Annual Reporting Requirements Renewable Energy Target RCW 19.285.070 and WAC 480-109-040 Puget Sound Energy 2014

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. 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 5 - Incremental Cost Compared To Annual Retail Revenue Requirement Page 8 Section 6 - Current Year Progress Page 10

SECTION 1 Alternative Compliance

This section states if the utility is relying upon one of the alternative compliance mechanisms provided in WAC <u>480-109-030</u> 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 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 or its commission-approved 2013 Renewable Energy Target.

SECTION 2 Annual Load For Previous Two Years

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

Delivered Load to Retail Customers (MWh) 2012 2013 21,208,608

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

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. PSE's Commission-approved Renewable Energy Target for 2013 is 639,514 MWh.

After Commission approval, PSE's Renewable Energy Target for 2014 will be 635,202 MWh.

Calculation:

Delivered Load to Retail Customers (MWh)	<u>2012</u> 21,138,168	2013 21,208,608
Average load 3% of Average load	21,173,388 635,202	

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 or other directive, retire the RECs and associated Extra Apprenticeship Credits from Lower Snake River-Dodge Junction, and Lower Snake River-Phalen Gulch. A small amount of incremental hydro generation from the Wanapum Fish Bypass facility is also being utilized. The following RECs from the following facilities will be retired, upon Commission order or other directive, for compliance with the Commission-approved 2012 Renewable Energy Target. Please also see Attachment 1.

Lower Snake River-Dodge Junction (Facility WREGIS ID: W2669) WREGIS Certificate Serial Numbers:

2669-WA-64707-1 to 48312

2669-WA-59215-1 to 1443

2669-WA-66597-1 to 49336

2669-WA-61012-1 to 57622

2669-WA-68472-1 to 25553

2669-WA-72339-1 to 21542

2669-WA-74136-1 to 44107

2669-WA-77938-1 to 56484

2669-WA-70387-1 to 29801

2669-WA-76114-1 to 28969 2669-WA-62823-1 to 43656

Lower Snake River-Phalen Gulch (Facility WREGIS ID: W2670) WREGIS Certificate Serial Numbers:

2670-WA-62824-1 to 34934

2670-WA-61013-1 to 44213

2670-WA-66598-1 to 102

2670-WA-59216-1 to 1387

2670-WA-64708-1 to 38366

Summary of 2012 PSE Comp	oliance
Target	635,958
Wanapum Hydro	4,966
Lower Snake River - Dodge Junction (Vintage 2012)	406,825
Extra Apprenticeship Credits	81,365
Lower Snake River - Phalen Gulch (Vintage 2012)	119,002

Extra Apprenticeship Credits	23,800
Balance	(0)

To meet its Commission-approved Renewable Energy Target for 2013 of 639,514 MWh, PSE will use, and upon Commission order or other directive, retire the RECs and associated Extra Apprenticeship Credits from Wild Horse, Wild Horse Phase II, Hopkins Ridge, Hopkins Ridge Phase II, and Lower Snake River-Phalen Gulch. A small amount of incremental hydro generation from the Wanapum Fish Bypass facility is also being utilized. The following RECs from the following facilities will be retired, upon Commission order or other directive, for compliance with the Commission-approved 2013 Renewable Energy Target. Please also see Attachment 1.

Wild Horse (Facility WREGIS ID: W183) WREGIS Certificate Serial Numbers:

183-WA-55766-38144 to 59540

183-WA-57591-1 to 3851

183-WA-57591-3852 to 48037

183-WA-59369-1 to 25463

183-WA-59369-25464 to 27755

Wild Horse Phase II (Facility WREGIS ID: W1364) WREGIS Certificate Serial Numbers:

1364-WA-58432-1 to 9246

1364-WA-60271-1 to 13386

1364-WA-62065-1 to 9780

1364-WA-63926-1 to 11808

1364-WA-65795-1 to 11316

Hopkins Ridge (Facility WREGIS ID: W184) WREGIS Certificate Serial Numbers:

