PUGET SOUND ENERGY

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Filed at WUTC via Web Portal

May 31, 2013

Mr. Steven V. King, Acting Executive Director and Secretary
Washington Utilities and Transportation Commission
1300 South Evergreen Park Drive S.W.
P.O. Box 47250
Olympia, WA 98504-7250

Re: RCW-Required Report, RCW 19.285.070 and WAC-Required Report, WAC 480-109-040 Renewable Energy Target

Dear Mr. King:

Enclosed for filing, please find Puget Sound Energy, Inc.'s ("PSE") report detailing the annual reporting requirements for the renewable energy target in RCW 19.285.070 and WAC 480-109-040. PSE is asking the Commission to approve: its 2013 Renewable Energy Target (639,514); and order PSE to retire the RECs indicated herein in order to comply with meeting the Commission-approved 2012 Renewable Energy Target (635,958).

The report is filed pursuant to RCW 19.285.070 and WAC 480-109-040. A copy of this report will also be submitted to the Department of Commerce. Consistent with WAC 480-109-040(2), Commission Staff and other interested persons may file written comments regarding this report within 30 days of its filing; in this case Commission Staff and other interested parties have until June 30, 2013 to file written comments.

If you have any questions about the information contained in this filing, please contact Eric Englert, Manager, Regulatory Initiatives & Tariffs, at 425-456-2312.

Sincerely,

Kathryn J. Barnard

for Ken Johnson
Director, State Regulatory Affairs

Enclosures

Annual Reporting Requirements
Renewable Energy Target
RCW 19.285.070 and WAC 480-109-040
Puget Sound Energy
2013

Required Contents: Checklist and Table of Contents

RCW 19.285.070	WAC 480-109-040	Section/Page
For each year that a qualifying utility elects to demonstrate alternative compliance under RCW 19.285.040(2) (d) or (i) or 19.285.050(1), it must include in its annual report relevant data to demonstrate that it met the criteria in that section.	The report must state if the utility is relying upon one of the alternative compliance mechanisms provided in WAC 480-109-030 instead of meeting its renewable resource target. A utility using an alternative compliance mechanism must include sufficient data, documentation and other information in its report to demonstrate that it qualifies to use that alternative mechanism.	**Section 1 - Alternative Compliance** Page 3
the utility's annual load for the prior two years,	the utility's annual load for the prior two years,	**Section 2 -Annual Load For Previous Two Years** Page 4
the amount of megawatt-hours needed to meet the annual renewable energy target,	the total number of megawatt-hours from eligible renewable resources and/or renewable resource credits the utility needed to meet its annual renewable energy target by January 1 of the target year	**Section 3 - Renewable Energy Target** Page 4
the amount of megawatt-hours of each type of eligible renewable resource acquired, the type and amount of renewable energy credits acquired	the amount (in megawatt-hours) and cost of each type of eligible renewable resource used	**Section 4 - Renewable Energy Acquired To Have Met Renewable Energy Target** Page 5
the percent of its total annual retail revenue requirement invested in the incremental cost of eligible renewable resources and the cost of renewable energy credits	the type and cost (per megawatt-hour) of the least-cost substitute resources available to the utility that do not qualify as eligible renewable resources, the incremental cost of eligible renewable resources and renewable energy credits, and the ratio of this investment relative to the utility's total annual retail revenue requirement.	**Section 5 - Incremental Cost Compared To Annual Retail Revenue Requirement** Page 6
	The report must describe the steps the utility is taking to meet the renewable resource requirements for the current year. This description should indicate whether the utility plans to use or acquire its own renewable resources, plans to or has acquired contracted renewable resources, or plans to use an alternative compliance mechanism.	**Section 6 - Current Year Progress** Page 8

SECTION 1 Alternative Compliance

This section states if the utility is relying upon one of the alternative compliance mechanisms provided in WAC 480-109-030 instead of meeting its renewable resource target. A utility using an alternative compliance mechanism instead of meeting its renewable resource target, must include sufficient data, documentation and other information in its report to demonstrate that it qualifies to use that alternative mechanism.

Puget Sound Energy, Inc. (PSE) is not utilizing one of the alternative compliance mechanisms provided for in the RCW 19.285.040(2)(d) or RCW 19.285.050(1) and WAC 480.109.030(1),(3) instead of meeting its commission-approved 2012 renewable energy target.

SECTION 2 Annual Load For Previous Two Years

This section states the utility's annual load for the prior two years.

RCW 19.285 Compliance Need	2011	2012
Delivered Load to Retail Customers (MWh)	21,496,074	21,138,168

The source of this data is the PSE 2012 FERC Form 1, page 301, line number 10, columns d and e.

Please also see Attachment 1.

SECTION 3 Renewable Energy Target

This section contains the total number of megawatt-hours from eligible renewable resources, and/or renewable energy credits, and/or multiplier credits the utility needed to meet its annual renewable energy target.

PSE's Commission-approved Renewable Energy Target for 2012 is 635,958 MWh.

After Commission approval, PSE's Renewable Energy Target for 2013 will be 639,514 MWh.

RCW 19.285 Compliance Need	2011	2012	2013
Delivered Load to Retail Customers (MWh)	21,496,074	21,138,168	
WA State RCW 19.285 Requirement	0%	3%	3%
Quantity Required for Compliance		635,958	639,514

Please also see Attachment 1.

SECTION 4 Renewable Energy Acquired To Have Met Renewable Energy Target

This section contains the total number of megawatt-hours from eligible renewable resources, renewable energy credits, and/or multiplier credits the utility acquired to meet its annual renewable energy target.

To meet its Commission-approved Renewable Energy Target for 2012 of 635,958 MWh, PSE will use, and upon Commission order, retire the RECs and associated Extra Apprenticeship Credits from Wild Horse Phase II, Lower Snake River-Dodge Junction, and Lower Snake River-Phalen Gulch. The following RECs from the following facilities will be retired, upon Commission order, for compliance with the Commission-approved 2012 Renewable Energy Target. Please also see Attachment 1.

