

Puget Sound Energy P.O. Box 97034 Bellevue, WA 98009-9734 PSE.com

Filed via Web Portal

June 1, 2020

Mr. Mark L. Johnson, Executive Director and Secretary Washington Utilities and Transportation Commission 621 Woodland Square Loop SE Lacey, Washington 98503

Re: Annual Renewable Portfolio Standard Report - 2020 RCW-Required Report, RCW 19.285.070 and WAC-Required Report, WAC 480-109-210

Dear Mr. Johnson:

Attached for filing, please find Puget Sound Energy's ("PSE's") report detailing the annual reporting requirements for the Renewable Portfolio Standard Report (the "Report") in RCW 19.285.070 and WAC 480-109-210. PSE is asking the Commission to approve its 2020 Renewable Energy Target of 3,114,782 MWh.

PSE requests confidential treatment for Attachments 4 and 5 to the Report under RCW 80.04.095 and in accordance with WAC 480-07-160. The information labeled as confidential includes commercially sensitive data and confidential information related to renewable energy credit ("REC") sales revenues, which could expose PSE to competitive injury if disclosure is unrestricted. Therefore, PSE requests confidential treatment on the basis that the information labeled "Shaded Information is Designated as Confidential per WAC 480-07-160" contains "valuable commercial information, including trade secrets or confidential marketing, cost, or financial information, or customer-specific usage and network configuration and design information," as provided in in RCW 80.04.095 in accordance with WAC 480-07-160(2)(c).

This Confidential information is reducted as follows:

Location	Type of Information	Explanation
Attachment 4 First tab: Summary Table	REC revenues	This tab contains REC revenue information from which REC prices could be derived using the quantity information in the Revenue Detail
		tab.

Location	Type of	Explanation
	Information	
Attachment 4	REC revenues	This tab contains REC price detail by
Second tab: Revenue Detail		transaction and by resource or agreement.
Attachment 5	REC revenues	This column contains REC revenue information
Tab (2)(a)(ii)Annual-2019,		from which REC prices could be derived using
estimate, Column G		the REC quantity information in Attachments 3
		or 4.
Attachment 5	REC prices	This tab contains REC price information.
REC Purchases tab		

A copy of this report will also be submitted to the Department of Commerce.

If you have any questions about the information contained in this filing, please contact Chris Schaefer at 425-456-2932 or chris.schaefer@pse.com. If you have any other questions please contact me at (425) 456-2142.

Sincerely,

/s/ Jon Piliaris

Jon Piliaris, Director Regulatory Affairs Puget Sound Energy PO Box 97034, EST-07W Bellevue, WA 98009-9734 425-456-2142 Jon.Piliaris@pse.com

cc: Department of Commerce

Attachments:

PSE 2020 RPS Report Attachment 1: Memo

Attachment 2: IRP Appendix N Attachment 3: Reporting Tool

Attachment 4: REC Sales (Redacted Version)

REC Sales (Confidential Version)

Attachment 5: Incremental Cost Template (Redacted Version)

Incremental Cost Template (Confidential Version)

Attachment 6: Department of Commerce EIA Workbook

Attachment 7: Apprenticeship Credit Approval Letters

Puget Sound Energy 2020 Annual Renewable Portfolio Standard Report pursuant to RCW 19.285.070 and WAC 480-109-210

Required Contents: Checklist and Table of Contents

RCW 19.285.070	WAC 480-109-210(2)	Section/Page
The utility's annual load for the prior two years	The utility's annual load for the prior two years	Section 1 Annual Load For Previous Two Years Page 1
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 2 Renewable Energy Target Page 1
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) of each type of eligible renewable resource used and the amount of renewable energy credits acquired	Section 3 Renewable Energy Acquired To Have Met Renewable Energy Target Page 1
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	Total incremental cost as a dollar amount and in dollars per megawatt-hour of renewable energy generated by all eligible renewable resources and multiply the dollars per megawatt-hour cost by the number of megawatt-hours needed for target year compliance.	Section 4 Incremental Cost Calculation and Revenue Requirement Ratio Page 2
	State whether the utility is relying upon one of the alternative compliance mechanisms provided in WAC 480-109-220 instead of fully meeting its renewable resource target.	Section 5 Alternative Compliance Page 3

RCW 19.285.070	WAC 480-109-210(2)	Section/Page
	Describe the resources that the utility intends to use to meet the renewable resource requirements for the target year.	Section 6 2019 Compliance Plan Page 3
	A list of each eligible renewable resource that serves Washington customers, for which a utility owns the certificates, with an installed capacity greater than twenty-five kilowatts.	Section 7 Eligible Resources Page 4
	The number of certificates sold, their WREGIS certificate numbers, their source, and the revenues obtained from the sales.	Section 8 Sales Page 5

Attachment 1: Memo dated December 24, 2019 Regarding Eligible Renewable

Resources

Attachment 2: Appendix N from PSE's Integrated Resource Plan filed with the

Commission on November 14, 2017

Attachment 3: Reporting Tool

Attachment 4: REC Sales, Confidential Version

REC Sales, Redacted Version

Attachment 5: Incremental Cost Template, Confidential Version

Incremental Cost Template, Redacted Version

Attachment 6: Department of Commerce EIA Workbook

Attachment 7: Apprenticeship Credit Approval Letters

Section 1. Annual Load for the Prior Two Years

	<u>2018</u>	<u>2019</u>
Delivered Load to Retail Customers (MWh)	20,697,195	20,833,230

The source of this data is the Puget Sound Energy ("PSE") 2019 FERC Form 1, p. 301, line 10, columns d and e.

Section 2. 2020 Renewable Energy Target

This section provides the 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 1st of the target year.

After Commission approval, PSE's Renewable Energy Target for 2020 will be 3,114,782 MWh.

Calculation:

	<u>2018</u>	<u>2019</u>
Delivered Load to Retail Customers (MWh)	20,697,195	20,833,230
Average Load	20,76	5,213
15 Percent of Average Load	3,114	1,782

Section 3. Renewable Energy Acquired To Meet 2020 Renewable Energy Target

This section provides the amount (in megawatt-hours) of each type of eligible renewable resource used, and the amount of renewable energy credits acquired to meet the 2020 target.

As demonstrated in Attachment 1, PSE has sufficient eligible renewable resources to meet its 2020 target. PSE plans to meet its 2020 target with a combination of incremental hydro along with other renewable energy certificates from qualifying resources. The following table shows all of PSE's eligible resources for 2020, of which a subset will be used for compliance purposes:

Incremental Hydro Resources	88,091
Eligible Wind Resources	3,992,072
Landfill Gas	2,361

Section 4. Incremental Cost Calculation and Revenue Requirement Ratio

This section calculates the total incremental cost as a dollar amount and in dollars per megawatt-hour of renewable energy generated by all eligible renewable resources and multiplies the dollars per megawatt-hour cost by the number of megawatt-hours needed for target year compliance and provides the annual revenue requirement ratio.

The following is a summary of PSE's incremental cost calculation as developed in Staff's template, attached as Attachment 5.

Incremental Cost	\$27.8M
Revenue Requirement	\$1,996M
Percentage	1.459%
Source of Information	Please see table below.

PSE's incremental cost is based on the average cost of eligible renewable resources. Consistent with the requirements outlined in WAC 480-109-210 (2)(a)(i) (A) through (G), the calculation of incremental costs for each eligible resource is performed at the time of acquisition. PSE has not acquired any new resources since 2013 and therefore continues to utilize incremental cost calculations as documented in Attachment 2. The incremental costs (in millions of dollars) along with the annual megawatt hour (MWh) as sourced from PSE's 2017 IRP, for each eligible resource are as follows:

D	Renewable	Equivalent Non-Renewable			One Year	Annual	Market	
Resource	Resource	Peaker	Market	Total	Incremental Cost	MWh	Price/Peaker Assumptions*	
Hopkins Ridge	\$18.77	\$1.71	\$19.26	\$20.97	(\$2.20)	466,908	2004 RFP	
Wild Horse	\$34.94	\$3.21	\$26.53	\$29.74	\$5.20	642,984	2006 RFP	
Klondike III	\$10.27	\$0.93	\$8.98	\$9.91	\$0.36	157,680	2006 RFP	
Hopkins Infill	\$1.28	\$0.17	\$1.19	\$1.36	(\$0.08)	21,024	2007 IRP	
Wild Horse Expansion	\$10.03	\$0.81	\$5.09	\$5.90	\$4.14	91,980	2007 IRP	
Lower Snake River I	\$70.61	\$1.69	\$48.51	\$50.20	\$20.42	897,900	2010 Trends	
Snoqualmie Falls Upgrade	\$3.85	\$0.74	\$2.44	\$3.18	\$0.67	34,164	2009 Trends	
Lower Baker 4	\$8.60	\$1.37	\$7.92	\$9.29	(\$0.69)	109,500	2011 IRP Base	
Total					\$27.81	2,422,140		

^{(\$} Millions/Year)

This information appears in PSE's 2017 IRP, Appendix N, Page N-177, Figure N-145, and is provided in Attachment 2. Due to the implementation of the Clean Energy Transformation Act, PSE's next IRP will be filed April 1, 2021.

As reflected in the above table, the incremental cost of the eligible renewable resources portfolio is \$27.81 million resulting in an average cost/MWh of \$11.48. The incremental cost for the 2020 target year, based on the average cost for the portfolio of resources is \$35.8 million (\$11.48/MWh * 3,114,782 MWh).

The resulting ratio of the portfolio's annualized cost of investment relative to the utility's total annual retail revenue requirement is 1.459%.

Utilizing Staff's template, attached as Attachment 5, that calculates the incremental cost for the target based on the actual planned resources, the incremental cost for 2020 target year compliance is \$42.6 million.

The total annual retail revenue requirement for 2020 is \$1,996.287 million. The 2020 revenue requirement is based on the revenue requirement determined in PSE's last general rate case (UE-170033) after adjusting for Tax Cuts and Jobs Act ("Tax Reform") (Docket UE-180282), Expedited Rate Filing ("ERF") (Docket UE-180899 and UG-180900) and Protected-Plus Excess Deferred Income Tax Reversal ("EDIT ARAM") (Docket UE-180899).

Section 5. Alternative Compliance

This section states whether the utility is relying upon one of the alternative compliance mechanisms provided in WAC 480-109-220 instead of fully meeting its renewable resource target. A utility using an alternative compliance mechanism must use the incremental cost methodology described in this section and include sufficient data, documentation and other information in its report to demonstrate that it qualifies to use that alternative mechanism.

PSE is not utilizing an alternative compliance mechanism provided for in RCW 19.285.040(2)(d) or RCW 19.285.050(1) and WAC 480.109.220 instead of meeting its 2020 Renewable Energy Target.

¹ Figure reflects Revenue Requirement from PSE's 2017 General Rate Case, after adjusting for Tax Reform updates approved by the Commission in Docket UE-180282. Electric Revenue Requirement as originally approved in UE-170033 was \$2,069,159,344. Utilizing the pre-tax reform, revenue requirement results in a 1.408% revenue requirement ratio.

Section 6. 2020 Compliance Plan

This section describes the resources that PSE intends to use to meet the renewable resource requirements for the target year.

PSE is positioned to meet its 2020 Renewable Energy Target with a combination of qualified hydroelectric upgrades and other renewable energy certificates from qualifying resources. The following table provides a summary of PSE's expected 2020 compliance. Further details about this information can be found in Attachment 3.

Lower Baker Project Incremental Hydro Snoqualmie Falls Project Incremental Hydro 17,398 Lower Snake River - Phalen Gulch (Vintage 2019) 28,679 Extra Apprenticeship Credits 59,736 Wild Horse Phase II (Vintage 2019) 99,359 Extra Apprenticeship Credits 19,872 Lower Snake River-Dodge Junction (Vintage 2019) 412,098 Extra Apprenticeship Credits 19,872 Lower Snake River-Dodge Junction (Vintage 2019) 412,098 Extra Apprenticeship Credits 412,098 Extra Apprenticeship Credits 412,098 Hopkins Ridge (Vintage 2019) 424,844 Hopkins Ridge (Vintage 2019) 434,366 Klondike III (Vintage 2019) 435,366 Klondike III (Vintage 2019) 436,366 Klondike III (Vintage 2019) 437,301 Camp Reed Wind Park REC only (Vintage 2019) 438,367 Klondike III REC only (Vintage 2019) 439,301 Camp Reed Wind Farm Five Pine Project REC only (Vintage 2019) 437,307 Rolden Valley Wind Farm Five Pine Project REC only (Vintage 2019) 438,408 Meadow Creek Wind Farm Five Pine Project REC only (Vintage 2019) 439,408 Oregon Trail Wind Park REC only Wind Park REC Only (Vintage 2019) 430,408 Oregon Trail Wind Park, LLC - Oregon Trail Wind Park REC Only (Vintage 2019) 430,408 Soseburg LFG - Roseburg LFG Energy REC Only (Vintage 2019) 431,407 Salmon Falls Wind Park, LLC - Salmon Falls Wind Park REC Only (Vintage 2019) 431,407 Salmon Falls Wind Park, LLC - Salmon Falls Wind Park REC Only (Vintage 2019) 430,077 Thousand Springs Wind Park, LLC - Touana Springs Wind Park REC Only (Vintage 2019) 430,077 Thousand Springs Wind Park, LLC - Tuana Sulch Wind Park REC Only (Vintage 2019) 430,077 Thousand Springs Wind Park, LLC - Tuana Sulch Wind Park REC Only (Vintage 2019) 430,077 Thousand Springs Wind Park, LLC - Tuana Springs REC Only (Vintage 2019) 430,077 Thousand Springs Wind Park, LLC - Tuana Springs REC Only (Vintage 2019) 430,077 Thousand Springs Foregy REC Only (Vintage 2019) 430,077 Thousand Springs Wind Park, LLC - Tuana Gulch Wind Park REC Only (Vintage 2019) 430,077 Thousand Springs Foregy REC Only (Vint	2020 Compliance Plan	
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Extra Apprenticeship Credits 62,041 Wild Horse Phase II (Vintage 2020) 90,930 Extra Apprenticeship Credits 18,186 Lower Snake River-Dodge Junction (Vintage 2020) 423,793 Extra Apprenticeship Credits 84,759 Klondike III (Vintage 2020) 40,467 Hopkins Ridge Phase II (Vintage 2020) 17,545	White Creek Wind 1 - White Creek REC Only (Vintage 2019)	2,797
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Extra Apprenticeship Credits 18,186 Lower Snake River-Dodge Junction (Vintage 2020) 423,793 Extra Apprenticeship Credits 84,759 Klondike III (Vintage 2020) 40,467 Hopkins Ridge Phase II (Vintage 2020) 17,545		•
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Klondike III (Vintage 2020) 40,467 Hopkins Ridge Phase II (Vintage 2020) 17,545		•
Hopkins Ridge Phase II (Vintage 2020) 17,545		•
	Available to Meet Target	3,114,783

Data for 2020 provided above is an estimate and is subject to change.