184-WA-55767-1 to 41665

184-WA-57592-1 to 27509

184-WA-59370-1 to 51422

184-WA-61176-1 to 35900

184-WA-63005-1 to 39824

184-WA-64900-1 to 42522

Hopkins Ridge Phase II (Facility WREGIS ID: W1382) WREGIS Certificate Serial Numbers:

1382-WA-56628-1 to 1834

1382-WA-58443-1 to 1210

1382-WA-60282-1 to 2263

1382-WA-62077-1 to 1579

1382-WA-63938-1 to 1752

1382-WA-65807-1 to 1871

Lower Snake River-Phalen Gulch (Facility WREGIS ID: W2670) WREGIS Certificate Serial Numbers:

2670-WA-66598-103 to 40387

2670-WA-68473-1 to 19052

2670-WA-70388-1 to 21835

2670-WA-72340-1 to 13379

Summary of 2013 PSE Compliance	e .
Target	639,514
Wanapum Hydro	4,631
Lower Snake River - Phalen Gulch (Vintage 2012)	184,750
Extra Apprenticeship Credits	36,950
Wild Horse Phase II (Vintage 2012)	55,536
Extra Apprenticeship Credits	11,107
Hopkins Ridge (Vintage 2012)	238,842
Hopkins Ridge Phase II (Vintage 2012)	10,509
Wild Horse (Vintage 2012)	97,189
Balance	医三角性 化性的

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 2014 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	Equivale	2014 One Year		
	Resource	Peaker	Market	Total	Incremental Cost
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 2014.

The total annual retail revenue requirement for 2014 is \$2,112.297 million. This total annual retail revenue requirement for 2014 is based on the revenue requirement determined in PSE's 2011 GRC (UE-111048) and adjusted in subsequent dockets such as UE-130137, UE-121697, UE-130617, and UE-140599.

Thus the ratio of this investment relative to the utility's total annual retail revenue requirement is 1% (27.81 / 2,112.297 = 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 2014 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 31, 2013, PSE determined it would have sufficient eligible renewable resources in its portfolio by January 1, 2014 to supply at least three percent of its load for the year 2014. Please see Attachment 3, which documents this determination and also lists sufficient resources that meet the definition of "eligible renewable resource" in RCW 19.285. Evidence of sufficient resources for 2014 from that document includes:

"Total 2012 generation from Hopkins Ridge, Wild Horse, Wild Horse Expansion and Lower Snake River was about 1,821,000 megawatt-hours (not inclusive of the extra apprenticeship credits); similar generation may be achieved for 2013 and 2014."

and;

"PSE's eligible renewable resources in 2014 may be expected to generate approximately 2,424,985 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 and/or customers or ii) any

renewable energy credits generated in 2013 that the Company may elect to use for its 2014 renewable energy target)."

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)
- Snoqualmie Falls Project, Docket No. UE-130617 (Order No. 06)
- Baker River Project, Docket No. UE-130617 (Order No. 06)

San Service Commence

Attachment 1 — RCW 19.285 Compliance Reporting Tool (WUTC)

Reporting Entity:		Puget Sound I	uget Sound Energy, Inc.			
Reporting Date:	May 30), 2014				
RCW 19.285 Compliance Need	2011	2012	2013	2014		
Delivered Load to Retail Customers (MWh)	21,496,074	21,138,168	21,208,608			
WA State RCW 19.285 Requirement		3%	3%	3%		
Quantity Required for Compliance		635,958	639,514	635,202		
Eligible Quantity Acquired	2011	2012	2013*	2014*		
Qualifying MWh Allocated to WA		1,117,619	530,990	40,144		
Quantity from Non REC Eligible Generation		153,223	105,272	-		
Total Quantity Available for RCW 19.285 Con	npliance	1,270,842	636,262	40,144		
Sales and Transfers	2011	2012	2013	2014		
Quantity of RECs Sold		-	-	-		
Bonus Incentives Transferred		-	-	-		
Bonus Incentives Not Realized		p-	-	-		
Total Sold / Transferred / Unrealized		-	_	-		
Adjustments	2011	2012	2013	2014		
2012 Surplus Applied to 2013		(634,883)	634,883			
2013 Surplus Applied to 2012		-	-			
2013 Surplus Applied to 2014			(631,631)	631,631		
2014 Surplus Applied to 2013			μ	-		
Net Surplus Adjustments		(634,883)	3,252	631,631		
Adjustment for Events Beyond Control		-	_	-		
	2011	2012	2013*	2014*		
RCW 19.285 Compliance Surplus / (Deficit)		0	0	36,573		

^{*} Any surplus shown in 2012, 2013 or 2014 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.