Wild Horse Phase II (Facility WREGIS ID: W1364) WREGIS Certificate Numbers:
1364-WA-2012-1-56617-1 to 11460

1364-WA-2012-2-58432-1 to 9246

1364-WA-2012-3-60271-1 to 13386

1364-WA-2012-4-62065-1 to 9780

1364-WA-2012-5-63926-1 to 11808

1364-WA-2012-6-65795-1 to 11316

1364-WA-2012-7-67679-1 to 5173

1364-WA-2012-8-69581-1 to 7555

1364-WA-2012-9-71550-1 to 5730

1364-WA-2012-10-73442-1 to 8749

1364-WA-2012-11-75339-1 to 6660

1364-WA-2012-12-77250-1 to 8879

Lower Snake River-Dodge Junction (Facility WREGIS ID: W2669) WREGIS Certificate Numbers:
2669-WA-2012-2-59215-1 to 1443

2669-WA-2012-3-61012-1 to 57622

2669-WA-2012-4-62823-1 to 43656

2669-WA-2012-5-64707-1 to 48312

2669-WA-2012-6-66597-1 to 49336

2669-WA-2012-7-68472-1 to 25553

Lower Snake River-Phalen Gulch (Facility WREGIS ID: W2670) WREGIS Certificate Numbers:
2670-WA-2012-2-59216-1 to 1387

2670-WA-2012-3-61013-1 to 44213

2670-WA-2012-4-62824-1 to 34934

2670-WA-2012-5-64708-1 to 38366

2670-WA-2012-6-66598-1 to 40387

2670-WA-2012-7-68473-1 to 19052

2670-WA-2012-8-70388-1 to 15962

SECTION 5 Incremental Cost Compared To Annual Retail Revenue Requirement

This section contains the percent of its total annual retail revenue requirement invested in the incremental cost of eligible renewable resources and the cost of renewable energy credits. This includes the type and cost (per megawatt-hour) of the least-cost substitute resources available to the utility that do not qualify as eligible renewable resources, the incremental cost of eligible renewable resources and renewable energy credits, and the ratio of this investment relative to the utility's total annual retail revenue requirement.

The type and cost of the least-cost substitute resources available to the utility at the time of decision that do not qualify as eligible renewable resources is contained in Attachment 2.

This analysis compares the revenue requirement cost of each renewable resource with the projected market value and capacity value at the time of the renewable acquisition. There may be other approaches to calculating these costs – such as using variable costs from different kinds of thermal plants instead of market. However, PSE's approach is most reasonable because it most closely reflects how customers will experience costs; i.e., PSE would not dispatch a peaker or CCCT with the ramping up and down of a wind farm without regard to whether the unit is being economically dispatched. For example, a peaker will not be economically dispatched often at all, so capacity from the thermal plant and energy from market is the closest match to actual incremental costs – and that is the point of this provision in the law – and to ensure customers don't pay too much. This, "contemporaneous" with the decision-making aspect of PSE's approach, is important. Utilities should be able to assess whether they will exceed the cost cap before an acquisition, without having to worry about ex-post adjustments that could change compliance status. The analytical framework here reflects a close approximation of the portfolio analysis used by PSE in resource planning, as well as in the evaluation of bids received in response to the company's Request for Proposals (RFP).

The incremental cost of eligible renewable resources and renewable energy credits for 2013 is $27.81 million. A detailed description of the methodology for this calculation is contained in Attachment 2, which was filed with the Commission on May 31, 2013, as part of PSE's 2013 Integrated Resource Plan. One important element of that section is the description on page K-106, which demonstrates that the cost of an equivalent non-renewable resource has three components:

1. Capacity Cost: There are two parts of capacity cost: First is the capacity in MW. This would be nameplate for a firm resource like biomass, or the assumed capacity of a wind plant. Second is the $/kW cost, which we assumed to be equal to the cost of a peaker.

2. Energy Cost: This was calculated by taking the hourly generation shape of the resource, multiplied by the market price in each hour. This is the equivalent cost of purchasing the equivalent energy on the market.
3. Imputed Debt: The law states the non-renewable must be an "equivalent amount," which includes a time dimension. If PSE entered into a long-term contract for energy, there would be an element of imputed debt. Therefore, it is included in this analysis as a cost for the non-renewable equivalent.

($ Millions/Year)	Renewable Resource	Equivalent Non-Renewable			2013 One Year Incremental Cost
		Peaker	Market	Total	
Hopkins Ridge	$18.77	$1.71	$19.26	$20.97	($2.20)
Wild Horse	$34.94	$3.21	$26.53	$29.74	$5.20
Klondike III	$10.27	$0.93	$8.98	$9.91	$0.36
Hopkins Infill	$1.28	$0.17	$1.19	$1.36	($0.08)
Wild Horse Expansion	$10.03	$0.81	$5.09	$5.90	$4.14
Lower Snake River I	$70.61	$1.69	$48.51	$50.20	$20.42
Snoqualmie Falls Upgrade	$3.85	$0.74	$2.44	$3.18	$0.67
Lower Baker 4	$8.60	$1.37	$7.92	$9.29	($0.69)
Total					$27.81

The incremental cost of each of the eligible renewable resources is shown in the table above. The analysis is conducted over a 25 year life of the project for wind and 40 years for Hydro and levelized over that life, producing a one-year cost, in this case, for 2013.

The total annual retail revenue requirement for 2013 is $2,039.841 million. This total annual retail revenue requirement for 2013 is based on the revenue requirement determined in PSE's 2011 GRC (UE-111048).

Thus the ratio of this investment relative to the utility's total annual retail revenue requirement is 1% (27.81 / 2,039.841 = 1%).

Please also see Attachment 2.

SECTION 6 Current Year Progress

This section contains a description of the steps the utility is taking to meet the annual renewable energy target for the current year. This description should indicate whether the utility plans to use or acquire its own renewable resources, plans to or has acquired contracted renewable resources, or plans to use an alternative compliance mechanism.