Section 7. Eligible Resources

This section provides a list of each eligible renewable resource that serves Washington customers, for which PSE owns the certificates, with an installed capacity greater than twenty-five kilowatts and each resource's WREGIS registration status and use of certificates, whether it be for annual target compliance, a voluntary renewable energy program as provided for in RCW 19.29A.090, or owned by the customer; and eligible resources being included in the report for the first time and documentation of their eligibility.

PSE has acquired sufficient eligible renewable resources in its portfolio to supply at least fifteen percent of its estimated load for the year 2020, in advance of January 1, 2020. Eligible renewable resources that PSE may elect to use in whole or in part to meet its 2020 target include (but are 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 Upgrades;
- 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 2020 or 2021.

Please also see Attachment 1.

Section 8. Sales

This section reports on the number of certificates sold, their WREGIS certificate numbers, their source, and the revenues obtained from the sales.

The following table summarizes PSE's REC sales by source and vintage year for 2014 through 2019 vintages. Through March 31, 2020, the Company has not transferred title to any Vintage 2020 RECs.

REC Sold by Year by Resource

	WREGIS			Vintage				Total
Source	No.	2014	2015	2016	2017	2018	2019	REC Sold
Wild Horse	W183	541,930	43,254	138,677	44,385	203,209	172,850	1,628,640
Wild Horse Phase II	W1364	98,496	10,000	-	-	-	-	210,088
Hopkins Ridge	W184	423,662	109,781	190,560	74,400	176,270	-	1,312,149
Hopkins Ridge Phase II	W1382	18,641	1,735	9,184	-	10,171	-	47,040
Klondike III	W237	133,571	60,697	62,849	57,197	57,609	24,620	523,272
Lower Snake River-Dodge Junction	W2669	230,247	-	-	-	-	-	431,998
Lower Snake River-Phalen Gulch	W2670	169,808	12,732	-	-	-	-	324,750
	_	1,616,355	238,199	401,270	175,982	447,259	197,470	4,477,937

Reflects REC transfers through 3/31/2020.

Confidential Attachment 4 provides transaction details including the revenue proceeds associated with those sales.



MEMORANDUM

TO: Jon Piliaris, Paul Wetherbee and Chris Smith

FROM: Tricia Fischer and Chris Schaefer

DATE: December 24, 2019

SUBJECT: Renewable portfolio standard

Background

Chapter 480-109 of Washington Administrive Code (WAC) establishes rules that electric utilities must follow to comply with the requirements of the Energy Independence Act (Chapter 19.285 RCW). Specifically, WAC 480-109-200 Renewable portfolio standard states:

(1) **Renewable resource target.** Each utility must meet the following annual targets.

•••

(c) By January 1st of each year beginning in 2020 and continuing each year thereafter, each utility must use sufficient eligible renewable resources, acquire equivalent renewable energy credits, or a combination of both, to supply at least fifteen percent of its two-year average load for the remainder of each target year.

...

- (2) **Credit eligibility.** 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 1st of the target year.
- (3) **WREGIS registration.** All eligible hydropower generation and all renewable energy credits used for utility compliance with the renewable resource target must be registered in WREGIS, regardless of facility ownership. Any megawatt-hour of eligible hydropower or renewable energy credit that a utility uses for compliance must have a corresponding certificate retired in the utility's WREGIS account.

•••

- (5) **Target calculation.** In meeting the annual targets of this section, a utility must calculate its annual target based on the average of the utility's load for the previous two years.
- (6) **Integration services.** A renewable resource within the Pacific Northwest may receive integration, shaping, storage or other services from sources outside of the Pacific Northwest and remain eligible to count towards a utility's renewable resource target.

Summary

Pursuant to the requirements of WAC 480-109-200 Renewable portfolio standard, we have prepared this Memorandum to document that Puget Sound Energy ("PSE") has acquired sufficient eligible renewable resources in its portfolio, by January 1, 2020, to supply at least fifteen percent of its 2018-2019 average load for the 2020 target year. This is consistent with the information provided to the WUTC on November 15, 2019 in PSE's Integrated Resource Plan Progress Report in Dockets UE-180607 and UG-180608. The section titled Renewable Energy Need (page 15) states that, "... PSE has sufficient qualifying renewable resources to meet the RPS requirements until 2023, including the ability to bank RECs."

The following provides detail of PSE's eligible renewable resources, load and renewable energy target.

Eligible Renewable Resources

Eligible renewable resources that PSE may elect to use in whole or in part to meet its 2020 target include (but are 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 Upgrades;
- 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;
- WA RPS compliant RECs purchases; and
- Any other eligible renewable resources that may become available.

Total 2018 generation from Hopkins Ridge, Wild Horse, Wild Horse Expansion, Lower Snake River and Klondike III Wind Projects was approximately 2,050,408 megawatt-hours (not inclusive of the extra apprenticeship credits); similar generation may be achieved for 2019 and 2020.

These eligible renewable resources may be impacted by events beyond PSE's reasonable control, which could not be reasonably anticipated, that could prevent 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 PSE.

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 480-109-220 for meeting its 2020

renewable resource target. However, there may be events beyond PSE's control during calendar year 2020 which could prompt PSE to utilize one of the above mentioned alternative compliance mechanisms. Such determination will be made when PSE reports on its final 2020 compliance in the 2021 or 2022 report.

PSE may choose to purchase eligible RECs to meet annual compliance targets and use PSE-owned resources for other purposes.

Load

As defined in the rule, "'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 2018 delivered load was 20,697,195,000 kilowatt-hours (20,697,195 megawatt-hours) and the 2019 forecast load is 20,852,369,000 kilowatt-hours (20,852,369 megawatt-hours). This forecast does not include Microsoft load served under the Special Contract in Docket UE-161123.

Consistent with WAC 480-109-210(2), based on the average of PSE's load in 2018 and 2019 and as reflected above, PSE's estimated load for purposes of meeting its 2020 target is 20,774,782 megawatt-hours.

2020 Renewable Resource Target

Pursuant to Chapter 480-109-200(1)(b) WAC, PSE's renewable resource target shall be fifteen percent of its 2018-2019 average load. Therefore, PSE's estimated renewable energy target for 2020 is approximately 3,116,217 megawatt-hours (fifteen percent of 20,774,782 megawatt-hours.) PSE expects that eligible renewable energy generation in 2020 combined with RECs generated in 2019 will be in excess of its 2020 requirement.

PSE will report on the specific renewable energy credits produced and to be retired for final compliance with the 2020 target in either its 2021 or 2022 annual report, and reserves the right to submit renewable energy credits from the resources reported here or to substitute with renewable energy credits produced from 2019 to 2021 by other eligible renewable resources or with 2020 generation from eligible renewable resources that have not been converted to renewable energy credits.

Conclusion

PSE has acquired sufficient eligible renewable resources or renewable energy credits to meet the estimated renewable energy target for 2020.

PSE's expected 2020 eligible renewable resource generation of 1,978,169 megawatt-hours, not including extra apprenticeship credits, plus 2019 eligible renewable resource generation banked forward, exceeds its 2020 renewable resource target of 3,116,217 megawatt-hours.









9. INCREMENTAL COST OF RENEWABLE RESOURCES

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 was 3 percent of retail electric load, and for 2016, it was 9 percent. 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."

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 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).









"Eligible Renewable Resources"

Figure N-145: Resources that Meet RCW 19.285 Definition of Eligible Renewable Resources

	Nameplate (MW)	Annual Energy (aMW)	Commercial Online Date	Market Price/ Peaker Assumptions	Capacity Credit Assumption
Hopkins Ridge	149.4	53.3	Dec-05	2004 RFP	20%
Wild Horse	228.6	73.4	Dec-06	2006 RFP	17.20%
Klondike III	50	18	Dec-07	2006 RFP	15.60%
Hopkins Infill	7.2	2.4	Dec-07	2007 IRP	20%
Wild Horse Expansion	44	10.5	Dec-09	2007 IRP	15%
Lower Snake River I	342.7	102.5	Apr-12	2010 Trends	5%
Snoqualmie Upgrades	6.1	3.9	Mar-13	2009 Trends	95%
Lower Baker Upgrades	30	12.5	May-13	2011 IRP Base	95%
Generic Solar 2022	266	70.8	Jan-22	2017 IRP Base	0%
Generic Solar 2024	112	29.8	Jan-24	2017 IRP Base	0%
Generic Solar 2032	25	6.7	Jan-32	2017 IRP Base	0%
Generic Solar 2033	59	15.7	Jan-33	2017 IRP Base	0%
Generic Solar 2037	25	6.6	Jan-37	2017 IRP Base	0%

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 the 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.

Appendix N: Electric Analysis









- 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.

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 N-146 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 N-146: Calculation of Wild Horse Revenue Requirement

(\$ Millions)	20-yr NPV	2007	2008	 2025
Gross Plant		384	384	 384
Accumulative depreciation		(10)	(29)	 (355)
(Avg.)				
Accumulative deferred tax		(20)	(56)	 (7)
(EOP)				
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			

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

Capacity = 39 MW

Capital Cost of Capacity: \$462/KW

Figure N-147: 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				

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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 N-148:: 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
(\$Million	ns)				
Cost of	Market			36	 41
Imputed	Debt			1	 0
Total Re Require			285	37	 41

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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 N-149: 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 per year using the 7.01 percent discount rate.





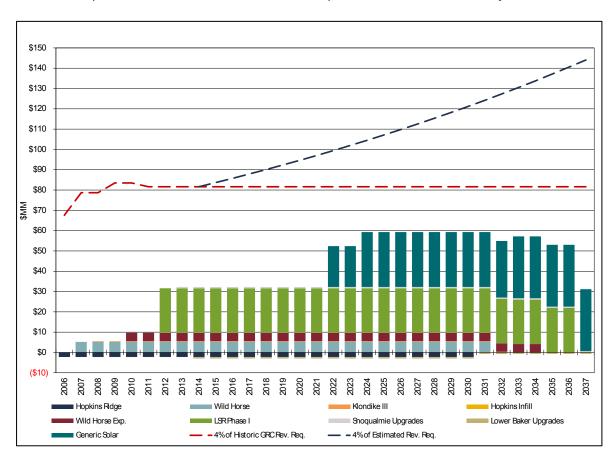




Summary Results

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 N-150 resents 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 N-150: Equivalent Non-renewable 20-year Levelized Cost Difference Compared to 4% of 2011 GRC Revenue Requirement + 2014 PCORC Adjustment



Appendix N: Electric Analysis









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 company's current revenue requirement.

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General Instructions:

Grey shading indicates cells where information is not required Yellow shading indicate cells where inputs are entered Green shading indicate cells with dropdown lists White shading indicate formulated cells Blue shading indicates summary calculations

"Compliance Summary" Worksheet

Enter "X" When Complete	Checklist Item	Cell/Row Description	Units	Cell/Row	Comments
	1	Reporting Entity	Text	B2	Enter the name of the reporting entity
	2	Reporting Date	Year	B4	Enter the date the report is submitted
	3	Delivered Load to Retail Customers	MWh	B7:E7	Enter the MWh delivered to customers

"Facility Detail" Worksheet

Enter "X" When Complete	Checklist Item	Cell/Row Description	Units	Cell/Row	Comments			
Instructions in the section are for the cells B2:F31. Each row represents a different facility. FIRST UPDATE cell B1053 For Start								
Year								
	1	Facility Name	Text	B2:B31	Enter the name of the qualifying facility or contract			
	2	WREGIS ID	Text	C2:C31	Enter the WREGIS ID for the qualifying facility			
	3	Facility Type	Toggle	D2:D31	Select the generation type for the qualifying facility			
	4	Extra Apprenticeship Credit Eligibility	Toggle	E2:E31	For facilities that qualify for extra apprenticeship credits select "Eligible". Select "Not Eligible for non-qualifying facilities.			
	5	Distributed Generation Eligibility	Toggle	F2:F31	For facilities that qualify for distributed generation select "Eligible". Select "Not Eligible for non-qualifying facilities.			

Enter "X" When Complete	Checklist Item	Cell/Row Description	Units	Cell/Row	Comments			
Instructions in this section identify the input locations for the 1st facility found in the "Facility Detail" worksheet. Inputs for facilities 2 through 30, also found in the "Facility Detail" worksheet, are identical to facility 1.								
	6	Total MWh Produced from Facility	Number	D39:F39	Enter the annual MWh output from the qualifying facility			
	7	Percent of MWh Qualifying	%	D40:F40	Enter the percent of MWh produced that are eligible for meeting RCW 19.285			
	8	Percent of Qualifying MWh Allocated to WA State Compliance	%	D41:F41	Enter the percent of qualifying MWh used for compliance with RCW 19.285. Used for facilities that are utilized for RPS compliance in two or more states.			
	9	Quantity of RECs from MWh Sold	Number	D50:F50	Enter the annual amount of RECs sold. For Multi-Jurisdictional Utilities, enter in annual WA allocated amount of RECs sold.			
	10	Bonus Incentives Transferred	Number	D51:F51	Enter the annual amount of transferred RECs procured from bonus incentives			
	11	Bonus Incentives Not Realized	Number	D52:F52	Enter the annual number of bonus incentives that were not realized			
	12	2011 Surplus Applied to 2012	Number	D56	Enter the amount of RECs procured in 2011 used for compliance in 2012			
	13	2012 Surplus Applied to 2011	Number	E57	Enter the amount of RECs procured in 2012 used for compliance in 2011			
	14	2012 Surplus Applied to 2013	Number	E58	Enter the amount of RECs procured in 2012 used for compliance in 2013			
	15	2013 Surplus Applied to 2012	Number	F59	Enter the amount of RECs procured in 2013 used for compliance in 2012			