			Extra	Distributed	
Facility Name:	Facility WREGIS ID:	Facility Type	Apprenticeship	Generation Bonus	Online Date:
			Credit Eligibility:	Eligibility:	
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 Junction	W2669	Wind	Eligible		
ower Snake River - Phalen Gulch	W2670	Wind	Eligible		
Wanapum Fish Bypass	N/A	Water (Incremental Hydro)	Not Eligible		
Baker River Project	N/A	Water (Incremental Hydro)			
Snoqualmie Falls Project	N/A	Water (Incremental Hydro)		——————————————————————————————————————	
Facility 11				8-12-13-13-14-14-14-14-14-14-14-14-14-14-14-14-14-	
Facility 12					
Facility 13			(1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.		
Facility 14					
Facility 15			4.4		
Facility 16					
Facility 17					
Facility 18				-	
Facility 19					
Facility 20					
Facility 21					
Facility 22					
Facility 23				148-15 S-13 SAN 1	
Facility 24				Sauth 4 1 - Sais - 1	
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	Ì		a.
-				WREGIS Certificate Serial Numbers
MWh Allocated to WA Compliance	2012	2013	2014	nat will be used for compliance for 2013
Total MWh Produced / Purchased from Wild I	forse			183-WA-55766-38144 to 59540
Percent of MWh Qualifying Under RCW 19.28	5 100%			183-WA-57591-1 to 3851
Percent of Qualifying MWh Allocated to WA	100%			183-WA-57591- 3852 to 48037
Eligible MWh Available for RCW 19.285 Com	pliance 97,189	-	-	183-WA-59369-1 to 25463
				183-WA-59369-25464 to 27755
Non REC Eligible Generation	2012	2013	2014	• •
Extra Apprenticeship Credit	-	-	-	
Distributed Generation Bonus	-	-	-	
Total Quantity from Non REC Eligible Genera	tion -		-	
REC Sales / Transfers	2012	2013	2014	
Quantity of RECs Sold				
Bonus Incentives Transferred				
Bonus Incentives Not Realized				
Total Sold / Transferred / Unrealized	-	-	-	
Adjustments	2012	2013	2014	25:46
2012 Surplus Applied to 2013	97,189	97,189		
2013 Surplus Applied to 2012	-			
2013 Surplus Applied to 2014				
2014 Surplus Applied to 2013	<u> </u>			
Net Surplus Adjustments	(97,189)	97,189	-	
Adjustment for Events Beyond Control				
Contribution to RCW 19.285 Compliance	1	97,189	-	

Facility Name: Hopkins Ridge MWh Allocated to WA Compliance 2013 2014 **WREGIS Certificate Serial Numbers** 2012 Total MWh Produced / Purchased from Hopkins Ridge that will be used for compliance for 2013 Percent of MWh Qualifying Under RCW 19.285 184-WA-55767-1 to 41665 100% 184-WA-57592-1 to 27509 Percent of Qualifying MWh Allocated to WA 100% Eligible MWh Available for RCW 19.285 Compliance 238,842 184-WA-59370-1 to 51422 184-WA-61176-1 to 35900 Non REC Eligible Generation 184-WA-63005-1 to 39824 2012 2013 2014 184-WA-64900-1 to 42522 Extra Apprenticeship Credit Distributed Generation Bonus **Total Quantity from Non REC Eligible Generation REC Sales / Transfers** 2012 2014 Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments 2012 2013 2014 2012 Surplus Applied to 2013 238,842 238,842 2013 Surplus Applied to 2012 2013 Surplus Applied to 2014 2014 Surplus Applied to 2013 **Net Surplus Adjustments** (238.842) 238.842 Adjustment for Events Beyond Control Contribution to RCW 19.285 Compliance 238,842 **Facility Name:** Klondike III May be used for Target Year 2014 Compliance MWh Allocated to WA Compliance 2012 2013 2014 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 2012 2014 Extra Apprenticeship Credit Distributed Generation Bonus **Total Quantity from Non REC Eligible Generation REC Sales / Transfers** 2012 2013 2014 Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments 2012 2014 2012 Surplus Applied to 2013 2013 Surplus Applied to 2012 2013 Surplus Applied to 2014 2014 Surplus Applied to 2013 **Net Surplus Adjustments Adjustment for Events Beyond Control** Contribution to RCW 19.285 Compliance