PSE has previously informed the Commission that it is on track to meet the Renewable Energy Target requirement for both the current year of 2013 as well as through the year 2022.

On March 29, 2013, in its compliance filing in Docket No. U-072375, in regard to merger commitment number 4, PSE informed the Commission:

> *"PSE is on track to meet the Renewable Energy Target requirement for the year 2013. PSE believes that it has acquired enough eligible renewable resources or renewable energy credits to meet the renewable energy target through 2021 as noted in RCW 19.285.040(2)."*

On May 31, 2013, PSE filed its 2013 Integrated Resource Plan. In the Executive Summary (Chapter 1) on page 1-6, the Integrated Resource Plan concludes:

> *"Figure 1-3 compares existing qualifying renewable resources with this annual target, and shows that PSE has acquired enough renewable resources and RECs to meet the requirements of the law through 2022."*

On December 27, 2012, PSE determined it would have sufficient eligible renewable resources in its portfolio by January 1, 2013 to supply at least three percent of its load for the year 2013. Please see Attachment 3, which documents this determination and also lists the resources that meet the definition of "eligible renewable resource" in RCW 19.285.

The Commission has determined that PSE's acquisition of the following eligible renewable resources was prudent, the docket numbers and the order number in which the Commission made the prudence determination is provided. The cost of each eligible renewable resource and its expected production output is contained within the documentation in those dockets.

- Hopkins Ridge wind generation facility, Docket No. UE-050870 (Order No. 04)
- Wild Horse wind farm, Docket No. UE-060266 (Order No. 08)
- 7.2 MW additional wind capacity at PSE-owned Hopkins Ridge Wind Farm ("the Hopkins Ridge Infill"), Docket No. UE-072300 (Order No. 12)

- 44 MW additional wind capacity at PSE-owned Wild Horse Wind Facility ("the Wild Horse Expansion"), Docket No. UE-090704 (Order No. 11)
- Lower Snake River 1 ("LSR-1") wind farm, Docket No. UE-111048 (Order No. 08)

The expected output of all these eligible renewable resources was provided in the power cost analysis in Docket No. UE-111048.

Attachment 1 – RCW 19.285 Compliance Reporting Tool (WUTC)

Reporting Entity: Puget Sound Energy, Inc.

Reporting Date: May 31, 2013

RCW 19.285 Compliance Need

	2010	2011	2012	2013
Delivered Load to Retail Customers (MWh)	20,901,139	21,496,074	21,138,168	
WA State RCW 19.285 Requirement		0%	3%	3%
Quantity Required for Compliance		-	635,958	639,514

Eligible Quantity Acquired

	2010	2011	2012*	2013*
Qualifying MWh Allocated to WA		-	1,821,119	-
Quantity from Non REC Eligible Generation		-	164,064	-
Total Quantity Available for RCW 19.285 Compliance		**-**	**1,985,183**	**-**

Sales and Transfers

	2010	2011	2012	2013
Quantity of RECs Sold		-	-	-
Bonus Incentives Transferred		-	-	-
Bonus Incentives Not Realized		-	-	-
Total Sold / Transferred / Unrealized		**-**	**-**	**-**

Adjustments

	2010	2011	2012	2013
2011 Surplus Applied to 2012		-	-	
2012 Surplus Applied to 2011		-	-	
2012 Surplus Applied to 2013			(1,349,225)	1,349,225
2013 Surplus Applied to 2012			-	-
Net Surplus Adjustments		**-**	**(1,349,225)**	**1,349,225**
Adjustment for Events Beyond Control		-	-	-

	2010	2011	2012*	2013*
RCW 19.285 Compliance Surplus / (Deficit)		**-**	**(0)**	**709,711**

* Any surplus shown in 2012 or 2013 may be sold or used for compliance in subsequent years.

In both the "Compliance Summary" and "Facility Detail" worksheets, utilities may need to protect commercially sensitive information by use of the CONFIDENTIAL designation.

Facility Name:	Facility WREGIS ID:	Facility Type	Extra Apprenticeship Credit Eligibility:	Distributed Generation Bonus Eligibility:	Online Date:
Wild Horse	W183	Wind	Not Eligible	---	
Hopkins Ridge	W184	Wind	Not Eligible	---	
Klondike III	W237	Wind	---	---	
Wild Horse Phase II	W1364	Wind	Eligible	---	
Hopkins Ridge Phase II	W1382	Wind	---	---	
Lower Snake River - Dodge Junctic	W2669	Wind	Eligible	---	
Lower Snake River - Phalen Gulch	W2670	Wind	Eligible	---	
Facility 8			---	---	
Facility 9			---	---	
Facility 10			---	---	
Facility 11			---	---	
Facility 12			---	---	
Facility 13			---	---	
Facility 14			---	---	
Facility 15			---	---	
Facility 16			---	---	
Facility 17			---	---	
Facility 18			---	---	
Facility 19			---	---	
Facility 20			---	---	
Facility 21			---	---	
Facility 22			---	---	
Facility 23			---	---	
Facility 24			---	---	
Facility 25			---	---	
Facility 26			---	---	
Facility 27			---	---	
Facility 28			---	---	
Facility 29			---	---	
Facility 30			---	---	

In both the "Compliance Summary" and "Facility Detail" worksheets, utilities may need to protect commercially sensitive information by use of the CONFIDENTIAL designation.