Reporting Entity:		Р	uget Sound Energ	у	
Reporting Date:	[June 1, 2020		
RCW 19.285 Compliance Need	2016	2017	2018	2019	2020
Delivered Load to Retail Customers (MWh)	20,448,423	21,316,397	20,697,195	20,833,230	Not Applicable
WA State RCW 19.285 Requirement	3%	9%	9%	9%	15%
Quantity Required for Compliance	1,848,542	1,843,118	1,879,417	1,890,612	3,114,782
Eligible Quantity Acquired	2016	2017	2018	2019	2020
Qualifying MWh Allocated to WA	2,205,548	1,934,234	2,175,902	2,105,243	1,868,775
Quantity from Non REC Eligible Generation	195,475	162,488	196,505	162,027	164,986
Total Quantity Available for RCW 19.285 Compliance	2,401,023	2,096,722	2,372,407	2,267,270	2,033,761
Sales and Transfers	2016	2017	2018	2019	2020
Quantity of RECs Sold	(521,270)	(175,982)	(447,259)	(197,470)	-
Bonus Incentives Transferred	-	-	-	-	_
Bonus Incentives Not Realized	-	-	-	-	-
Total Sold / Transferred / Unrealized	(521,270)	(175,982)	(447,259)	(197,470)	-
Adjustments	2016	2017	2018	2019	2020
2015 Surplus Applied to 2016	1,757,710				
2016 Surplus Applied to 2015					
2016 Surplus Applied to 2017	(1,760,729)	1,760,729			
2017 Surplus Applied to 2016	-	-			
2017 Surplus Applied to 2018		(1,771,252)	1,771,252		
2018 Surplus Applied to 2017		-	-		
2018 Surplus Applied to 2019			(1,799,654)	1,799,654	
2019 Surplus Applied to 2018			-	-	
2019 Surplus Applied to 2020				(1,978,763)	1,978,763
2020 Surplus Applied to 2019				-	-
Net Surplus Adjustments	(3,018)	(10,523)	(28,402)	(179,110)	1,978,763
Adjustment for Events Beyond Control	-	-	-	-	-
	2016	2017	2018	2019	2020
RCW 19.285 Compliance Surplus / (Deficit)	28,192	67,098	17,329	79	897,742
Actual Retirements for RPS Compliance	1,649,762	1,647,643	1,716,929		

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

PUGET SOUND ENERGY - 2020 RPS REPORT ATTACHMENT 3

Facility Name:	Facility WREGIS		Facility Type	Extra Apprenticeship	Distributed Generation	Online Date:
	ID:	1	115	Credit Eligibility:	Bonus Eligibility:	
Wild Horse	W183		Wind	Not Eligible		
Hopkins Ridge	W184		Wind	Not Eligible		
Klondike III	W237		Wind	Not Eligible		
Wild Horse Phase II	W1364		Wind	Eligible		
Hopkins Ridge Phase II	W1382		Wind	Not Eligible		
Lower Snake River - Dodge Junction	W2669		Wind	Eligible		
Lower Snake River - Phalen Gulch	W2670		Wind	Eligible		
Wanapum Fish Bypass	Not Available		Water (Incremental Hydro)	Not Eligible		
Baker River Project	W4865		Water (Incremental Hydro)	Not Eligible		
Snoqualmie Falls Project	W4866		Water (Incremental Hydro)	Not Eligible		
Klondike 1REC only**	W238		Wind	Not Eligible		
Stateline WA WindREC Only **	W248		Wind	Not Eligible		
Horse Butte WindREC only **	W3260		Wind	Not Eligible		
Grand View 5 EastREC Only**	W5069		Solar	Not Eligible		
Grand View 2 WestREC Only **	W5070		Solar	Not Eligible		
ID Solar 1 REC Only **	W5076		Solar	Not Eligible		
Condon Wind Power REC Only **	W774		Wind	Not Eligible		
Condon Wind Power Phase II REC Only **	W833		Wind	Not Eligible		
Camp Reed Wind Park - Camp Reed Wind Park REC Only **	W1875		Wind	Not Eligible		
Golden Valley Wind Park - Golden Valley Wind Park REC Only **	W1862		Wind	Not Eligible		
Klondike III - Klondike Wind Power III LLC REC Only **	W237		Wind	Not Eligible		
Meadow Creek Wind Farm - Five Pine Project REC Only **	W3186		Wind	Not Eligible		
Meadow Creek Wind Farm - North Point Wind Farm REC Only **	W3185		Wind	Not Eligible		
Mountain Air Wind Projects - Mountain Air Wind Projects REC Only	W2869		Wind	Not Eligible		
Nine Canyon Wind Project - Nine Canyon Phase 3 REC Only **	W697		Wind	Not Eligible		
Oregon Trail Wind Park, LLC - Oregon Trail Wind Park REC Only **	W1882		Wind	Not Eligible		
PaTu Wind Farm - PaTu Wind REC Only **	W1844		Wind	Not Eligible		
Roseburg LFG - Roseburg LFG Energy REC Only **	W2616		Landfill Gas	Not Eligible		
Salmon Falls Wind Park, LLC - Salmon Falls Wind Park REC Only **	W1885		Wind	Not Eligible		
Sawtooth Wind Project - Sawtooth Wind Project REC Only **	W2323		Wind	Not Eligible		
Thousand Springs Wind Park, LLC - Thousand Springs Wind Park REC On			Wind	Not Eligible		
Tuana Gulch Wind Park, LLC - Tuana Gulch Wind Park REC Only **	W1883		Wind	Not Eligible		
Tuana Springs Energy, LLC - Tuana Springs REC Only **	W1503		Wind	Not Eligible		
White Creek Wind 1 - White Creek REC Only **	W360		Wind	Not Eligible		
Facility 35	WSOU		vviiiu	NOL Eligible		
Facility 35						
Facility 37						
Facility 38						
Facility 39						
Facility 40						

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

Contribution to RCW 19.285 Compliance

racility Name:	wild noise					
MWh Allocated to WA Compliance		2016	2017	2018	2019	2020
Total MWh Produced / Purchased from Wild Horse		564,671	516,263	537,534	516,216	477,826
Percent of MWh Qualifying Under RCW 19.285		100%	100%	100%	100%	100%
Percent of Qualifying MWh Allocated to WA		100%	100%	100%	100%	100%
Eligible MWh Available for RCW 19.285 Compliance		564,671	516,263	537,534	516,216	477,826
Non REC Eligible Generation		2016	2017	2018	2019	2020
Extra Apprenticeship Credit		=	=	-	=	-
Distributed Generation Bonus		-	-	-	ı	-
Total Quantity from Non REC Eligible Generation		-	-	-	-	-
REC Sales / Transfers		2016	2017	2018	2019	2020
Quantity of RECs Sold		258,677	44,385	203,209	172,850	-
Bonus Incentives Transferred		-	-	-	-	-
Bonus Incentives Not Realized		-	-	-	-	-
Total Sold / Transferred / Unrealized		258,677	44,385	203,209	172,850	-
Adjustments		2016	2017	2018	2019	2020
2015 Surplus Applied to 2016		469,503				
2016 Surplus Applied to 2015		-				
2016 Surplus Applied to 2017		305,994	305,994			
2017 Surplus Applied to 2016		-	=			
2017 Surplus Applied to 2018			471,878	471,878		
2018 Surplus Applied to 2017			-	-		
2018 Surplus Applied to 2019				334,325	334,325	
2019 Surplus Applied to 2018				-	-	242.200
2019 Surplus Applied to 2020					343,366	343,366
2020 Surplus Applied to 2019 Net Surplus Adjustments	Į	163,509	(165,884)	137,553	(9,041)	343,366
ivet Surplus Aujustilients		103,509	(105,884)	137,553	(9,041)	343,300
Adjustment for Events Beyond Control	[-	-	-	-	-

469,503

469,503

Actual Retirements for RPS Compliance

305,994

238,895

471,878

471,878

334,325

821,192

Facility Name: Hopkins Ridge

MWh Allocated to WA Compliance 2016 2017 2018 2019 2020 324,844 346,466 201	<u></u>	<u>-</u>				
Percent of MWh Qualifying Under RCW 19.285 100%	MWh Allocated to WA Compliance	2016	2017	2018	2019	2020
Percent of Qualifying MVM Allocated to WA 100%	Total MWh Produced / Purchased from Hopkins Ridge	398,058	329,544	392,020	324,844	346,466
Eligible MWh Available for RCW 19.285 Compliance 398,058 329,544 392,020 324,844 346,466	Percent of MWh Qualifying Under RCW 19.285	100%	100%	100%	100%	100%
Non REC Eligible Generation 2016 2017 2018 2019 2020	Percent of Qualifying MWh Allocated to WA	100%	100%	100%	100%	100%
Extra Apprenticeship Credit Distributed Generation Bonus Total Quantity from Non REC Eligible Generation REC Sales / Transfers Quantity of RECs Sold Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Transferred Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Total Sold / Transferred / Unrealized 2016 2017 2018 2019 2020 Adjustments 2018 2019 2020 Adjustments 2018 2019 2020 2020 Adjustments 2018 2019 2020 203 204 205 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 208 209 209 209 200 200 200 200 200 200 200	Eligible MWh Available for RCW 19.285 Compliance	398,058	329,544	392,020	324,844	346,466
Distributed Generation Bonus	Non REC Eligible Generation	2016	2017	2018	2019	2020
Total Quantity from Non REC Eligible Generation	Extra Apprenticeship Credit	-	-	-	-	-
REC Sales / Transfers Quantity of RECs Sold Bonus Incentives Transferred Bonus Incentives Not Realized Total Sold / Transferred / Unrealized Description of Processing Occasionary of Processing Occasionary of Processing Occasionary of Procesing Occasionary of Processing Occasionary of Processing Occasiona	Distributed Generation Bonus	-	-	-	-	-
Quantity of RECs Sold 190,560 74,400 176,270	Total Quantity from Non REC Eligible Generation	=	=	=	-	-
Bonus Incentives Transferred	REC Sales / Transfers	2016	2017	2018	2019	2020
Bonus Incentives Not Realized	Quantity of RECs Sold	190,560	74,400	176,270	-	-
Total Sold / Transferred / Unrealized 190,560 74,400 176,270	Bonus Incentives Transferred	-	-	-	-	-
Adjustments 2016 2017 2018 2019 2015 Surplus Applied to 2016 2016 Surplus Applied to 2015 2016 Surplus Applied to 2017 2017 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2016 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2018 2019 Surplus Applied to 2019 2019 Surplus Adjustments 2018 Surplus Adjustments 2019 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2018 2019 Surplus Applied to 2018 2019 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2019 2019 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied t	Bonus Incentives Not Realized	-	-	-	-	-
2015 Surplus Applied to 2016 2016 Surplus Applied to 2015 2016 Surplus Applied to 2017 2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2019 2019 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2018 2019 Surplus Applied to 2020 2019 Surplus Applied to 2019 2019 Surplus Applied to 2010 2019 Surplus App	Total Sold / Transferred / Unrealized	190,560	74,400	176,270	-	-
2016 Surplus Applied to 2015 2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2018 2019 Surplus Applied to 2020 2019 Surplus Applied to 2020 2019 Surplus Applied to 2020 2019 Surplus Applied to 2019 2019 Surplus Applied to 2010 2019 Surplus Applied to 2010 2019 Surplus App	Adjustments	2016	2017	2018	2019	2020
2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2018 2019 Surplus Applied to 2018 2019 Surplus Applied to 2020 2019 Surplus Applied to 2020 2019 Surplus Applied to 2020 2019 Surplus Applied to 2019 2010 Surplus Applied to 2010 Surplus Applied to 2019 2010 Surplus Applied	2015 Surplus Applied to 2016	238,385				
2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2018 2019 Surplus Applied to 2020 2019 Surplus Applied to 2019 2020 Surplus Applied to 2019 203 Surplus Applied to 2019 204 Surplus Adjustments 205 Surplus Adjustments 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498	2016 Surplus Applied to 2015	-				
2017 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2018 2019 Surplus Applied to 2020 2019 Surplus Applied to 2020 2020 Surplus Applied to 2020 203 Surplus Applied to 2019 204	2016 Surplus Applied to 2017	207,498	207,498			
2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2018 2019 Surplus Applied to 2020 2019 Surplus Applied to 2020 2019 Surplus Applied to 2020 2020 Surplus Applied to 2019 2020 Surplus Adjustments 2030 Surplus Adjustments 204,844 2050 Surplus Adjustments 2050 Surplus Adjustments 2060 Surplus Adjustments 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498 207,498	2017 Surplus Applied to 2016	-	-			
2018 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2020 2019 Surplus Applied to 2020 2020 Surplus Applied to 2019 2020 Surplus Applied to 2019 2020 Surplus Adjustments 2030 Surplus Adjustments 204,844 2050 Surplus Adjustments 205,887 207,498			255,144	255,144		
2019 Surplus Applied to 2018 2019 Surplus Applied to 2020 2020 Surplus Applied to 2020 2020 Surplus Applied to 2019 2030 Surplus Adjustments 2030 Surplus Adjustments 204,844 2050 Surplus Adjustments 205,887 207,498			-	-		
2019 Surplus Applied to 2020 2020 Surplus Applied to 2019 Net Surplus Adjustments Adjustment for Events Beyond Control Contribution to RCW 19.285 Compliance 324,844 324,84				215,750	215,750	
2020 Surplus Applied to 2019 Net Surplus Adjustments 30,887 (47,646) 39,394 (109,094) 324,844 Adjustment for Events Beyond Control				-	-	
Net Surplus Adjustments 30,887 (47,646) 39,394 (109,094) 324,844 Adjustment for Events Beyond Control - - - - Contribution to RCW 19.285 Compliance 238,385 207,498 255,144 215,750 671,310					324,844	324,844
Adjustment for Events Beyond Control			()			-
Contribution to RCW 19.285 Compliance 238,385 207,498 255,144 215,750 671,310	Net Surplus Adjustments	30,887	(47,646)	39,394	(109,094)	324,844
	Adjustment for Events Beyond Control	-	-	-	-	-
Actual Retirements for RPS Compliance 238,385 207,498 237,815	Contribution to RCW 19.285 Compliance	238,385	207,498	255,144	215,750	671,310
	Actual Retirements for RPS Compliance			237,815		

Facility Name:	Klondike III					
MWh Allocated to WA Compliance	:	2016	2017	2018	2019	2020
Total MWh Produced / Purchased from Klondike III		127,238	110,618	119,438	117,651	113,917
Percent of MWh Qualifying Under RCW 19.285		100%	100%	100%	100%	100%
Percent of Qualifying MWh Allocated to WA		100%	100%	100%	100%	100%
Eligible MWh Available for RCW 19.285 Compliance		127,238	110,618	119,438	117,651	113,917
Non REC Eligible Generation	;	2016	2017	2018	2019	2020
Extra Apprenticeship Credit		-	-	-	-	-
Distributed Generation Bonus		-	-	-	-	-
Total Quantity from Non REC Eligible Generation	ļ	-	-	-	=	=
REC Sales / Transfers	;	2016	2017	2018	2019	2020
Quantity of RECs Sold		62,849	57,197	57,609	24,620	-
Bonus Incentives Transferred		-	-		-	-
Bonus Incentives Not Realized		-	-	-	-	-
Total Sold / Transferred / Unrealized		62,849	57,197	57,609	24,620	-
Adjustments	;	2016	2017	2018	2019	2020
2015 Surplus Applied to 2016		60,908				
2016 Surplus Applied to 2015		-				
2016 Surplus Applied to 2017		64,389	64,389			
2017 Surplus Applied to 2016		-	-			
2017 Surplus Applied to 2018			53,421	53,421		
2018 Surplus Applied to 2017			•	1		
2018 Surplus Applied to 2019				61,829	61,829	
2019 Surplus Applied to 2018				-	-	
2019 Surplus Applied to 2020					93,031	93,031
2020 Surplus Applied to 2019					-	-
Net Surplus Adjustments		(3,481)	10,968	(8,408)	(31,202)	93,031
Adjustment for Events Beyond Control		-	-	-	-	-