Facility Name:					
					WREGIS Certificate Serial Numbers
MWh Allocated to WA Compliance		2012	2013	2014	nat will be used for compliance for 2013
Total MWh Produced / Purchased from					1364-WA-58432-1 to 9246
Percent of MWh Qualifying Under RCW		100%	100%		1364-WA-60271-1 to 13386
Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285		100% 55,536	100% 54,242		1364-WA-62065-1 to 9780 1364-WA-63926-1 to 11808
Englishe WWW Available for New 15.26.	Compliance	33,330	34,242		1364-WA-65795-1 to 11316
Non REC Eligible Generation		2012	2013	2014	1304- W71-03773-1 to 11310
Extra Apprenticeship Credit		11,107	10,848	2014	ı ⁻
Distributed Generation Bonus			-		
Total Quantity from Non REC Eligible G	eneration	11,107	10,848		1
REC Sales / Transfers		2012	2013	2014	_
Quantity of RECs Sold					
Bonus Incentives Transferred					
Bonus Incentives Not Realized					J
Total Sold / Transferred / Unrealized		-	-	-	
Adjustments		2012	2013	2014	
2012 Surplus Applied to 2013		66,643	66,643	2021	1
2013 Surplus Applied to 2012		The Automotive Annual Control of the	00,0,0		
2013 Surplus Applied to 2014			65,090	65,090	
2014 Surplus Applied to 2013			-		
Net Surplus Adjustments		(66,643)	1,553	65,090	•
Adjustment for Events Beyond Control					
		Date of the second seco			
Contribution to RCW 19.285 Compl	iance	<u>.</u>	66,643	65,090	
Facility Name:	Hopkins	Ridge Phase II			
-	Hopkins				
MWh Allocated to WA Compliance		2012	2013	2014	WREGIS Certificate Serial Numbers
MWh Allocated to WA Compliance Total MWh Produced / Purchased from	Hopkins Ridge Phase I	2012	2013		hat will be used for compliance for 2013
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW	Hopkins Ridge Phase I 19.285	2012	2013	100 100 100 100 100 100 100 100 100 100	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to	Hopkins Ridge Phase I 19.285 WA	2012 100%	2013		hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW	Hopkins Ridge Phase I 19.285 WA	2012	2013	100 100 100 100 100 100 100 100 100 100	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285	Hopkins Ridge Phase I 19.285 WA	2012 100% 100% 10,509		er en	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285	Hopkins Ridge Phase I 19.285 WA	2012 100%	2013 2013	100 100 100 100 100 100 100 100 100 100	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation	Hopkins Ridge Phase I 19.285 WA	2012 100% 100% 10,509	2013	er en	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 100% 10,509	2013	er en	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Generation	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 100% 10,509 2012	2013	2014	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Generation	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 100% 10,509	2013	er en	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Generation REC Sales / Transfers Quantity of RECs Sold	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 100% 10,509 2012	2013	2014	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Go REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 100% 10,509 2012	2013	2014	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Generation REC Sales / Transfers Quantity of RECs Sold	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 100% 10,509 2012	2013	2014	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Go REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 100% 10,509 2012 - - 2012	2013	2014	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Go REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 10,509 2012 - - 2012	2013	2014	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Generation Bonus Total Quantity from Non REC Eligible Generation Bonus Total Quantity from Non REC Eligible Generation Bonus Incentives Transferred Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments 2012 Surplus Applied to 2013	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 10,509 2012 - - 2012	2013	2014	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Generation REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments 2012 Surplus Applied to 2013 2013 Surplus Applied to 2012	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 100% 10,509 2012 - - 2012 2012	2013	2014	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Ge REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments 2012 Surplus Applied to 2013 2013 Surplus Applied to 2012 2013 Surplus Applied to 2014	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 10,509 2012 - - 2012	2013	2014	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Generation REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments 2012 Surplus Applied to 2013 2013 Surplus Applied to 2012	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 100% 10,509 2012 - - 2012 2012	2013	2014	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Government REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments 2012 Surplus Applied to 2013 2013 Surplus Applied to 2014 2014 Surplus Applied to 2014	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 10,509 2012 	2013 	2014	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Generation Bonus Total Quantity from Non REC Eligible Generation Bonus Total Quantity from Non REC Eligible Generation REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments 2012 Surplus Applied to 2013 2013 Surplus Applied to 2014 2014 Surplus Applied to 2013 Net Surplus Adjustments Adjustment for Events Beyond Control	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 10,509 2012 - 2012 2012 - 2012 (10,509)	2013 - - 2013 2013 10,509 - 10,509	2014	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
MWh Allocated to WA Compliance Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Generation Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments 2012 Surplus Applied to 2013 2013 Surplus Applied to 2014 2014 Surplus Applied to 2013 Net Surplus Adjustments Adjustment for Events Beyond Control	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 10,509 2012 	2013 	2014	hat will be used for compliance for 2013 1382-WA-56628-1 to 1834 1382-WA-58443-1 to 1210 1382-WA-60282-1 to 2263 1382-WA-62077-1 to 1579 1382-WA-63938-1 to 1752
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Generation Bonus Total Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments 2012 Surplus Applied to 2013 2013 Surplus Applied to 2014 2014 Surplus Applied to 2014 2014 Surplus Applied to 2013 Net Surplus Applied to 2013	Hopkins Ridge Phase I 19.285 WA Compliance	2012 100% 10,509 2012 - 2012 2012 - 2012 (10,509)	2013 - - 2013 2013 10,509 - 10,509	2014	hat will be used for compliance for 201 1382-WA-56628-1 to 183 1382-WA-58443-1 to 121 1382-WA-60282-1 to 226 1382-WA-62077-1 to 157 1382-WA-63938-1 to 175