Facility Name: Wild Horse

MWh Allocated to WA Compliance	2011	2012	2013
Total MWh Produced / Purchased from Wild Horse		570,160	
Percent of MWh Qualifying Under RCW 19.285		100%	
Percent of Qualifying MWh Allocated to WA		100%	
Eligible MWh Available for RCW 19.285 Compliance	**-**	**570,160**	**-**

Non REC Eligible Generation	2011	2012	2013
Extra Apprenticeship Credit	-	-	-
Distributed Generation Bonus	-	-	-
Total Quantity from Non REC Eligible Generation	**-**	**-**	**-**

REC Sales / Transfers	2011	2012	2013
Quantity of RECs Sold			
Bonus Incentives Transferred			
Bonus Incentives Not Realized			
Total Sold / Transferred / Unrealized	**-**	**-**	**-**

Adjustments	2011	2012	2013
2011 Surplus Applied to 2012		-	
2012 Surplus Applied to 2011	-		
2012 Surplus Applied to 2013		570,160	570,160
2013 Surplus Applied to 2012		-	
Net Surplus Adjustments	**-**	**(570,160)**	**570,160**
Adjustment for Events Beyond Control			
Contribution to RCW 19.285 Compliance	**-**	**-**	**570,160**

Facility Name: Hopkins Ridge

MWh Allocated to WA Compliance	2011	2012	2013
Total MWh Produced / Purchased from Hopkins Ridge		412,490	
Percent of MWh Qualifying Under RCW 19.285		100%	
Percent of Qualifying MWh Allocated to WA		100%	
Eligible MWh Available for RCW 19.285 Compliance	-	**412,490**	-

Non REC Eligible Generation	2011	2012	2013
Extra Apprenticeship Credit	-	-	-
Distributed Generation Bonus	-	-	-
Total Quantity from Non REC Eligible Generation	-	-	-

REC Sales / Transfers	2011	2012	2013
Quantity of RECs Sold			
Bonus Incentives Transferred			
Bonus Incentives Not Realized			
Total Sold / Transferred / Unrealized	-	-	-

Adjustments	2011	2012	2013
2011 Surplus Applied to 2012		-	
2012 Surplus Applied to 2011	-		
2012 Surplus Applied to 2013		412,490	412,490
2013 Surplus Applied to 2012		-	
Net Surplus Adjustments	-	**(412,490)**	**412,490**
Adjustment for Events Beyond Control			
Contribution to RCW 19.285 Compliance	-	-	**412,490**

Facility Name: Klondike III Will be used for 2013 Compliance

MWh Allocated to WA Compliance	2011	2012	2013
Total MWh Produced / Purchased from Klondike III			
Percent of MWh Qualifying Under RCW 19.285			
Percent of Qualifying MWh Allocated to WA			
Eligible MWh Available for RCW 19.285 Compliance	-	-	-

Non REC Eligible Generation	2011	2012	2013
Extra Apprenticeship Credit	-	-	-
Distributed Generation Bonus	-	-	-
Total Quantity from Non REC Eligible Generation	-	-	-

REC Sales / Transfers	2011	2012	2013
Quantity of RECs Sold			
Bonus Incentives Transferred			
Bonus Incentives Not Realized			
Total Sold / Transferred / Unrealized	-	-	-

Adjustments	2011	2012	2013
2011 Surplus Applied to 2012		-	
2012 Surplus Applied to 2011	-		
2012 Surplus Applied to 2013			-
2013 Surplus Applied to 2012		-	
Net Surplus Adjustments	-	-	-
Adjustment for Events Beyond Control			
Contribution to RCW 19.285 Compliance	-	-	-

Facility Name: Wild Horse Phase II

MWh Allocated to WA Compliance	2011	2012	2013
Total MWh Produced / Purchased from Wild Horse Phase II		109,742	
Percent of MWh Qualifying Under RCW 19.285		100%	
Percent of Qualifying MWh Allocated to WA		100%	
Eligible MWh Available for RCW 19.285 Compliance	-	**109,742**	-

Non REC Eligible Generation	2011	2012	2013
Extra Apprenticeship Credit	-	21,948	-
Distributed Generation Bonus	-	-	-
Total Quantity from Non REC Eligible Generation	-	**21,948**	-

REC Sales / Transfers	2011	2012	2013
Quantity of RECs Sold			
Bonus Incentives Transferred			
Bonus Incentives Not Realized			
Total Sold / Transferred / Unrealized	-	-	-

Adjustments	2011	2012	2013
2011 Surplus Applied to 2012		-	
2012 Surplus Applied to 2011	-		
2012 Surplus Applied to 2013			-
2013 Surplus Applied to 2012		-	
Net Surplus Adjustments	-	-	-
Adjustment for Events Beyond Control			
Contribution to RCW 19.285 Compliance	-	**131,690**	-

WREGIS Certificate Numbers

that will be used for compliance for 2012

1364-WA-2012-1-56617-1 to 11460
1364-WA-2012-2-58432-1 to 9246
1364-WA-2012-3-60271-1 to 13386
1364-WA-2012-4-62065-1 to 9780
1364-WA-2012-5-63926-1 to 11808
1364-WA-2012-6-65795-1 to 11316
1364-WA-2012-7-67679-1 to 5173
1364-WA-2012-8-69581-1 to 7555
1364-WA-2012-9-71550-1 to 5730
1364-WA-2012-10-73442-1 to 8749
1364-WA-2012-11-75339-1 to 6660
1364-WA-2012-12-77250-1 to 8879

Facility Name: Hopkins Ridge Phase II

MWh Allocated to WA Compliance	2011	2012	2013
Total MWh Produced / Purchased from Hopkins Ridge Phase II		18,150	
Percent of MWh Qualifying Under RCW 19.285		100%	
Percent of Qualifying MWh Allocated to WA		100%	
Eligible MWh Available for RCW 19.285 Compliance	-	**18,150**	-

Non REC Eligible Generation	2011	2012	2013
Extra Apprenticeship Credit	-	-	-
Distributed Generation Bonus	-	-	-
Total Quantity from Non REC Eligible Generation	-	-	-

REC Sales / Transfers	2011	2012	2013
Quantity of RECs Sold			
Bonus Incentives Transferred			
Bonus Incentives Not Realized			
Total Sold / Transferred / Unrealized	-	-	-