60,908 32,714

Actual Retirements for RPS Compliance

64,389

64,389

53,421

53,421

61,829

206,948

Contribution to RCW 19.285 Compliance

Facility Name: Wild Horse Phase II

MWh Allocated to WA Compliance		2016	2017	2018	2019	2020
Total MWh Produced / Purchased from Wild Ho	orse Phase II	108,686	99,368	103,462	99,359	90,930
Percent of MWh Qualifying Under RCW 19.285		100%	100%	100%	100%	100%
Percent of Qualifying MWh Allocated to WA		100%	100%	100%	100%	100%
Eligible MWh Available for RCW 19.285 Compli	iance	108,686	99,368	103,462	99,359	90,930
Non REC Eligible Generation		2016	2017	2018	2019	2020
Extra Apprenticeship Credit	Γ	21,737	19,874	20,692	19,872	18,186
Distributed Generation Bonus		-	-	-	-	-
Total Quantity from Non REC Eligible Generation	on	21,737	19,874	20,692	19,872	18,186
REC Sales / Transfers		2016	2017	2018	2019	2020
Quantity of RECs Sold		-	-	-	-	-
Bonus Incentives Transferred		-	-	-	-	-
Bonus Incentives Not Realized		-	-	-	-	-
Total Sold / Transferred / Unrealized	_	-	-	-	-	-
Adjustments		2016	2017	2018	2019	2020
2015 Surplus Applied to 2016		106,432				
2016 Surplus Applied to 2015		-				
2016 Surplus Applied to 2017		130,423	130,423			
2017 Surplus Applied to 2016		-	-			
2017 Surplus Applied to 2018			119,242	119,242		
2018 Surplus Applied to 2017			-	-		
2018 Surplus Applied to 2019				124,154	124,154	
2019 Surplus Applied to 2018				-		
2019 Surplus Applied to 2020					119,231	119,231
2020 Surplus Applied to 2019	L				-	-
Net Surplus Adjustments		(23,992)	11,182	(4,913)	4,924	119,231
Adjustment for Events Beyond Control		-	-	-	-	-
Contribution to RCW 19.285 Compliance		106,432	130,423	119,242	124,154	228,347
•	Actual Retirements for RPS Compliance	88,693	108,686	99,368	,	

Facility Name: Hopkins Ridge Phase II

MWh Allocated to WA Compliance		2016	2017	2018	2019	2020
Total MWh Produced / Purchased from Hopkins	Ridge Phase II	19,184	15,881	18,893	15,655	17,545
Percent of MWh Qualifying Under RCW 19.285		100%	100%	100%	100%	100%
Percent of Qualifying MWh Allocated to WA		100%	100%	100%	100%	100%
Eligible MWh Available for RCW 19.285 Complia	ince	19,184	15,881	18,893	15,655	17,545
Non REC Eligible Generation		2016	2017	2018	2019	2020
Extra Apprenticeship Credit		-	-	-	-	-
Distributed Generation Bonus		-	-	-	-	-
Total Quantity from Non REC Eligible Generatio	n -	ē	=	-	=	-
REC Sales / Transfers		2016	2017	2018	2019	2020
Quantity of RECs Sold		9,184	-	10,171	-	-
Bonus Incentives Transferred		-	-	-	-	-
Bonus Incentives Not Realized		-	-	-	-	=
Total Sold / Transferred / Unrealized		9,184	=	10,171	=	-
Adjustments		2016	2017	2018	2019	2020
2015 Surplus Applied to 2016	ſ	14,879				
2016 Surplus Applied to 2015						
2010 Sai pias Applica to 2015		-				
2016 Surplus Applied to 2017		10,000	10,000			
		10,000	10,000			
2016 Surplus Applied to 2017		· ·	10,000 - 15,881	15,881		
2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017		· ·	-	=		
2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018		· ·	- 15,881	15,881 - 8,722	8,722	
2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017		· ·	- 15,881	=	8,722	
2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2020		· ·	- 15,881	=	8,722 15,655	15,655
2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2020 2020 Surplus Applied to 2020		-	- 15,881 -	8,722 -	15,655	-
2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2020		· ·	- 15,881	=	,	15,655 - 15,655
2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2020 2020 Surplus Applied to 2020		-	- 15,881 -	8,722 -	15,655	-
2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2020 2020 Surplus Applied to 2019 Net Surplus Adjustments		-	- 15,881 -	8,722 -	15,655	15,655

Facility Name: Lower Snake River - Dodge Junction

MWh Allocated to WA Compliance		2016	2017	2018	2019	2020
Total MWh Produced / Purchased from Lower S	Snake River - Dodge Junctior	500,734	413,806	508,243	412,098	423,793
Percent of MWh Qualifying Under RCW 19.285	-	100%	100%	100%	100%	100%
Percent of Qualifying MWh Allocated to WA		100%	100%	100%	100%	100%
Eligible MWh Available for RCW 19.285 Compl	iance	500,734	413,806	508,243	412,098	423,793
Non REC Eligible Generation		2016	2017	2018	2019	2020
Extra Apprenticeship Credit	Γ	100,147	82,761	101,649	82,420	84,759
Distributed Generation Bonus		-	-	-	-	-
Total Quantity from Non REC Eligible Generati	on	100,147	82,761	101,649	82,420	84,759
REC Sales / Transfers		2016	2017	2018	2019	2020
Quantity of RECs Sold		-	-	-	-	-
Bonus Incentives Transferred		-	-	-	-	-
Bonus Incentives Not Realized		-	-	-	-	-
Total Sold / Transferred / Unrealized	_	-	-	-	-	-
Adjustments		2016	2017	2018	2019	2020
2015 Surplus Applied to 2016		505,872				
2016 Surplus Applied to 2015		-				
2016 Surplus Applied to 2017		600,881	600,881			
2017 Surplus Applied to 2016		-	-			
2017 Surplus Applied to 2018			496,567	496,567		
2018 Surplus Applied to 2017			-	-		
2018 Surplus Applied to 2019				609,892	609,892	
2019 Surplus Applied to 2018				-	-	104.540
2019 Surplus Applied to 2020					494,518	494,518
2020 Surplus Applied to 2019	L	(05.000)	104 314	(112 224)	- 115 274	404 510
Net Surplus Adjustments		(95,009)	104,314	(113,324)	115,374	494,518
Adjustment for Events Beyond Control		-	-	-	-	-
Contribution to RCW 19.285 Compliance	Г	505,872	600,881	496,567	609,892	1,003,069
		•				
	Actual Retirements for RPS Compliance	421,560	500,734	413,806		

Lower Snake River - Phalen Gulch

MWh Allocated to WA Compliance	2016	2017	2018	2019	2020
Total MWh Produced / Purchased from Lower Snake River - Phalen Gulch	367,953	299,266	370,818	298,679	310,207
Percent of MWh Qualifying Under RCW 19.285	100%	100%	100%	100%	100%
Percent of Qualifying MWh Allocated to WA	100%	100%	100%	100%	100%
Eligible MWh Available for RCW 19.285 Compliance	367,953	299,266	370,818	298,679	310,207
Non REC Eligible Generation	2016	2017	2018	2019	2020
Extra Apprenticeship Credit	73,591	59,853	74,164	59,736	62,041
Distributed Generation Bonus	-	-	-	-	=
Total Quantity from Non REC Eligible Generation	73,591	59,853	74,164	59,736	62,041
REC Sales / Transfers	2016	2017	2018	2019	2020
Quantity of RECs Sold	-	-	-	-	-
Bonus Incentives Transferred	-	-	-	-	=
Bonus Incentives Not Realized	-	-	-	-	-
Total Sold / Transferred / Unrealized	-	-	-	-	-
Adjustments	2016	2017	2018	2019	2020
Adjustments 2015 Surplus Applied to 2016	2016 361,732	2017	2018	2019	2020
•		2017	2018	2019	2020
2015 Surplus Applied to 2016		2017	2018	2019	2020
2015 Surplus Applied to 2016 2016 Surplus Applied to 2015 2016 Surplus Applied to 2017 2017 Surplus Applied to 2016	361,732	441,544		2019	2020
2015 Surplus Applied to 2016 2016 Surplus Applied to 2015 2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018	361,732		359,119	2019	2020
2015 Surplus Applied to 2016 2016 Surplus Applied to 2015 2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2018	361,732	441,544	359,119		2020
2015 Surplus Applied to 2016 2016 Surplus Applied to 2015 2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2017	361,732	441,544 - 359,119		2019	2020
2015 Surplus Applied to 2016 2016 Surplus Applied to 2015 2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2019	361,732	441,544 - 359,119	359,119	444,982	
2015 Surplus Applied to 2016 2016 Surplus Applied to 2015 2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2018	361,732	441,544 - 359,119	359,119		358,415
2015 Surplus Applied to 2016 2016 Surplus Applied to 2015 2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2018 2019 Surplus Applied to 2020 2020 Surplus Applied to 2020	361,732 - 441,544 -	441,544 - - 359,119 -	359,119 - - 444,982	444,982 - - 358,415	358,415 -
2015 Surplus Applied to 2016 2016 Surplus Applied to 2015 2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2018	361,732	441,544 - 359,119	359,119	444,982	358,415
2015 Surplus Applied to 2016 2016 Surplus Applied to 2015 2016 Surplus Applied to 2017 2017 Surplus Applied to 2016 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2018 2019 Surplus Applied to 2020 2020 Surplus Applied to 2020	361,732 - 441,544 -	441,544 - - 359,119 -	359,119 - - 444,982	444,982 - - 358,415	358,415 -
2015 Surplus Applied to 2016 2016 Surplus Applied to 2015 2016 Surplus Applied to 2017 2017 Surplus Applied to 2017 2017 Surplus Applied to 2018 2018 Surplus Applied to 2017 2018 Surplus Applied to 2017 2018 Surplus Applied to 2019 2019 Surplus Applied to 2018 2019 Surplus Applied to 2018 2019 Surplus Applied to 2020 2020 Surplus Applied to 2019 Net Surplus Applied to 2019 Net Surplus Adjustments	361,732 - 441,544 - - (79,812)	441,544 - 359,119 - - 82,424	359,119 - - 444,982	444,982 - 358,415 - 86,567	358,415 - 358,415

Facility Name: Wanapum Fish Bypass

MWh Allocated to WA Compliance	2016	2017	2018	2019	2020
Total MWh Produced / Purchased from Wanapum Fish Bypass	Not Eligible				
Percent of MWh Qualifying Under RCW 19.285	1009		100%		100%
Percent of Qualifying MWh Allocated to WA	1009	100%	100%	100%	100%
Eligible MWh Available for RCW 19.285 Compliance	-	-	-	-	-
Non REC Eligible Generation	2016	2017	2018	2019	2020
Extra Apprenticeship Credit	-	-	-	-	-
Distributed Generation Bonus	-	-	-	-	-
Total Quantity from Non REC Eligible Generation	-	-	-	-	-
REC Sales / Transfers	2016	2017	2018	2019	2020
Quantity of RECs Sold	-	-	-	-	-
Bonus Incentives Transferred	-	-	-	-	-
Bonus Incentives Not Realized	-	-	-	-	-
Total Sold / Transferred / Unrealized	-	-	-	-	-
Adjustments	2016	2017	2018	2019	2020
2015 Surplus Applied to 2016	-				
2016 Surplus Applied to 2015	-				
2016 Surplus Applied to 2017	-	-			
2017 Surplus Applied to 2016	-	-			
2017 Surplus Applied to 2018		-	-		
2018 Surplus Applied to 2017		-	-		
2018 Surplus Applied to 2019			-	-	
2019 Surplus Applied to 2018			-	-	
2019 Surplus Applied to 2020				-	-
2020 Surplus Applied to 2019				-	-
Net Surplus Adjustments	-	-	-	-	-
Adjustment for Events Beyond Control	-	-	-	-	-
Contribution to RCW 19.285 Compliance				_	
Contribution to New 13.203 Compliance		•	•	•	•

Use of Wanapum Fish Bypass for RPS Compliance will be dependent upon Grant County filing WREGIS registration. To-date Grant County has not filed Wanapum in WREGIS

MWh Allocated to WA Compliance	2016	2017	2018	2019	2020
Total MWh Produced / Purchased from Baker River Project	358,833	313,000	385,059	263,625	249,799
Percent of MWh Qualifying Under RCW 19.285	28.3%	28.3%	28.3%	28.3%	28.3%
Percent of Qualifying MWh Allocated to WA	100%	100%	100%	100%	100%
Eligible MWh Available for RCW 19.285 Compliance	101,550	88,579	108,971	74,606	70,693
Non REC Eligible Generation	2016	2017	2018	2019	2020
Extra Apprenticeship Credit	-	-	_	-	-
Distributed Generation Bonus	-	-	_	-	-
Total Quantity from Non REC Eligible Generation	-	-	-	-	-
REC Sales / Transfers	2016	2017	2018	2019	2020
Quantity of RECs Sold	-	-	-	-	-
Bonus Incentives Transferred	-	-	-	-	-
Bonus Incentives Not Realized	-	-	-	-	-
Total Sold / Transferred / Unrealized	-	-	-	-	-
Adjustments	2016	2017	2018	2019	2020
2015 Surplus Applied to 2016	-				
2016 Surplus Applied to 2015	-				
2016 Surplus Applied to 2017	-	-			
2017 Surplus Applied to 2016	-	-			
2017 Surplus Applied to 2018	-	-	-		
2018 Surplus Applied to 2017		-	-		
2018 Surplus Applied to 2019			-	-	
2019 Surplus Applied to 2018			-		
2019 Surplus Applied to 2020				-	-
2020 Surplus Applied to 2019				-	-
Net Surplus Adjustments	-	-	-	-	-
Adjustment for Events Beyond Control	-	-	-	-	-
Contribution to RCW 19.285 Compliance	101,550	88,579	108,971	74,606	70,693
•	,	•			

Baker River Project

Facility Name:

Actual Retirements for RPS Compliance 70,243 88,579 108,971
2019 generation estimated based on 3 year average of generation at this facility. Baker estimated RPS Eligible generation based on Incremental Hydro Calculation Method 2. Baker Project WREGIS Registration was completed June, 20:

Facility Name: Snoqualmie Falls Project

MWh Allocated to WA Compliance	2016	2017	2018	2019	2020
Total MWh Produced / Purchased from Snoqualmie Falls Project	205,584	195,400	194,398	185,294	204,694
Percent of MWh Qualifying Under RCW 19.285	8.5%	8.5%	8.5%	8.5%	8.5%
Percent of Qualifying MWh Allocated to WA	100%	100%	100%	100%	100%
Eligible MWh Available for RCW 19.285 Compliance	17,475	16,609	16,523	15,750	17,398
Non REC Eligible Generation	2016	2017	2018	2019	2020
Extra Apprenticeship Credit	-	-	-	-	-
Distributed Generation Bonus	-	-	-	-	-
Total Quantity from Non REC Eligible Generation	-	-	-	-	-
REC Sales / Transfers	2016	2017	2018	2019	2020
Quantity of RECs Sold	-	-	-	-	-
Bonus Incentives Transferred	-	-	-	-	-
Bonus Incentives Not Realized	-	-	-	-	-
Total Sold / Transferred / Unrealized	-	-	-	-	-
Adjustments	2016	2017	2018	2019	2020
2015 Surplus Applied to 2016	-				
2016 Surplus Applied to 2015	-				
2016 Surplus Applied to 2017	-	-			
2017 Surplus Applied to 2016	-	-			
2017 Surplus Applied to 2018		-	-		
2018 Surplus Applied to 2017		-	-		
2018 Surplus Applied to 2019			-	-	
2019 Surplus Applied to 2018			-	-	
2019 Surplus Applied to 2020				-	-
2020 Surplus Applied to 2019				-	-
Net Surplus Adjustments	-	-	-	-	-
Adjustment for Events Beyond Control	-	-	-	-	-
Contribution to RCW 19.285 Compliance	17,475	16,609	16,523	15,750	17,398
Actual Retirements for RPS Compliance	12,342	16,609	16,523		

2019 generation estimated based on 3 year average of generation at this facility. Snoqualmie Falls Project estimated RPS Eligible generation based on Incremental Hydro Calculation Method 2. Snoqualmie Falls Project WREGIS Registra

MWh Allocated to WA Compliance

Purchased from Klondike 1--REC only**
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

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

2015 Surplus Applied to 2016
2016 Surplus Applied to 2015
2016 Surplus Applied to 2016
2017 Surplus Applied to 2016
2017 Surplus Applied to 2018
2018 Surplus Applied to 2017
2018 Surplus Applied to 2019
2019 Surplus Applied to 2019
2019 Surplus Applied to 2020
2020 Surplus Applied to 2020
2020 Surplus Applied to 2019

Adjustment for Events Beyond Control
Contribution to RCW 19.285 Compliance

Klondike 1--REC only**

** REC purchase only, no generation provided with purchase

2016	2017	2018	2019	2020
2010	968	2016	2013	2020
	100%			
	100%			
-	968	-	-	-
	300			
2016	2017	2018	2019	2020
-	-	-	-	-
-	-	-	-	
-	-	-	-	-
2016	2017	2018	2019	2020
-	-	-	-	ı
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
2016	2017	2018	2019	2020
-				
-				
-	-			
	-			
-	-	-		
-	-	-		
-	-	-	-	
-	-	-	-	
-	-	-	-	-
-	-	-	-	-
-	-	-	-	
-	-	-	-	-
-	-	-	- - - -	-

Actual Retirements for RPS Compliance

968

Stateline WA Wind--REC Only **

Actual Retirements for RPS Compliance

^{**} REC purchase only, no generation provided with purchase

MWh Allocated to WA Compliance

www. Anocated to wa compnance	
Purchased from Stateline WA WindREC Only **	
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

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

2015 Surplus Applied to 2016
2016 Surplus Applied to 2015
2016 Surplus Applied to 2017
2017 Surplus Applied to 2016
2017 Surplus Applied to 2018
2018 Surplus Applied to 2017
2018 Surplus Applied to 2019
2019 Surplus Applied to 2019
2019 Surplus Applied to 2018
2019 Surplus Applied to 2020
2020 Surplus Applied to 2019
Net Surplus Adjustments

Adjustment for Events Beyond Control

Contribution to RCW 19.285 Compliance

20:	16	2017	2018	2019	2020
		3,890			
		100%			
		100%			
	-	3,890	-	-	-
201	16	2017	2018	2019	2020
	-	-	-	-	-
	-	-		-	-
	-	-	-	-	-
200	16	2017	2018	2019	2020
20.	-	-	-	-	-
	-	-	-	-	-
	-	-	=	-	-
•	-	-	=	-	
203		2017	2018	2019	2020
20:		2017			
20:	16	2017			
20:	- - -	2017			
20:	16 - -		2018		
20:	- - -	-	2018		
20:	- - -	- -	2018	2019	
20:	- - -	-	2018	2019	
20:	- - -	-	2018	2019	2020
20:	- - -	-	2018	2019	2020
20:	- - -	-	2018	2019	2020
20:		-	2018	2019	2020
20:		-	2018	2019	2020
20:	-	-		2019 - - - - -	2020

3,890

Horse Butte Wind--REC only **

** REC purchase only, no generation provided with purchase

Purchased from Horse Butte Wind--REC only **
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

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

2015 Surplus Applied to 2016
2016 Surplus Applied to 2015
2016 Surplus Applied to 2017
2017 Surplus Applied to 2016
2017 Surplus Applied to 2018
2018 Surplus Applied to 2017
2018 Surplus Applied to 2017
2018 Surplus Applied to 2019
2019 Surplus Applied to 2018
2019 Surplus Applied to 2020
2020 Surplus Applied to 2019
Net Surplus Adjustments

Adjustment for Events Beyond Control

Contribution to RCW 19.285 Compliance

2016	2017	2018	2019	2020
	27			
	100%			
	100%			
-	27	-	-	-
2016	2017	2018	2019	2020
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
2016	2017	2018	2019	2020
-	-	-	-	-
=	-	-	-	-
-	-	-	-	-
-	-	-	-	-
2016	2017	2019	2010	2020
2016	2017	2018	2019	2020
-	2017	2018	2019	2020
-		2018	2019	2020
-	-	2018	2019	2020
-		2018	2019	2020
-	-	-	2019	2020
-	-		2019	2020
-	-	-		2020
-		- -		2020
-		- -	-	
-		- -	-	-
-	-	- - - - -	-	-
-	-		-	-
-	-	- - - - -	-	-

Actual Retirements for RPS Compliance

27

Grand View 5 East--REC Only** ** REC purchase only, no generation provided with purchase

Actual Retirements for RPS Compliance

Purchased from Grand View 5 East--REC Only**
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

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

2015 Surplus Applied to 2016
2016 Surplus Applied to 2015
2016 Surplus Applied to 2017
2017 Surplus Applied to 2016
2017 Surplus Applied to 2018
2018 Surplus Applied to 2017
2018 Surplus Applied to 2019
2019 Surplus Applied to 2019
2019 Surplus Applied to 2020
2020 Surplus Applied to 2020
Net Surplus Applied to 2019
Net Surplus Adjustments

Adjustment for Events Beyond Control

Contribution to RCW 19.285 Compliance

2010	6	2017	2018	2019	2020
		6,741			
		100%			
		100%			
	-	6,741	-	-	-
2010	6	2017	2018	2019	2020
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
2010	6	2017	2018	2019	2020
201	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
2010	6	2017	2018	2019	2020
2010	6 -	2017	2018	2019	2020
2010		2017	2018	2019	2020
2010	- - -	-	2018	2019	2020
2010	-	-		2019	2020
2010	- - -	-		2019	2020
2010	- - -	-	-		2020
2010	- - -	-	- - -	-	2020
2010	- - -	-	-	-	
2010	- - -	-	- - -	-	-
2010	- - -	-	- - -	-	
2010	-		: : :	-	-
2010	-		: : :	-	-
2010	-	-	- - - -	-	-
2010	-	-	- - - -	-	-

6,741

MWh Allocated to WA Compliance

Facility Name: Grand View 2 West--REC Only **

Contribution to RCW 19.285 Compliance

** REC purchase only, no generation provided with purcha	ase
--	-----

2016	2017	2018	2019	2020
	18,511			
	100%			
	100%			
-	18,511	-	-	-
2016	2017	2018	2019	2020
-	-	-	-	-
	-	-	-	-
-	-	-	-	-
2016	2017	2018	2019	2020
2010	2017	2010		2020
_	_	_		_
_	_	-	-	-
-	-	-	-	-
2016	2017	2018	2019	2020
-				
-				
-	-			
-	-			
	-	-		
	-	-		
		-	-	
		-	-	
			-	-
			-	-
-	-	-	-	-
-	-	-	-	-
	2016	18,511 100% 100% 100% 100% 100% 18,511 2016 2017	18,511 100% 100% 100%	18,511 100% 100%

Actual Retirements for RPS Compliance

18,511 18,511

ID Solar 1 -- REC Only **

MWh Allocated to WA Compliance

Purchased from ID Solar 1 -- REC Only **
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

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

2015 Surplus Applied to 2016
2016 Surplus Applied to 2017
2016 Surplus Applied to 2017
2017 Surplus Applied to 2016
2017 Surplus Applied to 2018
2018 Surplus Applied to 2017
2018 Surplus Applied to 2017
2018 Surplus Applied to 2019
2019 Surplus Applied to 2018
2019 Surplus Applied to 2020
2020 Surplus Applied to 2020
2020 Surplus Adplied to 2019
Net Surplus Adjustments

Adjustment for Events Beyond Control

Contribution to RCW 19.285 Compliance

** REC purchase on	, no generation provided	with purchase
--------------------	--------------------------	---------------

	2016	2017	2018	2019	2020
		12,048			
		100%			
		100%			
	-	12,048	-	-	
:	2016	2017	2018	2019	2020
	-	-	-	-	
	-	-	-	-	
	-	-	-	-	
:	2016	2017	2018	2019	2020
	-	-	-	-	
	-	-	-	-	
	-	-	-	-	
	-	-	-	-	
:	2016	2017	2018	2019	2020
	-				
	-				
	-	-			
	-	-			
		-	-		
		-	-		
		-	-	-	
		-		-	
		-	-		
	-	-	-	-	
		-			
	-		-	-	
		-			

Facility Name:	Condon Wind Power R	REC Only **				
•		y, no generation provided wi	th purchase			
MWh Allocated to WA Compliance		2016	2017	2018	2019	2020
Purchased from Condon Wind Power REC Only **			1,046			
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		-	1,046	-	-	-
Non REC Eligible Generation		2016	2017	2018	2019	2020
Extra Apprenticeship Credit		-	-	=	-	-
Distributed Generation Bonus		-	-	1	-	-
Total Quantity from Non REC Eligible Generation		-	-	-	-	-
REC Sales / Transfers		2016	2017	2018	2019	2020
Quantity of RECs Sold		-	-	-	-	-
Bonus Incentives Transferred		-	-	-	-	-
Bonus Incentives Not Realized		-	-	-	-	-
Total Sold / Transferred / Unrealized		-	-	-	-	-
Adjustments		2016	2017	2018	2019	2020
2015 Surplus Applied to 2016		-				
2016 Surplus Applied to 2015		-				
2016 Surplus Applied to 2017		-	-			
2017 Surplus Applied to 2016		-	-			
2017 Surplus Applied to 2018			-	•		
2018 Surplus Applied to 2017 2018 Surplus Applied to 2019			-	-	-	
2019 Surplus Applied to 2019 2019 Surplus Applied to 2018					-	
2019 Surplus Applied to 2010						_
2020 Surplus Applied to 2019					-	-
Net Surplus Adjustments		-	-	-	-	-
• •						

Actual Retirements for RPS Compliance

1,046 1,046

Adjustment for Events Beyond Control

Contribution to RCW 19.285 Compliance

Facility Name: Condon Wind Power Phase II REC Only **							
	** REC purchase on	ly, no generation provided wi	th purchase				
MWh Allocated to WA Compliance	e	2016	2017	2018	2019	2020	
Purchased from Condon Wind Power	Phase II REC Only **		1,069				
Percent of MWh Qualifying Under RCW 19.285 Percent of Qualifying MWh Allocated to WA			100%				
			100%				
Eligible MWh Available for RCW 19.2	285 Compliance	=	1,069	=	-	-	
Non REC Eligible Generation		2016	2017	2018	2019	2020	
Extra Apprenticeship Credit		-	-	-	-	-	
Distributed Generation Bonus		-	-	-	-	-	
Total Quantity from Non REC Eligible	Generation	=	-	-	-	-	
REC Sales / Transfers		2016	2017	2018	2019	2020	
Quantity of RECs Sold		2010	2017	2010	2013	2020	
Bonus Incentives Transferred			-	-	_	-	
Bonus Incentives Not Realized		-	-	-	_	-	
Total Sold / Transferred / Unrealized	I	-	-	-	-	-	
Adjustments		2016	2017	2018	2019	2020	
2015 Surplus Applied to 2016		-					
2016 Surplus Applied to 2015		=					
2016 Surplus Applied to 2017		-	-				
2017 Surplus Applied to 2016		-	-				
2017 Surplus Applied to 2018			-	-			
2018 Surplus Applied to 2017				-			
2018 Surplus Applied to 2019				-	-		
2019 Surplus Applied to 2018 2019 Surplus Applied to 2020				•	-		
2019 Surplus Applied to 2020 2020 Surplus Applied to 2019					-	-	
Net Surplus Adjustments		_	-		-	-	
wet outplus Aujustillents		-	-	-	-	-	

Actual Retirements for RPS Compliance

1,069

1,069

Adjustment for Events Beyond Control

Contribution to RCW 19.285 Compliance

PUGET SOUND ENERGY 2020 RPS REPORT Compliance Contribution by Generation Type

Wind Solar Water (Incremental Hydro) Biomass Geothermal Landfill Gas Sewage Treatment Gas Wave, Ocean, Tidal Biodiesel Fuel

2016	2017	2018	2019	2020
1,757,710	1,767,729	1,771,252	1,800,335	3,922,072
-	37,300	-	-	-
119,024	105,188	125,494	90,356	88,091
-	-	-	-	-
-		-	-	-
-	-	-	-	2,361
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