Facility Name:

Lower Snake River - Dodge Junction

WREGIS Certificate Serial Numbers

MWh Allocated to WA Compliance

Total MWh Produced / Purchased from Lower Snake River - De Percent of MWh Qualifying Under RCW 19.285 Percent of Qualifying MWh Allocated to WA Eligible MWh Available for RCW 19.285 Compliance

2012	2013	2014
406,825		
100%	100%	
100%	100%	
406,825	269,130	-

Non REC Eligible Generation

Extra Apprenticeship Credit
Distributed Generation Bonus
Total Quantity from Non REC Eligible Generation

		** *
2012	2013	_ 2014
81,365	53,826	-
- 1	-	-
81 365	53 826	•

1at w	ill be used for compliance for 2012
	2669-WA-64707-1 to 48312
	2669-WA-59215-1 to 1443
	2669-WA-66597-1 to 49336
-	2669-WA-61012-1 to 57622
	2669-WA-68472-1 to 25553
	2669-WA-72339-1 to 21542
1	2669-WA-74136-1 to 44107
1	2669-WA-77938-1 to 56484
-	2669-WA-70387-1 to 29801
	2669-WA-76114-1 to 28969
	2669-WA-62823-1 to 43656

REC Sales / Transfers

Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized

2012	2013	2014

Adjustments

2012 Surplus Applied to 2013 2013 Surplus Applied to 2012 2013 Surplus Applied to 2014 2014 Surplus Applied to 2013 Net Surplus Adjustments

2012	2013	2014
	-	
-		
	322,956	322,956
-	(322,956)	322,956

Adjustment for Events Beyond Control

La sur anticolor de sistema de la con-	tal decreases control of the first control	

Contribution to RCW 19.285 Compliance

ance	488,190 - 322,956

Lower Snake River - Phalen Gulch

WREGIS Certificate Serial Numbers

MWh Allocated to WA Compliance

Total MWh Produced / Purchased from Lower Snake River - Ph Percent of MWh Qualifying Under RCW 19.285 Percent of Qualifying MWh Allocated to WA Eligible MWh Available for RCW 19.285 Compliance