Adjustments	2011	2012	2013
2011 Surplus Applied to 2012		-	
2012 Surplus Applied to 2011	-		
2012 Surplus Applied to 2013		18,150	18,150
2013 Surplus Applied to 2012		-	
Net Surplus Adjustments	-	**(18,150)**	**18,150**
Adjustment for Events Beyond Control			
Contribution to RCW 19.285 Compliance	-	-	**18,150**

Facility Name: Lower Snake River - Dodge Junction

MWh Allocated to WA Compliance	2011	2012	2013	WREGIS Certificate Numbers that will be used for compliance for 2012
Total MWh Produced / Purchased from Lower Snake River - Dodge Junction		406,825		2669-WA-2012-2-59215-1 to 1443
Percent of MWh Qualifying Under RCW 19.285		100%		2669-WA-2012-3-61012-1 to 57622
Percent of Qualifying MWh Allocated to WA		100%		2669-WA-2012-4-62823-1 to 43656
Eligible MWh Available for RCW 19.285 Compliance	-	**406,825**	-	2669-WA-2012-5-64707-1 to 48312
				2669-WA-2012-6-66597-1 to 49336
Non REC Eligible Generation	2011	2012	2013	2669-WA-2012-7-68472-1 to 25553
Extra Apprenticeship Credit	-	81,365	-	
Distributed Generation Bonus	-	-	-	
Total Quantity from Non REC Eligible Generation	-	**81,365**	-	
REC Sales / Transfers	2011	2012	2013	
Quantity of RECs Sold				
Bonus Incentives Transferred				
Bonus Incentives Not Realized				
Total Sold / Transferred / Unrealized	-	-	-	
Adjustments	2011	2012	2013	
2011 Surplus Applied to 2012		-		
2012 Surplus Applied to 2011	-			
2012 Surplus Applied to 2013		217,084	217,084	
2013 Surplus Applied to 2012		-		
Net Surplus Adjustments	-	**(217,084)**	**217,084**	
Adjustment for Events Beyond Control				
Contribution to RCW 19.285 Compliance	-	**271,106**	**217,084**	

Facility Name: Lower Snake River - Phalen Gulch

MWh Allocated to WA Compliance	2011	2012	2013	WREGIS Certificate Numbers that will be used for compliance for 2012
Total MWh Produced / Purchased from Lower Snake River - Phalen Gulch		303,752		2670-WA-2012-2-59216-1 to 1387
Percent of MWh Qualifying Under RCW 19.285		100%		2670-WA-2012-3-61013-1 to 44213
Percent of Qualifying MWh Allocated to WA		100%		2670-WA-2012-4-62824-1 to 34934
Eligible MWh Available for RCW 19.285 Compliance	-	**303,752**	-	2670-WA-2012-5-64708-1 to 38366
				2670-WA-2012-6-66598-1 to 40387
Non REC Eligible Generation	2011	2012	2013	2670-WA-2012-7-68473-1 to 19052
Extra Apprenticeship Credit	-	60,750	-	2670-WA-2012-8-70388-1 to 15962
Distributed Generation Bonus	-	-	-	
Total Quantity from Non REC Eligible Generation	-	**60,750**	-	
REC Sales / Transfers	2011	2012	2013	
Quantity of RECs Sold				
Bonus Incentives Transferred				
Bonus Incentives Not Realized				
Total Sold / Transferred / Unrealized	-	-	-	
Adjustments	2011	2012	2013	
2011 Surplus Applied to 2012		-		
2012 Surplus Applied to 2011	-			
2012 Surplus Applied to 2013		131,341	131,341	
2013 Surplus Applied to 2012		-		
Net Surplus Adjustments	-	**(131,341)**	**131,341**	
Adjustment for Events Beyond Control				
Contribution to RCW 19.285 Compliance	-	**233,161**	**131,341**	

Attachment 2 – Portion of PSE's 2013 IRP describing: the type and cost of the least-cost substitute resources available to the utility at the time of decision that do not qualify as eligible renewable resource; and the incremental cost of eligible renewable resources

Incremental cost of renewable resources to meet RCW 19.285 incremental cost alternative compliance

Overview

According to RCW 19.285, certain electric utilities in Washington must meet 15 percent of their retail electric load with eligible renewable resources by the calendar year 2020. The annual target for the calendar year 2012 is 3 percent of retail electric load. However, if the incremental cost of those renewable resources compared to an equivalent non-renewable is greater than 4 percent of its revenue requirement, then a utility will be considered in compliance with the annual renewable energy target in RCW 19.285. The law states it this way: "The incremental cost of an eligible renewable resource is calculated as the difference between the levelized delivered cost of the eligible renewable resource, regardless of ownership, compared to the levelized delivered cost of an equivalent amount of reasonably available substitute resources that do not qualify as eligible renewable resources".[7]

Analytic framework

This analysis compares the revenue requirement cost of each renewable resource with the projected market value and capacity value at the time of the renewable acquisition. There may be other approaches to calculating these costs – such as using variable costs from different kinds of thermal plants instead of market. However, PSE's approach is most reasonable because it most closely reflects how customers will experience costs; i.e., PSE would not dispatch a peaker or CCCT with the ramping up and down of a wind farm without regard to whether the unit is being economically dispatched. For example, a peaker will not be economically dispatched often at all, so capacity from the thermal plant and energy from market is the closest match to actual incremental costs – and that is the point of this provision in the law – a to ensure customers don't pay too much. This, "contemporaneous" with the decision-making aspect of PSE's approach, is important. Utilities should be able to assess whether they will exceed the cost cap before an acquisition, without having to worry about ex-post adjustments that could change compliance status. The analytical framework here reflects a close approximation of the

[7] *RCW 19.285.050 (1) (a) (b)*

portfolio analysis used by PSE in resource planning, as well as in the evaluation of bids received in response to the company's Request for Proposals (RFP).