1,878,751 1,912,234 1,898,764 1,892,710 4,014,544

Facility Name	Facility Type	2016	2017	2018	2019	2020
Wild Horse	Wind	469,503	305,994	471,878	334,325	821,192
Hopkins Ridge	Wind	238,385	207,498	255,144	215,750	671,310
Klondike III	Wind	60,908	64,389	53,421	61,829	206,948
Wild Horse Phase II	Wind	106,432	130,423	119,242	124,154	228,347
Hopkins Ridge Phase II	Wind	14,879	10,000	15,881	8,722	33,200
Lower Snake River - Dodge Junction	Wind	505,872	600,881	496,567	609,892	1,003,069
Lower Snake River - Phalen Gulch	Wind	361,732	441,544	359,119	444,982	730,663
Wanapum Fish Bypass	Water (Incremental Hydro)	-	-	-	-	-
Baker River Project	Water (Incremental Hydro)	101,550	88,579	108,971	74,606	70,693
Snoqualmie Falls Project	Water (Incremental Hydro)	17,475	16,609	16,523	15,750	17,398
Klondike 1REC only**	Wind	-	968	-	-	-
Stateline WA WindREC Only **	Wind	-	3,890	-	-	-
Horse Butte WindREC only **	Wind	-	27	-	-	-
Grand View 5 EastREC Only**	Solar	-	6,741	-	-	-
Grand View 2 WestREC Only **	Solar	-	18,511	-	-	-
ID Solar 1 REC Only **	Solar	-	12,048	-	-	-
Condon Wind Power REC Only **	Wind	-	1,046	-	-	-
Condon Wind Power Phase II REC Only **	Wind	-	1,069	-	-	-
Camp Reed Wind Park - Camp Reed Wind Park REC Only **	Wind	-	-	-	-	18,037
Golden Valley Wind Park - Golden Valley Wind Park REC Only **	Wind	-	-	-	-	8,707
Klondike III - Klondike Wind Power III LLC REC Only **	Wind	-	-	-	-	15,341
Meadow Creek Wind Farm - Five Pine Project REC Only **	Wind	-	-	-	-	25,276
Meadow Creek Wind Farm - North Point Wind Farm REC Only **	Wind	-	-	-	-	49,724
Mountain Air Wind Projects - Mountain Air Wind Projects REC Only **	Wind	-	-	-	681	-
Nine Canyon Wind Project - Nine Canyon Phase 3 REC Only **	Wind	-	-	-	-	3,486
Oregon Trail Wind Park, LLC - Oregon Trail Wind Park REC Only **	Wind	-	-	-	-	9,879
PaTu Wind Farm - PaTu Wind REC Only **	Wind	-	-	-	-	12,375
Roseburg LFG - Roseburg LFG Energy REC Only **	Landfill Gas	-	-	-	-	2,361
Salmon Falls Wind Park, LLC - Salmon Falls Wind Park REC Only **	Wind	-	-	-	-	17,090
Sawtooth Wind Project - Sawtooth Wind Project REC Only **	Wind	-	-	-	-	30,077
Thousand Springs Wind Park, LLC - Thousand Springs Wind Park REC Only **	Wind	-	-	-	-	8,681
Tuana Gulch Wind Park, LLC - Tuana Gulch Wind Park REC Only **	Wind	-	-	-	-	7,912
Tuana Springs Energy, LLC - Tuana Springs REC Only **	Wind	-	-	-	-	17,961

PUGET SOUND ENERGY 2020 RPS REPORT

Compliance Contribution by Generation Type

White Creek Wind 1 - White Creek REC Only **	Wind		-	-	-	-	2,797
Facility 35		0	-	-	-	-	-
Facility 36		0	-	-	-	-	-
Facility 37		0	-	-	-	-	-
Facility 38		0	-	-	-	-	-
Facility 39		0	-	-	-	-	-
Facility 40		0	-	-	ı	-	-
		1,878,	751	1,912,234	1,898,764	1,892,710	4,014,544

SHADED INFORMATION IS DESIGNATED CONFIDENTIAL PER WAC 480-07-160 REDACTED VERSION

Puget Sound Energy - 2020 RPS Report

Attachment 4

SHADED INFORMATION IS DESIGNATED CONFIDENTIAL PER WAC 480-07-160

Puget Sound	Energy -	2020	RPS	Report
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]	REDACTED	
	Version	

Attachment 4

REC Revenues by Year by Resource

	WREGIS					V	intage						Total
Source	No.	2012	2	2013	2014		2015	2016	2017	2018	2019	R	EC Revenues
Wild Horse	W183	XXXXX		XXXXX	XXXXX		XXXXX	XXXXX	XXXXX	XXXXX	XXXXX		-
Wild Horse Phase II	W1364	XXXXX		XXXXX	XXXXX		XXXXX	-	-	-	-		-
Hopkins Ridge	W184	XXXXX		XXXXX	XXXXX		XXXXX	XXXXX	XXXXX	XXXXX	-		-
Hopkins Ridge Phase II	W1382			XXXXX	XXXXX		XXXXX	XXXXX	-	XXXXX	-		-
Klondike III	W237	XXXXX		XXXXX	XXXXX		XXXXX	XXXXX	XXXXX	XXXXX	XXXXX		-
Lower Snake River-Dodge Junction	W2669	-		XXXXX	XXXXX		-	-	-	-	-		-
Lower Snake River-Phalen Gulch	W2670	-		XXXXX	XXXXX		XXXXX	-	-	-	-		-
		\$ -	\$	-	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$	-

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PUGET SOUND ENERGY - 2020 RPS Report Deferred REC Revenue Proceeds

A/C 25400221

Vintages 2012 through 2019

REDACTED VERSION Attachment 4

-	Transaction				REC		Total REC		
Facility	Vintage	Mo/Yr	WREGIS#	Qty	Revenues	Total Qty	Revenues		
Wild Horse Phase II	2012-01WH2	May-12	W1364	11,460	XXXXX	54,206	XXXXX	2012 Vintage	
Wild Horse Phase II	2012-07WH2	Nov-13	W1364	5,173	XXXXX	47,386	XXXXX	2013 Vintage	
Wild Horse Phase II	2012-08WH2	Nov-13	W1364	7,555	XXXXX	98,496	XXXXX	2014 Vintage	
Wild Horse Phase II	2012-09WH2	Nov-13	W1364	5,730	XXXXX	10,000	XXXXX	2015 Vintage	
Wild Horse Phase II	2012-10WH2	Nov-13	W1364	8,749	XXXXX				
Wild Horse Phase II	2012-11WH2	Nov-13	W1364	6,660	XXXXX				
Wild Horse Phase II	2012-12WH2	Nov-13	W1364	8,879	XXXXX				
Wild Horse Phase II	2013-07WH2	Oct-14	W1364	8,048	XXXXX				
Wild Horse Phase II	2013-08WH2	Oct-14	W1364	4,733	XXXXX				
Wild Horse Phase II	2013-09WH2	Oct-14	W1364	7,637	XXXXX				
Wild Horse Phase II	2013-10WH2	Oct-14	W1364	4,582	XXXXX				
Wild Horse Phase II	2013-10WH2	Jan-15	W1364	1,600	XXXXX				
Wild Horse Phase II	2013-11WH2	Oct-14	W1364	7,682	XXXXX				
Wild Horse Phase II	2013-12WH2	Oct-14	W1364	9,931	XXXXX				
Wild Horse Phase II	2013-12WH2	Jan-15	W1364	3,173	XXXXX				
Wild Horse Phase II	2014-01WH2	Apr-15	W1364	5,002	XXXXX				
Wild Horse Phase II	2014-02WH2	Apr-15	W1364	7,583	XXXXX				
Wild Horse Phase II	2014-03WH2	Apr-15	W1364	11,579	XXXXX				
Wild Horse Phase II	2014-04WH2	Apr-15	W1364	12,732	XXXXX				
Wild Horse Phase II	2014-05WH2	Apr-15	W1364	9,343	XXXXX				
Wild Horse Phase II	2014-06WH2	Apr-15	W1364	8,109	XXXXX				
Wild Horse Phase II	2014-06WH2	Aug-15	W1364	3,314	XXXXX				
Wild Horse Phase II	2014-07WH2	Apr-15	W1364	5,008	XXXXX				
Wild Horse Phase II	2014-08WH2	Mar-16	W1364	290	XXXXX				
Wild Horse Phase II	2014-09WH2	Apr-15	W1364	6,626	XXXXX				
Wild Horse Phase II	2014-09WH2	Dec-15	W1364	1,440	XXXXX				
Wild Horse Phase II	2014-10WH2	Jan-16	W1364	7,625	XXXXX				
Wild Horse Phase II	2014-11WH2	Jan-16	W1364	11,591	XXXXX				
Wild Horse Phase II	2014-12WH2	Dec-15	W1364	500	XXXXX				
Wild Horse Phase II	2014-12WH2	Dec-15	W1364	7,678	XXXXX				
Wild Horse Phase II	2014-12WH2	Mar-16	W1364	76	XXXXX				
Wild Horse Phase II	2015-07WH2	Mar-16	W1364	10,000	XXXXX				

REDACTED VERSION Attachment 4

A/C 25400221

	Т	ransactio	n		REC		Total REC	
Facility	Vintage	Mo/Yr	WREGIS#	Qty	Revenues	Total Qty	Revenues	
Hopkins Ridge Phase II	2013-07HR2	Oct-14	W1382	1,222	XXXXX	7,309	XXXXX	2013 Vintage
Hopkins Ridge Phase II	2013-08HR2	Oct-14	W1382	932	XXXXX	18,641	XXXXX	2014 Vintage
Hopkins Ridge Phase II	2013-09HR2	Oct-14	W1382	1,486	XXXXX	1,735	XXXXX	2015 Vintage
Hopkins Ridge Phase II	2013-10HR2	Oct-14	W1382	819	XXXXX	9,184	XXXXX	2016 Vintage
Hopkins Ridge Phase II	2013-11HR2	Oct-14	W1382	1,330	XXXXX	10,171	XXXXX	2018 Vintage
Hopkins Ridge Phase II	2013-12HR2	Oct-14	W1382	1,520	XXXXX			
Hopkins Ridge Phase II	2014-01HR2	Oct-14	W1382	1,233	XXXXX			
Hopkins Ridge Phase II	2014-02HR2	Oct-14	W1382	1,376	XXXXX			
Hopkins Ridge Phase II	2014-03HR2	Oct-14	W1382	2,173	XXXXX			
Hopkins Ridge Phase II	2014-04HR2	Oct-14	W1382	2,147	XXXXX			
Hopkins Ridge Phase II	2014-05HR2	Oct-14	W1382	1,884	XXXXX			
Hopkins Ridge Phase II	2014-06HR2	Oct-14	W1382	1,883	XXXXX			
Hopkins Ridge Phase II	2014-07HR2	Jan-15	W1382	1,262	XXXXX			
Hopkins Ridge Phase II	2014-08HR2	Jan-15	W1382	1,165	XXXXX			
Hopkins Ridge Phase II	2014-09HR2	Jan-15	W1382	693	XXXXX			
Hopkins Ridge Phase II	2014-09HR2	Apr-15	W1382	437	XXXXX			
Hopkins Ridge Phase II	2014-10HR2	Apr-15	W1382	1,483	XXXXX			
Hopkins Ridge Phase II	2014-11HR2	Apr-15	W1382	1,813	XXXXX			
Hopkins Ridge Phase II	2014-12HR2	Apr-15	W1382	1,092	XXXXX			
Hopkins Ridge Phase II	2015-01HR2	Apr-15	W1382	574	XXXXX			
Hopkins Ridge Phase II	2015-02HR2	Apr-15	W1382	1,161	XXXXX			
Hopkins Ridge Phase II	2016-07HR2	Mar-18	W1382	1,583	XXXXX			
Hopkins Ridge Phase II	2016-08HR2	Mar-18	W1382	1,129	XXXXX			
Hopkins Ridge Phase II	2016-09HR2	Mar-18	W1382	1,478	XXXXX			
Hopkins Ridge Phase II	2016-10HR2	Mar-18	W1382	1,724	XXXXX			
Hopkins Ridge Phase II	2016-11HR2	Mar-18	W1382	1,705	XXXXX			
Hopkins Ridge Phase II	2016-12HR2	Mar-18	W1382	1,565	XXXXX			
Hopkins Ridge Phase II	2018 - 01HR2	Mar-19	W1382	1,961	XXXXX			
Hopkins Ridge Phase II	2018 - 07HR2	Feb-19	W1382	1,158	XXXXX			
Hopkins Ridge Phase II	2018 - 08HR2	Feb-19	W1382	1,529	XXXXX			
Hopkins Ridge Phase II	2018 - 09HR2	Feb-19	W1382	1,243	XXXXX			
Hopkins Ridge Phase II	2018 - 10HR2	Feb-19	W1382	947	XXXXX			
Hopkins Ridge Phase II	2018 - 11HR2	Jan-19	W1382	1,740	XXXXX			
Hopkins Ridge Phase II	2018 - 12HR2	Jan-19	W1382	1,593	XXXXX			

REDACTED VERSION Attachment 4

A/C 25400221

	7	Fransactio	n		REC		Total REC	
Facility	Vintage	Mo/Yr	WREGIS#	Qty	Revenues	Total Qty	Revenues	
Wild Horse	2012-01WH	May-12	W183	38,143	XXXXX	238,143	XXXXX	2012 Vintage
Wild Horse	2012-07WH	Dec-13	W183	26,875	XXXXX	246,192	XXXXX	2013 Vintage
Wild Horse	2012-08WH	Dec-13	W183	39,253	XXXXX	541,930	XXXXX	2014 Vintage
Wild Horse	2012-09WH	Dec-13	W183	29,767	XXXXX	43,254		2015 Vintage
Wild Horse	2012-10WH	Dec-13	W183	45,454	XXXXX	138,677	XXXXX	2016 Vintage
Wild Horse	2012-11WH	Dec-13	W183	34,606	XXXXX	44,385	XXXXX	2017 Vintage
Wild Horse	2012-12WH	Dec-13	W183	24,045	XXXXX	203,209		2018 Vintage
Wild Horse	2013-07WH	Jul-14	W183	15,535	XXXXX	172,850	XXXXX	2019 Vintage
Wild Horse	2013-07WH	Oct-14	W183	26,280	XXXXX			
Wild Horse	2013-08WH	Oct-14	W183	24,591	XXXXX			
Wild Horse	2013-09WH	Oct-14	W183	39,676	XXXXX			
Wild Horse	2013-10WH	Oct-14	W183	32,117	XXXXX			
Wild Horse	2013-11WH	Oct-14	W183	27,336	XXXXX			
Wild Horse	2013-11WH	Jan-15	W183	12,577	XXXXX			
Wild Horse	2013-12WH	Jan-15	W183	25,465	XXXXX			
Wild Horse	2013-12WH	Feb-15	W183	3,000	XXXXX			
Wild Horse	2013-12WH	Apr-15	W183	39,615	XXXXX			
Wild Horse	2014-01WH	Oct-14	W183	25,000	XXXXX			
Wild Horse	2014-01WH	Nov-14	W183	991	XXXXX			
Wild Horse	2014-02WH	Nov-14	W183	39,394	XXXXX			
Wild Horse	2014-03WH	Nov-14	W183	60,000	XXXXX			
Wild Horse	2014-03WH	Apr-15	W183	160	XXXXX			
Wild Horse	2014-04WH	Nov-14	W183	66,150	XXXXX			
Wild Horse	2014-05WH	Nov-14	W183	48,537	XXXXX			
Wild Horse	2014-06WH	Nov-14	W183	39,928	XXXXX			
Wild Horse	2014-06WH	Apr-15	W183	19,422	XXXXX			
Wild Horse	2014-07WH	Apr-15	W183	26,017	XXXXX			
Wild Horse	2014-08WH	Apr-15	W183	36,234	XXXXX			
Wild Horse	2014-09WH	Apr-15	W183	41,907	XXXXX			
Wild Horse	2014-10WH	Apr-15	W183	38,734	XXXXX			
Wild Horse	2014-10WH	Dec-15	W183	882	XXXXX			
Wild Horse	2014-11WH	Jun-15	W183	30,000	XXXXX			
Wild Horse	2014-11WH	Jan-16	W183	24,038	XXXXX			
Wild Horse	2014-11WH	Feb-16	W183	1,653	XXXXX			