2012	2013	2014 1
303,752		
100%	100%	
100%	100%	
· 303,752	202,987	

nat will be used for compliance for 2012 2670-WA-62824-1 to 34934 2670-WA-61013-1 to 44213 2670-WA-66598-1 to 102 2670-WA-59216-1 to 1387 2670-WA-64708-1 to 38366

Non REC Eligible Generation

Extra Apprenticeship Credit
Distributed Generation Bonus
Total Quantity from Non REC Eligible Generation

201	2	2013	2014
	60,750	40,597	-
	-	-	-
	60.750	40.597	-

REC Sales / Transfers

Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized

2012	2013	2014	WREG
		<u>th</u>	at will be

used for compliance for 2013
2670-WA-66598-103 to 40387
2670-WA-68473-1 to 19052
2670-WA-70388-1 to 21835
2670-WA-72340-1 to 13379
2670-WA-74137-1 to 32339
2670-WA-76115-1 to 19073

2670-WA-77939-1 to 38787

WREGIS Certificate Serial Numbers

Adjustments

2012 Surplus Applied to 2013 2013 Surplus Applied to 2012 2013 Surplus Applied to 2014 2014 Surplus Applied to 2013 Net Surplus Adjustments

2012	2013	2014
221,700	221,700	
-		
	243,584	243,584
	-	
(221,700)	(21,884)	243,584

Adjustment for Events Beyond Control

Contribution to RCW 19.285 Compliance

142,802 221,700 243,584

Facility Name: Wanapum Fish Bypass MWh Allocated to WA Compliance 2013 2014 Total MWh Produced / Purchased from Wanapum Fish Bypass 4,966 4,631 3,571 Percent of MWh Qualifying Under RCW 19.285 100% 100% 100% Percent of Qualifying MWh Allocated to WA 100% 100% 100% Eligible MWh Available for RCW 19.285 Compliance 4,966 4,631 3,571 Non REC Eligible Generation 2012 2013 2014 Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Generation **REC Sales / Transfers** 2012 2014 Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments 2012 2013 2014 2012 Surplus Applied to 2013 2013 Surplus Applied to 2012 2013 Surplus Applied to 2014 2014 Surplus Applied to 2013 **Net Surplus Adjustments** Adjustment for Events Beyond Control Contribution to RCW 19.285 Compliance 4,966 4,631

Facility Name: Bake	r River Project	Estimate for Informatio	nal Purposes
MWh Allocated to WA Compliance	2012	2013	2014
Total MWh Produced / Purchased from Baker River Project			
Percent of MWh Qualifying Under RCW 19.285			
Percent of Qualifying MWh Allocated to WA			
Eligible MWh Available for RCW 19.285 Compliance	-	-	27,39
Non REC Eligible Generation	2012	2013	2014
Extra Apprenticeship Credit	-	-	-
Distributed Generation Bonus	-	-	-
Total Quantity from Non REC Eligible Generation	•	-	-
REC Sales / Transfers	2012	2013	2014
Quantity of RECs Sold			
Bonus Incentives Transferred			
Bonus Incentives Not Realized			
Total Sold / Transferred / Unrealized	-	-	-
Adjustments	2012	2013	2014
2012 Surplus Applied to 2013		- 9	
2013 Surplus Applied to 2012	-		
2013 Surplus Applied to 2014			-
2014 Surplus Applied to 2013		-	
Net Surplus Adjustments	•		-
	<u></u>		

For informational purposes, an estimated amount of eligible incremental hydroelectric energy for the Baker River Project can be provided as a pro-rated estimate which assumes

implementation of the FERC license minimum flow requirement will occur October 1, 2014.