Resources that meet RCW 19.285 definition of "eligible renewable resource"

Figure K-41

Resources that meet RCW 19.285 definition of Eligible Renewable Resource

	Nameplate (MW)	Annual Energy (aMW)	Commercial Online Date	Market Price/ Peaker Assumptions	Capacity Credit Assumption
Hopkins Ridge	149.4	53.3	Dec 2005	2004 RFP	20%
Wild Horse	228.6	73.4	Dec 2006	2006 RFP	17.2%
Klondike III	50	18.0	Dec 2007	2006 RFP	15.6%
Hopkins Infill	7.2	2.4	Dec 2007	2007 IRP	20%
Wild Horse Expansion	44	10.5	Dec 2009	2007 IRP	15%
Lower Snake River I	342.7	102.5	Apr 2012	2010 Trends	5%
Snoqualmie Upgrades	6.1	3.9	Mar 2013	2009 Trends	95%
Lower Baker Upgrades	30	12.5	May 2013	2011 IRP Base	95%
Generic Wind 2022	300	90	Jan 2022	2013 IRP Base	4%
Generic Wind 2027	100	30	Jan 2027	2013 IRP Base	4%
Generic Wind 2029	100	30	Jan 2029	2013 IRP Base	4%
Generic Wind 2033	100	30	Jan 2033	2013 IRP Base	4%

Equivalent non-renewable

The incremental cost of a renewable resource is defined as the difference between the levelized cost of the renewable resource compared to an equivalent non-renewable resource. An equivalent non-renewable is an energy resource that does not meet the definition of a renewable resource in RCW 19.285, but is equal to a renewable resource on an energy and capacity basis. For the purpose of this analysis, the cost of an equivalent non-renewable resource has three components:

1. Capacity Cost: There are two parts of capacity cost. First is the capacity in MW. This would be nameplate for a firm resource like biomass, or the assumed

capacity of a wind plant. Second is the $/kW cost, which we assumed to be equal to the cost of a peaker.

2. Energy Cost: This was calculated by taking the hourly generation shape of the resource, multiplied by the market price in each hour. This is the equivalent cost of purchasing the equivalent energy on the market.
3. Imputed Debt: The law states the non-renewable must be an "equivalent amount," which includes a time dimension. If PSE entered into a long-term contract for energy, there would be an element of imputed debt. Therefore, it is included in this analysis as a cost for the non-renewable equivalent.

For example, Hopkins Ridge produces 466,900 MWh annually. The equivalent non renewable is to purchase 466,900 MWh from the Mid-C market and then build a 30 MW (149.4*20 percent = 30) peaker plant for capacity only. With the example, the cost comparison includes the hourly Mid-C price plus the cost of building a peaker, plus the cost of the imputed debt. The total revenue requirement (fixed and variable costs) of the non-renewable is the cost stream – including end effects – discounted back to the first year. That net present value is then levelized over the life of the comparison renewable resource.

Cost of renewable resource

Levelized cost of the renewable resource is more direct. It is based on the proforma financial analysis performed at the time of the acquisition. The stream of revenue requirement (all fixed and variable costs, including integration costs) are discounted back to the first year – again, including end effects. That net present value is then levelized out over the life of the resource/contract. The levelized cost of the renewable resource is then compared with the levelized cost of the equivalent non-renewable resource to calculate the incremental cost.

Example

The following is a detailed example of how PSE calculated the incremental cost of Wild Horse. It is important to note that PSE's approach uses information contemporaneous with the decision making process, so this analysis will not reflect updated assumptions for capacity, capital cost, or integration costs, etc.

Eligible Renewable: Wild Horse Wind Facility
Capacity Contribution Assumption: 228.6 * 17.2% = 39 MW

1. Calculate Wild Horse revenue requirement

Figure K-42 is a sample of the annual revenue requirement calculations for the first few years of Wild Horse, along with the NPV of revenue requirement.

Figure K-42
Calculation of Wild Horse Revenue Requirement

($ Millions)	20-yr NPV	2007	2008	…	2025
Gross Plant		**384**	**384**	**...**	**384**
Accumulative depreciation (Avg.)		**(10)**	**(29)**	**…**	**(355)**
Accumulative deferred tax (EOP)		**(20)**	**(56)**	**…**	**(7)**
Rate base		**354**	**299**	**…**	**22**
After tax WACC		**7.01%**	**7.01%**	**…**	**7.01%**
After tax return		**25**	**21**	**…**	**2**
Grossed up return		**38**	**32**	**…**	**2**
PTC grossed up		**(20)**	**(20)**	**…**	**-**
Expenses		**16**	**16**	**…**	**22**
Book depreciation		**19**	**19**	**…**	**19**
Revenue required	**370.9**	**53**	**48**	**…**	**44**
End effects	**4.6**				
Total revenue requirement	**375**				

2. Calculate revenue requirement for equivalent non-renewable: Peaker capacity

Capacity = 39 MW

Capital Cost of Capacity: $462/KW

Figure K-43
Calculation of Peaker Revenue Requirement

($ Millions)	20-yr NPV	2007	2008	…	2025
Gross Plant		**18**	**18**	…	**18**
Accumulative depreciation (Avg.)		**(0)**	**(1)**	…	**(10)**
Accumulative deferred tax (EOP)		**(0)**	**(0)**	…	**(3)**
Rate base		**18**	**17**	…	**5**
After tax WACC		**7.01%**	**7.01%**	…	**7.01%**
After tax return		**1**	**1**	…	**0**
Grossed up return		**2**	**2**	…	**0**
Expenses		**1**	**1**	…	**2**
Book depreciation		**1**	**1**	…	**1**
Revenue required	**32**	**4**	**4**	…	**3**
End effects	**2**				
Total revenue requirement	**34**				

3. Calculate revenue requirement for equivalent non-renewable: Energy

Energy: 642,814 MWh

For the market purchase, we used the hourly power prices from the 2006 RFP plus a transmission adder of $1.65/MWh in 2007 and escalated at 2.5 percent.