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3 - 3 - 3	Transaction				REC		Total REC	
Facility	Vintage	Mo/Yr	WREGIS#	Qty	Revenues	Total Qty	Revenues	
Wild Horse	2014-12WH	May-15	W183	20,000	XXXXX	-		
Wild Horse	2014-12WH	Dec-15	W183	22,000	XXXXX			
Wild Horse	2014-12WH	Mar-16	W183	883	XXXXX			
Wild Horse	2015-07WH	Mar-17	W183	43,254	XXXXX			
Wild Horse	2016-07WH	Dec-17	W183	39,127	XXXXX			
Wild Horse	2016-07WH	Dec-17	W183	4,603	XXXXX			
Wild Horse	2016-07WH	Feb-18	W183	4,837	XXXXX			
Wild Horse	2016-08WH	Feb-18	W183	19,294	XXXXX			
Wild Horse	2016-08WH	Mar-18	W183	17,912	XXXXX			
Wild Horse	2016-09WH	Mar-18	W183	50,678	XXXXX			
Wild Horse	2016-10WH	Mar-18	W183	2,226	XXXXX			
Wild Horse	2017-07 WH	Dec-18	W183	44,385	XXXXX			
Wild Horse	2018-07WH	Feb-19	W183	33,427	XXXXX			
Wild Horse	2018-08WH	Feb-19	W183	35,505	XXXXX			
Wild Horse	2018-10WH	Sep-19	W183	30,070	XXXXX			
Wild Horse	2018-11WH	Sep-19	W183	8,348	XXXXX			
Wild Horse	2018-12WH	Sep-19	W183	16,582	XXXXX			
Wild Horse	2018-11WH	Sep-19	W183	34,892	XXXXX			
Wild Horse	2018-08WH	Dec-19	W183	8,937	XXXXX			
Wild Horse	2018-09WH	Dec-19	W183	33,659	XXXXX			
Wild Horse	2018-10WH	Dec-19	W183	1,789	XXXXX			
Wild Horse	2019-01WH	Jan-20	W183	38,920	XXXXX			
Wild Horse	2019-02WH	Jan-20	W183	35,316	XXXXX			
Wild Horse	2019-03WH	Jan-20	W183	34,133	160,425			
Wild Horse	2019-04WH	Jan-20	W183	64,385	XXXXX			
Wild Horse	2019-05WH	Jan-20	W183	96	XXXXX			
Hopkins Ridge	2012-07HR	Nov-13	W184	22,170	XXXXX	171,359		2012 Vintage
Hopkins Ridge	2012-08HR	Nov-13	W184	23,942	XXXXX	166,117		2013 Vintage
Hopkins Ridge	2012-09HR	Nov-13	W184	17,681	XXXXX	423,662		2014 Vintage
Hopkins Ridge	2012-10HR	Nov-13	W184	32,566	XXXXX	109,781		2015 Vintage
Hopkins Ridge	2012-10HR	Nov-13	W184	833	XXXXX	190,560		2016 Vintage
Hopkins Ridge	2012-11HR	Nov-13	W184	25,218	XXXXX	74,400		2017 Vintage
Hopkins Ridge	2012-12-HR	Nov-13	W184	48,949	XXXXX	176,270	XXXXX	2018 Vintage
Hopkins Ridge	2013-07HR	Aug-14	W184	27,772	XXXXX			

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Vintages 2012 through 2019

REDACTED VERSION Attachment 4

	-	Fransactio	n		REC		Total REC	
Facility	Vintage	Mo/Yr	WREGIS#	Qty	Revenues	Total Qty	Revenues	
Hopkins Ridge	2013-08HR	Aug-14	W184	7,228	XXXXX			
Hopkins Ridge	2013-08HR	Oct-14	W184	13,962	XXXXX			
Hopkins Ridge	2013-09HR	Oct-14	W184	33,769	XXXXX			
Hopkins Ridge	2013-10HR	Oct-14	W184	18,608	XXXXX			
Hopkins Ridge	2013-11HR	Oct-14	W184	30,236	XXXXX			
Hopkins Ridge	2013-12HR	Oct-14	W184	34,542	XXXXX			
Hopkins Ridge	2014-01HR	Oct-14	W184	28,019	XXXXX			
Hopkins Ridge	2014-02HR	Oct-14	W184	31,279	XXXXX			
Hopkins Ridge	2014-03HR	Oct-14	W184	49,384	XXXXX			
Hopkins Ridge	2014-04HR	Oct-14	W184	48,790	XXXXX			
Hopkins Ridge	2014-05HR	Oct-14	W184	42,826	XXXXX			
Hopkins Ridge	2014-06HR	Oct-14	W184	42,793	XXXXX			
Hopkins Ridge	2014-07HR	Oct-14	W184	17,305	XXXXX			
Hopkins Ridge	2014-07HR	Jan-15	W184	11,371	XXXXX			
Hopkins Ridge	2014-08HR	Oct-14	W184	5,970	XXXXX			
Hopkins Ridge	2014-08HR	Jan-15	W184	20,509	XXXXX			
Hopkins Ridge	2014-09HR	Apr-15	W184	25,682	XXXXX			
Hopkins Ridge	2014-10HR	Apr-15	W184	33,693	XXXXX			
Hopkins Ridge	2014-11HR	Apr-15	W184	41,204	XXXXX			
Hopkins Ridge	2014-12HR	Apr-15	W184	24,837	XXXXX			
Hopkins Ridge	2015-01HR	Apr-15	W184	13,037	XXXXX			
Hopkins Ridge	2015-02HR	Apr-15	W184	22,496	XXXXX			
Hopkins Ridge	2015-07HR	Mar-17	W184	33,651	XXXXX			
Hopkins Ridge	2015-08HR	Mar-17	W184	32,313	XXXXX			
Hopkins Ridge	2015-09HR	Mar-17	W184	8,284	XXXXX			
Hopkins Ridge	2016-07HR	Nov-17	W184	32,841	XXXXX			
Hopkins Ridge	2016-08HR	Nov-17	W184	23,440	XXXXX			
Hopkins Ridge	2016-09HR	Nov-17	W184	30,662	XXXXX			
Hopkins Ridge	2016-10HR	Nov-17	W184	35,770	XXXXX			
Hopkins Ridge	2016-11HR	Nov-17	W184	14,438	XXXXX			
Hopkins Ridge	2016-11HR	Feb-18	W184	20,940	XXXXX			
Hopkins Ridge	2016-12HR	Feb-18	W184	32,469	XXXXX			
Hopkins Ridge	2017-07HR	Oct-18	W184	25,526	XXXXX			
Hopkins Ridge	2017-08HR	Oct-18	W184	19,992	XXXXX			

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Vintages 2012 through 2019

REDACTED VERSION Attachment 4

3 3 3	Transaction				REC		Total REC		
Facility	Vintage	Mo/Yr	WREGIS#	Qty	Revenues	Total Qty	Revenues		
Hopkins Ridge	2017-09HR	Oct-18	W184	22,694	XXXXX	_			
Hopkins Ridge	2017-10HR	Oct-18	W184	6,188	XXXXX				
Hopkins Ridge	2018 - 11HR	Jan-19	W184	36,121	XXXXX				
Hopkins Ridge	2018 - 12HR	Jan-19	W184	27,937	XXXXX				
Hopkins Ridge	2018 - 07HR	Feb-19	W184	24,033	XXXXX				
Hopkins Ridge	2018 - 08HR	Feb-19	W184	31,728	XXXXX				
Hopkins Ridge	2018 - 09HR	Feb-19	W184	6,557	XXXXX				
Hopkins Ridge	2018 - 09HR	Feb-19	W184	19,239	XXXXX				
Hopkins Ridge	2018 - 10HR	Feb-19	W184	19,634	XXXXX				
Hopkins Ridge	2018 - 01HR	Mar-19	W184	5,913	XXXXX				
Hopkins Ridge	2018-12HR	Sep-19	W184	5,108	XXXXX				
Klondike III	2012-07K3	Oct-13	W237	16,041	XXXXX	58,264		2012 Vintage	
Klondike III	2012-08K3	Oct-13	W237	14,164	XXXXX	68,465		2013 Vintage	
Klondike III	2012-09K3	Oct-13	W237	9,214	XXXXX	133,571		2014 Vintage	
Klondike III	2012-10K3	Oct-13	W237	6,499	XXXXX	60,697		2015 Vintage	
Klondike III	2012-11K3	Oct-13	W237	4,082	XXXXX	62,849		2016 Vintage	
Klondike III	2012-11K3	Nov-13	W237	101	XXXXX	57,197		2017 Vintage	
Klondike III	2012-12K3	Nov-13	W237	3,641	XXXXX	57,609		2018 Vintage	
Klondike III	2012-12K3	Nov-13	W237	4,522	XXXXX	24,620	XXXXX	2019 Vintage	
Klondike III	2013-01K3	Mar-14	W237	4,000	XXXXX				
Klondike III	2013-07K3	Jul-14	W237	18,439	XXXXX				
Klondike III	2013-08K3	Jul-14	W237	12,249	XXXXX				
Klondike III	2013-09K3	Jul-14	W237	10,448	XXXXX				
Klondike III	2013-10K3	Jul-14	W237	5,856	XXXXX				
Klondike III	2013-11K3	Jul-14	W237	7,926	XXXXX				
Klondike III	2013-12K3	Jul-14	W237	9,547	XXXXX				
Klondike III	2014-01K3	Aug-14	W237	6,730	XXXXX				
Klondike III	2014-02K3	Aug-14	W237	8,102	XXXXX				
Klondike III	2014-03K3	Aug-14	W237	9,982	XXXXX				
Klondike III	2014-04K3	Aug-14	W237	10,186	XXXXX				
Klondike III	2014-04K3	Oct-14	W237	2,256	XXXXX				
Klondike III	2014-05K3	Oct-14	W237	2,957	XXXXX				
Klondike III	2014-05K3	Jan-15	W237	11,854	XXXXX				
Klondike III	2014-06K3	Jan-15	W237	13,146	XXXXX				

REDACTED VERSION Attachment 4

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viillages zo iz alieagii zo io	7	Transaction			REC	Total REC			
Facility	Vintage	/intage Mo/Yr WREGIS# Qt		Qty	Revenues	Total Qty	Revenues		
Klondike III	2014-06K3	Apr-15	W237	6,455	XXXXX	Ĭ			
Klondike III	2014-07K3	Oct-14	W237	14,575	XXXXX				
Klondike III	2014-08K3	Oct-14	W237	13,120	XXXXX				
Klondike III	2014-09K3	Apr-15	W237	10,070	XXXXX				
Klondike III	2014-10K3	Apr-15	W237	6,107	XXXXX				
Klondike III	2014-11K3	Apr-15	W237	10,298	XXXXX				
Klondike III	2014-12K3	Apr-15	W237	7,733	XXXXX				
Klondike III	2015-01K3	Jun-15	W237	3,410	XXXXX				
Klondike III	2015-02K3	Jun-15	W237	6,590	XXXXX				
Klondike III	2015-02K3	Aug-15	W237	1,516	XXXXX				
Klondike III	2015-03K3	Aug-15	W237	6,429	XXXXX				
Klondike III	2015-07K3	Feb-17	W237	17,267	XXXXX				
Klondike III	2015-08K3	Feb-17	W237	10,233	XXXXX				
Klondike III	2015-08K3	Mar-17	W237	4,674	XXXXX				
Klondike III	2015-09K3	Mar-17	W237	10,578	XXXXX				
Klondike III	2016-07K3	Nov-17	W237	17,398	XXXXX				
Klondike III	2016-08K3	Nov-17	W237	13,079	XXXXX				
Klondike III	2016-09K3	Nov-17	W237	12,312	XXXXX				
Klondike III	2016-10K3	Nov-17	W237	6,457	XXXXX				
Klondike III	2016-11K3	Nov-17	W237	5,775	XXXXX				
Klondike III	2016-12K3	Nov-17	W237	7,828	XXXXX				
Klondike III	2017-07K3	Jul-18	W237	17,830	XXXXX				
Klondike III	2017-08K3	Jul-18	W237	11,863	XXXXX				
Klondike III	2017-09K3	Jul-18	W237	7,147	XXXXX				
Klondike III	2017-10K3	Jul-18	W237	9,254	XXXXX				
Klondike III	2017-11K3	Jul-18	W237	6,026	XXXXX				
Klondike III	2017-12K3	Jul-18	W237	5,077	XXXXX				
Klondike III	2018 - 07K3	Jan-19	W237	14,947	XXXXX				
Klondike III	2018 - 08K3	Jan-19	W237	14,527	XXXXX				
Klondike III	2018 - 09K3	Jan-19	W237	10,066	XXXXX				
Klondike III	2018 - 10K3	Jan-19	W237	4,524	XXXXX				
Klondike III	2018 - 11K3	Jan-19	W237	6,974	XXXXX				
Klondike III	2018 - 12K3	Jan-19	W237	6,571	XXXXX				
Klondike III	2019 - 01K3	Jan-20	W237	4,116	XXXXX				