Facility Name:	Snoqualm	ie Falls Project	Estimate for Information	nal Purposes
MWh Allocated to WA Compliance		2012	2013	2014
Total MWh Produced / Purchased from		ct		
Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to				
Eligible MWh Available for RCW 19.28		<u> </u>	-	9,179
Non REC Eligible Generation		2012	2013	2014
Extra Apprenticeship Credit		2012	- 2013	
Distributed Generation Bonus			-	-
Total Quantity from Non REC Eligible G	ieneration	-	•	-
REC Sales / Transfers		2012	2013	2014
Quantity of RECs Sold Bonus Incentives Transferred				
Bonus Incentives Not Realized				
Total Sold / Transferred / Unrealized	'	-	-	-
Adjustments		2012	2013	2014
2012 Surplus Applied to 2013			-	
2013 Surplus Applied to 2012				
2013 Surplus Applied to 2014 2014 Surplus Applied to 2013				
Net Surplus Adjustments		-	-	-
Adjustment for Events Beyond Control	[
Contribution to RCW 19.285 Compl	iance	_		9,179
For informational purposes, an estimated amount of eligible incrementation			oro-rated estimate which assumes	J. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
branch pipe repairs are completed and all seven units are fully operation	onal August 1, 2014			
Facility Name:	Fac	ility 11]	
MWh Allocated to WA Compliance				
		2012	2013	2014
Total MWh Produced / Purchased from	Facility 11	2012	- 2013	2014
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW	19.285	2012	- 2013	2014
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to	19.285 WA	2012	2013	2014
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285	19.285 WA			-
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285	19.285 WA	- 2012	2013	2014
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285	19.285 WA			-
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit	19.285 WA Compliance	2012	2013	-
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus	19.285 WA Compliance	2012	2013	-
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible G REC Sales / Transfers Quantity of RECs Sold	19.285 WA Compliance	2012	2013	2014
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible G REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred	19.285 WA Compliance	2012	2013	2014 2014
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible G REC Sales / Transfers Quantity of RECs Sold	19.285 WA Compliance	2012	2013	2014
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible G REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized	19.285 WA Compliance	2012	2013	2014
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible G REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments	19.285 WA Compliance	2012 2012	2013	2014 2014
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible G REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized	19.285 WA Compliance	2012	2013	2014
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible G REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments 2012 Surplus Applied to 2013 2013 Surplus Applied to 2012 2013 Surplus Applied to 2014	19.285 WA Compliance	2012	2013	2014
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible G REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Transferred Total Sold / Transferred / Unrealized Adjustments 2012 Surplus Applied to 2013 2013 Surplus Applied to 2014 2014 Surplus Applied to 2014 2014 Surplus Applied to 2013	19.285 WA Compliance	2012	2013	2014
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible G REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Transferred Total Sold / Transferred / Unrealized Adjustments 2012 Surplus Applied to 2013 2013 Surplus Applied to 2012 2013 Surplus Applied to 2014 2014 Surplus Applied to 2013 Net Surplus Adjustments	19.285 WA Compliance	2012	2013	2014
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible G REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments 2012 Surplus Applied to 2013 2013 Surplus Applied to 2014 2014 Surplus Applied to 2014 2014 Surplus Applied to 2013	19.285 WA Compliance	2012	2013	2014
Total MWh Produced / Purchased from Percent of MWh Qualifying Under RCW Percent of Qualifying MWh Allocated to Eligible MWh Available for RCW 19.285 Non REC Eligible Generation Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible G REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Adjustments 2012 Surplus Applied to 2013 2013 Surplus Applied to 2014 2014 Surplus Applied to 2014 2014 Surplus Applied to 2013 Net Surplus Adjustments	19.285 WA Compliance eneration	2012	2013	2014

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:

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	43+	92 MW * \$63/MW = \$5796
***	****	***			***	7
12	31	24		13 MW * \$59/MW = \$767	***	13 MW * \$65/MW = \$845
(\$Millio	18					
Cost of	Market			36	***	41
Imputed	i Debt			1	137	0
Total Re Require			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

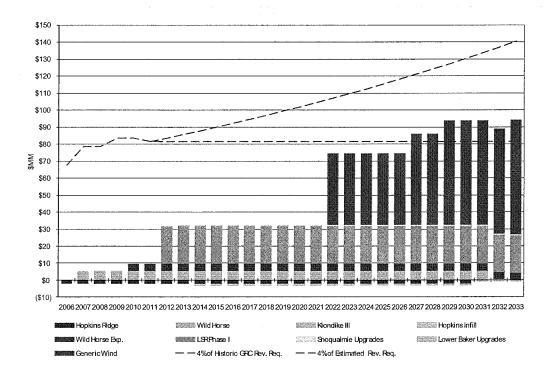
(\$ Millions)	20-yr NPV
Wild Horse	375
Peaker	34
Market	285
20-yr Incremental Cost of Wild Horse	56

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, 2014 to supply at least three percent of its load for the year 2014.