Figure K-44
Calculation of Energy Revenue Requirement

Month	Day	Hour	20-yr NPV	2007	…	2025
1	1	1		49 MW * $59/MW = $2891	…	49 MW * $61/MW = $2989
1	1	2		92 MW * $60/MW = $5520	…	92 MW * $63/MW = $5796
…	….	…		…	…	…
12	31	24		13 MW * $59/MW = $767	…	13 MW * $65/MW = $845
($Millions)						
Cost of Market				36	…	41
Imputed Debt				1	…	0
Total Revenue Requirement			285	37	…	41

4. Incremental cost

The table below is the total cost of Wild Horse less the cost of the peaker and less the cost of the market purchases for the total 20-year incremental cost difference of the renewable to an equivalent non-renewable.

Figure K-45
20-yr Incremental Cost of Wild Horse

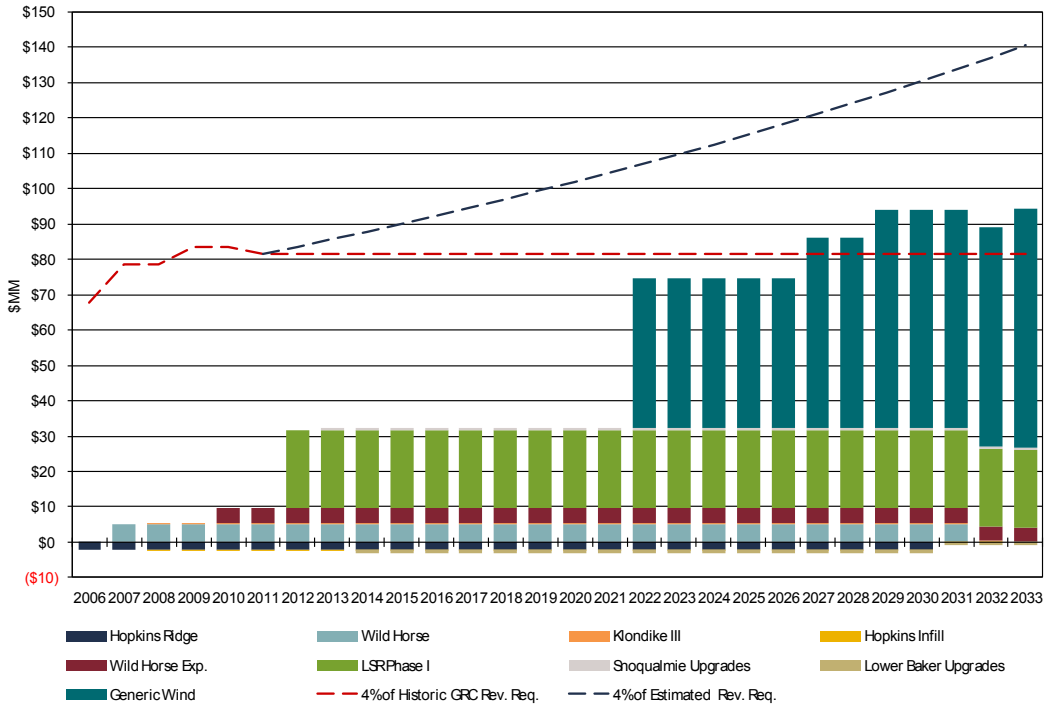
($ Millions)	20-yr NPV
Wild Horse	375
Peaker	34
Market	285
20-yr Incremental Cost of Wild Horse	56

We chose to spread the incremental cost over 25 years since that is the depreciable life of a wind project used by PSE. The payment of $56 Million over 25 years comes to $5.2 Million/Year using the 7.01 percent discount rate.

Summary results

Each renewable resource that counts towards meeting the renewable energy target was compared to an equivalent non-renewable resource starting in the same year and levelized over the book life of the plant: 25 years for wind power and 40 years for hydroelectric power. Figure K-46 presents results of this analysis for existing resources and projected resources. This demonstrates PSE expects to meet the physical targets under RCW 19.285 without being constrained by the cost cap. A negative cost difference means that the renewable was lower-cost than the equivalent non-renewable, while a positive cost means that the renewable was a higher cost.

Figure K-46
Equivalent Non-renewable 20-year Levelized Cost Difference Compared to 4 Percent of 2011 GRC Revenue Requirement



As the chart reveals, even if the company's revenue requirement were to stay the same for the next 10 years, PSE would still not hit the 4 percent requirement. The estimated revenue requirement uses a 2.5 percent assumed escalation from the 2011 General Rate Case revenue requirement.

Attachment 3 – Memorandum determining that PSE has sufficient eligible renewable resources in its portfolio by January 1, 2013 to supply at least three percent of its load for the year 2013

MEMORANDUM

TO: Tom DeBoer, Roger Garratt

FROM: Eric Englert, Anna Mikelsen Mills

SUBJECT: Requirements of Chapter 480-109-020 WAC

DATE: December 27, 2012

Background

Chapter 480-109-020 WAC Renewable resources states:

> "(1) Each utility must meet the following annual targets.
>
> (a) *By January 1 of each year beginning in 2012* and continuing through 2015, each utility must use sufficient eligible renewable resources, acquire equivalent renewable energy credits, or a combination of both, *to supply at least three percent of its load for the remainder of each year*.
>
> . . .
>
> (2) Renewable energy credits produced during the target year, the preceding year or the subsequent year may be used to comply with this annual renewable resource requirement provided that they were acquired by January 1 of the target year.
>
> (3) In meeting the annual targets of this subsection, a utility must calculate its annual load based on the average of the utility's load for the previous two years.
>
> (4) A renewable resource within the Pacific Northwest may receive integration, shaping, storage or other sevices from sources outside of the Pacific Northwest and remain eligible to count towards a utility's renewable resource target."

(Emphasis added.)

Summary

Pursuant to the requirements of Chapter 480-109-020 WAC, we have prepared this Memorandum to document that Puget Sound Energy, Inc. ("PSE") has acquired sufficient

eligible renewable resources in its portfolio by January 1, 2013 to supply at least three percent of its estimated load for the year 2013.