MEMORANDUM

TO: Roger Garratt, Ken Johnson

FROM: Eric Englert, Anna Mikelsen Mills

SUBJECT: Requirements of Chapter 480-109-020 WAC

DATE: December 31, 2013

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, 2014 to supply at least three percent of its estimated load for the year 2014.

This is consistent with the information provided to the WUTC on March 29, 2013 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 through the year 2021, as noted in RCW 19.285.040(2)."

It is also consistent with the information provided to the WUTC on May 31, 2013 in PSE's compliance filing in Docket No. UE-120767, in regard to PSE's 2013 Integrated Resource Plan ("IRP"). In the Executive Summary of the IRP, PSE stated that:

"... PSE has acquired enough eligible renewable resources and RECs to meet the requirements of the law through 2022."

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 2014, in advance of January 1, 2014.

Eligible renewable resources that PSE may elect to use in whole or in part to meet its 2014 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;

- Lower Baker River Hydroelectric Efficiency Upgrades¹;
- Allocation of Hydroelectric Efficiency Upgrades that may be (now or in the future) a part of PSE's Mid-C Contracts;
- Customer-Generator owned facilities taking service from PSE under PSE electric rate Schedule 91; and
- Any other eligible renewable resources that may become available in 2014 or 2015.

Total 2012 generation from Hopkins Ridge, Wild Horse, Wild Horse Expansion and Lower Snake River was about 1,821,000 megawatt-hours (not inclusive of the extra apprenticeship credits); similar generation may be achieved for 2013 and 2014.

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 2014 renewable energy target. However, there may be events beyond PSE's control during the remainder of the calendar year 2014 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 2014 compliance in the 2015 or 2016 report.

<u>Load</u>

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.

¹ Lower Baker River Hydroelectric Efficiency Upgrades are expected to be completed in 2014.

PSE's actual 2012 delivered load is 21,175,116,785 kilowatt-hours (i.e. 21,175,117 megawatt-hours) and the 2013 forecast load is about 21,145,480,923 kilowatt-hours (i.e. 21,145,481 megawatt-hours).

Consistent with WAC 480-109-020(3), based on the average of PSE's load in 2012 and 2013 and as reflected above, the Company's estimated load for purposes of meeting its 2014 target will likely be in the neighborhood of 21,160,299 megawatt-hours.

2014 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 2014 may end up being approximately 634,809 megawatt-hours.

PSE expects to generate more eligible renewable energy than its 2014 requirement (not including any renewable energy credits generated in 2013 that the Company may elect to use for its 2014 requirement).

PSE will report on the specific renewable energy credits produced and to be retired for final compliance with the 2014 target in either its annual 2015 or 2016 report, and reserves the right to submit renewable energy credits from the resources reported here or to substitute with renewable energy credits produced from 2013 to 2015 by other eligible renewable resources or with 2014 generation from eligible renewable resources that have not been converted to renewable energy credits.

Conclusion

PSE's eligible renewable resources in 2014 may be expected to generate approximately 2,424,985 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 and/or customers or ii) any renewable energy credits generated in 2013 that the Company may elect to use for its 2014 renewable energy target).

Events beyond PSE's reasonable control may yet occur during the remainder of calendar year 2014 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 2014 compliance in the annual 2015 or 2016 renewable energy target report.

As reported to the WUTC on March 29, 2013, PSE is on track to meet the Renewable Energy Target requirements for the year 2014 and all the way to the year 2021. PSE has acquired enough eligible renewable resources or renewable energy credits to meet the estimated renewable energy target for 2014 as noted in RCW 19.285.040(2).