This is consistent with the information provided to the WUTC on March 29, 2012 in PSE's compliance filing in Docket No. U-072375, in regard to merger commitment number 4, PSE stated that:

> "*PSE is on track to meet the Renewable Energy Target requirement for the year 2013. PSE believes that it has acquired enough eligible renewable resources or renewable energy credits to meet the renewable energy target for 2013 as noted in RCW 19.285.040(2), as long as the actions of any governmental authority do not adversely affect the generation, transmission, or distribution of PSE's eligible renewable resources."*

Following provides a summary of the Company's eligible renewable resources, load and renewable energy target.

Eligible Renewable Resources

PSE has acquired sufficient eligible renewable resources in its portfolio to supply at least three percent of its estimated load for the year 2013, in advance of January 1, 2013.

Eligible renewable resources that PSE may elect to use in whole or in part to meet its 2013 target include (but not limited to):

- Hopkins Ridge Wind Project;
- Wild Horse Wind Project;
- Wild Horse Expansion Wind Project (including extra apprenticeship credits);
- Lower Snake River Wind Project (including extra apprenticeship credits);
- Klondike III Wind Project (e.g. the output PSE purchases from Iberdrola);
- Snoqualmie Falls Hydroelectric Efficiency Upgrades[1];
- Lower Baker River Hydroelectric Efficiency Upgrades[2];
- Customer-Generator owned facilities taking service from PSE under PSE electric rate Schedule 91; and

[1] Snoqualmie Falls Hydroelectric Efficiency Upgrades are expected to be completed in 2013.

[2] Lower Baker River Hydroelectric Efficiency Upgrades are expected to be completed in 2013.

- Any other eligible renewable resources that may become available in 2013 or 2014.

Total 2011 generation from Hopkins Ridge, Wild Horse and Wild Horse Expansion was 1,166,224 megawatt-hours; similar generation may be achieved for 2012 and 2013. Lower Snake River Phase 1 generated over 490,000 megawatt-hours for months February – September 2012 (not inclusive of the extra apprenticeship credits).

These eligible renewable resources may be impacted by events beyond PSE's reasonable control that could not have been reasonably anticipated or ameliorated that prevented PSE from meeting the renewable energy target. Such events may include weather-related damage, mechanical failure, strikes, lockouts, or actions of a governmental authority that adversely affect the generation, transmission, or distribution of an eligible renewable resource owned by or under contract to a qualifying utility.

PSE does not currently intend to utilize one of the alternative compliance mechanisms provided for in RCW 19.285.040(2)(d) or RCW 19.285.050(1) and WAC 480.109.030(1),(3) instead of meeting its 2013 renewable energy target. However, there may be events beyond PSE's control during the remainder of the calendar year 2013 which could prompt PSE to utilize the alternative compliance mechanisms in RCW 19.285.040(2)(i) and WAC 480.109.030(2). Such determination will be made when PSE reports on its final 2013 compliance in the 2014 or 2015 report.

Load

Load is defined in the rules as:

> *"Load" means the amount of kilowatt-hours of electricity delivered in the most recently completed year by a qualifying utility to its Washington retail customers. Load does not include off-system sales or electricity delivered to transmission-only customers.*

PSE's actual 2011 delivered load is 21,496,074,000 kilowatt-hours (i.e. 21,496,074 megawatt-hours) and the 2012 forecast load is 21,338,021,000 kilowatt-hours (i.e. 21,338,021 megawatt-hours).

Consistent with WAC 480-109-020(3), based on the average of PSE's load in 2011 and 2012 and as reflected above, the Company's estimated load for purposes of meeting its 2013 target will likely be in the neighborhood of 21,417,047 megawatt-hours.

2013 Renewable Energy Target

PSE's load is used to compute its annual renewable energy target.

Chapter 480-109-020(1)(a) WAC states: "By January 1 of each year beginning in 2012 and continuing through 2015, each utility must use sufficient eligible renewable resources, acquire equivalent renewable energy credits, or a combination of both, *to supply at least three percent of its load for the remainder of each year*." (Emphasis added.)

Based on the load estimations above and the three percent requirement in Chapter 480-109-020(1)(a) WAC, the Company's estimated renewable energy target for 2013 may end up being approximately 642,511 megawatt-hours.

PSE expects to generate more eligible renewable energy than its 2013 requirement (not including any renewable energy credits generated in 2012 that the Company may elect to use for its 2013 requirement).

PSE will report on the specific renewable energy credits produced and to be retired for final compliance with the 2013 target in either its 2014 or 2015 report, and reserves the right to submit renewable energy credits from the resources reported here or to substitute with renewable energy credits produced from 2012 to 2014 by other eligible renewable resources or with 2013 generation from eligible renewable resources that have not been converted to renewable energy credits.

Conclusion

PSE's eligible renewable resources in 2013 may be expected to generate approximately 2,484,122 megawatt-hours and/or renewable energy credits and/or extra apprenticeship credits (not inclusive of i) any renewable energy credits that may be committed/sold to third-parties or ii) any renewable energy credits generated in 2012 that the Company may elect to use for its 2013 renewable energy target).

Events beyond PSE's reasonable control may yet occur during the remainder of calendar year 2013 which could prompt PSE to utilize the alternative compliance mechanism in RCW 19.285.040(2)(i) and WAC 480.109.030(2). Such events may include weather-related damage, mechanical failure, strikes, lockouts, or actions of a governmental authority that adversely affect the generation, transmission, or distribution of an eligible renewable resource owned by or under contract to a qualifying utility. Such determination will be made when PSE reports on its final 2013 compliance in the 2014 or 2015 report.

As reported to the WUTC on March 29, 2012, PSE is on track to meet the Renewable Energy Target requirement for the year 2013. PSE has acquired enough eligible renewable resources or renewable energy credits to meet the renewable energy target for 2013 as noted in RCW 19.285.040(2).