REDACTED VERSION Attachment 4

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	Transaction				REC	Total REC		
Facility	Vintage	Mo/Yr	WREGIS#	Qty	Revenues	Total Qty	Revenues	
Klondike III	2019 - 02K3	Jan-20	W237	4,115	XXXXX	_		
Klondike III	2019 - 03K3	Jan-20	W237	3,860	XXXXX			
Klondike III	2019 - 04K3	Jan-20	W237	11,922	XXXXX			
Klondike III	2019 - 05K3	Jan-20	W237	607	XXXXX			
Lower Snake River-Dodge Junction	2013-07DJ	Oct-14	W2669	32,666	XXXXX	201,751	XXXXX	2013 Vintage
Lower Snake River-Dodge Junction	2013-08DJ	Oct-14	W2669	26,144	XXXXX	230,247	XXXXX	2014 Vintage
Lower Snake River-Dodge Junction	2013-09DJ	Oct-14	W2669	43,424	XXXXX			
Lower Snake River-Dodge Junction	2013-10DJ	Oct-14	W2669	22,926	XXXXX			
Lower Snake River-Dodge Junction	2013-11DJ	Oct-14	W2669	37,127	XXXXX			
Lower Snake River-Dodge Junction	2013-12DJ	Oct-14	W2669	39,464	XXXXX			
Lower Snake River-Dodge Junction	2014-07DJ	Oct-14	W2669	38,161	XXXXX			
Lower Snake River-Dodge Junction	2014-08DJ	Oct-14	W2669	30,132	XXXXX			
Lower Snake River-Dodge Junction	2014-09DJ	Apr-15	W2669	34,897	XXXXX			
Lower Snake River-Dodge Junction	2014-10DJ	Apr-15	W2669	40,553	XXXXX			
Lower Snake River-Dodge Junction	2014-11DJ	Apr-15	W2669	50,548	XXXXX			
Lower Snake River-Dodge Junction	2014-12DJ	Apr-15	W2669	35,956	XXXXX			
Lower Snake River-Phalen Gulch	2013-07PG	Oct-14	W2670	22,993	17,245	142,210		2013 Vintage
Lower Snake River-Phalen Gulch	2013-08PG	Oct-14	W2670	18,193	XXXXX	169,808	XXXXX	2014 Vintage
Lower Snake River-Phalen Gulch	2013-09PG	Oct-14	W2670	13,056	XXXXX	12,732	XXXXX	2015 Vintage
Lower Snake River-Phalen Gulch	2013-09PG	Oct-14	W2670	19,776	XXXXX			
Lower Snake River-Phalen Gulch	2013-10PG	Oct-14	W2670	16,782	XXXXX			
Lower Snake River-Phalen Gulch	2013-11PG	Oct-14	W2670	27,555	XXXXX			
Lower Snake River-Phalen Gulch	2013-12PG	Oct-14	W2670	23,855	XXXXX			
Lower Snake River-Phalen Gulch	2014-07PG	Oct-14	W2670	28,789	XXXXX			
Lower Snake River-Phalen Gulch	2014-08PG	Oct-14	W2670	21,948	XXXXX			
Lower Snake River-Phalen Gulch	2014-09PG	Apr-15	W2670	26,547	XXXXX			
Lower Snake River-Phalen Gulch	2014-10PG	Apr-15	W2670	30,269	XXXXX			
Lower Snake River-Phalen Gulch	2014-11PG	Apr-15	W2670	37,582	XXXXX			
Lower Snake River-Phalen Gulch	2014-12PG	Apr-15	W2670	24,673	XXXXX			
Lower Snake River-Phalen Gulch	2015-01PG	Apr-15	W2670	12,732	XXXXX			
	GRAND TOTAL		_	4,477,937	XXXXX	-	XXXXX	

SHADED INFORMATION IS DESIGNATED CONFIDENTIAL PER WAC 480-07-160 REDACTED VERSION

PUGET SOUND ENERGY 2020 RPS REPORT

Attachment 5

480-109-210(2)(a)(i) Utility must make a one-time calculation of incremental cost for each eligible resource at the time of acquisition or, for historic acquisitions, the best information available at the time of acquisition

Formula **One Time Calculation** of Incremental Cost:

Energy-Levelized Incremental Cost:

[Levelized Cost Eligible Renewable Resource – Levelized Cost Alternative]

Capacity-Levelized Incremental Cost:

[Levelized Cost Eligible Renewable Resource – Levelized Cost Alternative]

Energy + Capacity = Incremental Cost

Note: Levelized cost of eligible renewable resource should include integration

	ENERGY	\$	Energy	Capacity	Capacity	\$	\$
	Levelized Cost Eligible						
	Renewable Resource		Levelized Cost	Levelized Cost			
Resource	(\$/REC/MWh)	Total Annual Cost (\$)	Alternative (\$/MWh)	Alternative (\$/kW-yr)	Total Alternative Cost (\$)	Incremental Cost (\$)	Washington Share
Baker River Project - Lower Baker	78.54	8,600,000	7.92	120	9,290,000	(690,000)	(690,000)
Snoqualmie Falls - Snoqualmie Fall	112.69	3,850,000	2.44	65	3,180,000	670,000	670,000
Wild Horse - Wild Horse	54.34	34,940,000	26.53	281	29,740,000	5,200,000	5,200,000
Hopkins Ridge - Hopkins Ridge	40.20	18,770,000	19.26	150	20,970,000	(2,200,000)	(2,200,000)
Wild Horse - Wild Horse - Phase II	109.05	10,030,000	5.09	71	5,900,000	4,130,000	4,130,000
Hopkins Ridge - Hopkins Ridge Pha	60.88	1,280,000	1.19	15	1,360,000	(80,000)	(80,000)
Lower Snake River - Dodge Junctio	78.63	39,330,000	48.51	148	27,960,000	11,370,000	11,370,000
Lower Snake River - Phalen Gulch -	78.65	31,280,000	48.51	148	22,230,000	9,050,000	9,050,000
Klondike III - Klondike Wind Power	65.13	10,270,000	8.98	81	9,910,000	360,000	360,000
						-	-
_						-	-
Total Renewable Resource Cost		158,350,000			130,540,000	27,810,000	27,810,000

Note 1: WAC 480-109-210 (2) (G): Legacy resources. Any eligible resource that the utility acquired prior to March 31, 1999, is deemed to have an incremental cost of zero.

Washington Share:	100.00%
ALL RESOURCES TOTAL INCREMENTAL COST =	
ENERGY + CAPACITY	27,810,000

PUGET SOUND ENERGY 2020 RPS REPORT Attachment 5

2020 Estimated Data: Annual Calculation of Revenue Requirement Ratio

480-109-210(2)(a)(ii) Utility must annually calculate its revenue requirement ratio for 1) All Resources 2) Required Resources Target Year	
Formula <u>Annual Calculation</u> of Incremental Cost (Revenue Requirement Ratio):	REDACTED VERSION

1) Total Incremental Cost All* Resources:

{[sum of incremental costs of All* eligible resources + cost of unbundled RECs] - [revenue RECs]} / annual revenue requirement

*required because of excess generation, Avista needs to report 2 incremental costs

2) Total Incremental Cost Required Resources for Target Year:

{[sum of incremental costs of Target Year* eligible resources used for target year compliance + cost of unbundled RECs] - [revenue RECs]} / annual revenue requirement

	ALL AV	AILABLE RESOURCES ESTIMA	ATED		TARGET YEAR: FORCAST SUBJECT TO CHANGE				
	sum of incremental costs of		Revenue from REC	sum of incremental costs of					
ResourceWashington Only	all eligible resources	RECs purchased	sales/Note 1	all eligible resources	RECs purchased	Revenue from REC sales/Note			
Baker River Project - Lower Baker Unit 3	(690,000)			(690,000)					
Snoqualmie Falls - Snoqualmie Falls Units 1-4	670,000			670,000					
Wild Horse - Wild Horse	5,200,000			5,200,000		XXXX			
Hopkins Ridge - Hopkins Ridge	(2,200,000)			(2,200,000)					
Wild Horse - Wild Horse - Phase II	4,130,000			4,130,000					
Hopkins Ridge - Hopkins Ridge Phase II	(80,000)			(80,000)					
Lower Snake River - Dodge Junction - LSR-Dodg	11,370,000			11,370,000					
Lower Snake River - Phalen Gulch - LSR-Phalen	9,050,000			9,050,000					
Klondike III - Klondike Wind Power III LLC	360,000			360,000		XXXX			
Various REC Purchases - Note 4					671,857	(
	0			0					
	0			0					
	0			0		C			
Total	27,810,000	0	0	27,810,000	671,857	(837,015			
Total WA Only Resources	27,810,000	0	0	27,810,000	671,857	(837,015			
		0	0	0	0				
	, , ,	<u> </u>	0	•	0				
Total WA Share of Costs	27,810,000	0	0	27,810,000	671,857	(837,01			
Annual Revenue Requirement (most recent rat	e case) (Note 3)		1,996,287,283	1	Г	1,996,287,28			
a. nevenue negamenten (most recent rat	CALCULATION 1 (Note 2):			CALCULATION 2 (Note 2):		28,961,12			
			1.459%			1.451'			

NOTES

Note 1: Includes only benefit of Vintage 2019 REC sales. Benefit of REC sales for Vintage 2012 through 2019 were considered and included in original one time calculation of incremental costs, therefore it would not be appropriate to include again in annual costs. Additionally, no vintage 2020 RECS sold to date.

Note 2: To calculate revenue requirements all costs/revenues are multiplied by 1.047614 to account for Washington's share Excise Tax, Uncollectibles and Commission Fees.

Note 3: Figure reflects Revenue Requirement from PSE's 2017 General Rate Case, after adjusting for Tax Cuts and Job Acts ("Tax Reform") updates approved by the Commission in Docket UE-18028

Electric Revenue Requirement as originally approved in UE-170033 was \$2,069,159,344. Utilizing the pre-tax reform revenue requirement results in a 1.408% revenue requirement rational states.

Note 4: Purchased RECs are part of PSE's REC optimization strategy in order to reduce customer costs associated with RPS compliance.

PSE sold portion of PNW wind RECs at a premium and purchased lower costing I-937 compliant RECs. These savings are provided to customers through PSE's REC tracket

PUGET SOUND ENERGY 2020 RPS REPORT

Attachment 5

(iii)(A) & (B) Annual Reporting Summary Data: 2020

Utility must (A) report its total incremental cost as a dollar amount and in dollars per megawatt-hour of renewable energy generated by all eligible renewable resources in the calcualtion (a)(i) of this subsection; and (B) multiply the dollars per megawatt-hour cost calculated in (a)(iii)(A) of this subsection by the number of megawatt-hours needed for target year compliance.

		(A)		(B)			
	Total Incremental Cost (as dollar \$		Total Incremental Cost	Number of Megawatt-hours Needed for	Total Incremental Cost (\$/MWh) Multiplied by Number of		
Resource	amt.)	MWh	(\$/MWh)	Target Year Compliance	Megawatt-hours Needed for Target Year Compliance		
Baker River Project - Lower Baker Unit 3	(690,000)	109,500	\$ (6.30)	70,693	(445,463)		
Snoqualmie Falls - Snoqualmie Falls Units 1-4	670,000	34,164	\$ 19.61	17,398	341,197		
Wild Horse - Wild Horse	5,200,000	642,984	\$ 8.09	343,366	2,776,901		
Hopkins Ridge - Hopkins Ridge	(2,200,000)	466,908	\$ (4.71)	324,844	(1,530,616)		
Wild Horse - Wild Horse - Phase II ** (Vintages 2019 & 2020)	4,130,000	91,980	\$ 44.90	190,289	8,544,179		
Hopkins Ridge - Hopkins Ridge Phase II (Vintages 2019 & 2020)	(80,000)	21,024	\$ (3.81)	33,200	(126,332)		
Lower Snake River - Dodge Junction - LSR-Dodge Junction** (Vintages 2019 & 202	11,370,000	500,172	\$ 22.73	835,891	19,001,625		
Lower Snake River - Phalen Gulch - LSR-Phalen Gulch** (Vintages 2019 & 2020)	9,050,000	397,728	\$ 22.75	608,886	13,854,741		
Klondike III - Klondike Wind Power III LLC (Vintages 2019 & 2020)	360,000	157,680	\$ 2.28	133,498	304,790		
Varioius REC Purchases (Note 1)			\$ 2.92	229,704	671,857		
REC Sales					(837,015)		
Apprenticeship Credits for Eligible Resources				327,014	-		
Total Renewable Portfolio	27,810,000	2,422,140	\$ 11.48	3,114,783	42,555,865		

**Note--These facilities qualify for apprenticeship credits therefore requiring less MWh for compliance

(Avg cost/MWH for resources used)

13.66

Note 1: Purchased RECs are part of PSE's REC optimization strategy in order to reduce customer costs associated with RPS compliance. PSE sold portion of PNW wind RECs at a premium and purchased lower costing I-937 compliant RECs. These savings are provided to customers through PSE's REC tracker.

SHADDED INFORMATION IS DESIGNATED CONFIDENTIAL PER WAC 480-07-160

	Cost/REC	RECs	Tot	al Cost
	XXXXX	XXXXX		XXXXX
	XXXXX	XXXXX		XXXXX
	XXXXX	XXXXX		XXXXX
Total Wind REC Purchases		227,343	\$	665,246.40
Total Bio-Gas REC Purchases	XXXXX	2,361		XXXXX
Total REC Purchases		229,704	\$	671,857.20

Energy Independence Act (I-937) Renewable Report Workbook Published March 31, 2020

Deadline: June 1, 2020

Submission: Email this workbook and all supporting documentation to EIA@commerce.wa.gov

Questions: Glenn Blackmon, State Energy Office, (360) 339-5619, glenn.blackmon@commerce.wa.gov

Enter information in green-shaded fields. Do not modify blue-shaded fields.

RCW 19.285.070

Reporting and public disclosure.

- (1) On or before June 1, 2012, and annually thereafter, each qualifying utility shall report to the department on its progress in the preceding year in meeting the targets established in RCW 19.285.040, including expected electricity savings from the biennial conservation target, expenditures on conservation, actual electricity savings results, the utility's annual load for the prior two years, the amount of megawatt-hours needed to meet the annual renewable energy target, the amount of megawatt-hours of each type of eligible renewable resource acquired, the type and amount of renewable energy credits acquired, and 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. 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. A qualifying utility may submit its report to the department in conjunction with its annual obligations in chapter 19.29A RCW.
- (2) A qualifying utility that is an investor-owned utility shall also report all information required in subsection (1) of this section to the commission, and all other qualifying utilities shall also make all information required in subsection (1) of this section available to the auditor.
 - (3) A qualifying utility shall also make reports required in this section available to its customers.

WAC 194-37-060

Conservation reporting requirements.

<Conservation targets and achievement are reported in a separate worksheet.>

WAC 194-37-110

Renewable resource energy reporting.

Each utility must submit a renewable resource energy report to the department by June 1st of each year using a form provided by the department. The report must reflect the actions that the utility took by the previous January 1st to meet the renewable requirements of chapter 19.285 RCW for that year. For example, a utility must report by June 1, 2015, the actions it took by January 1, 2015, to meet requirements applicable to the 2015 target year.

- (1) Reporting requirements applicable to all utilities. Each utility must report the following information:
- (a) The compliance method:
 - (i) Renewable energy target using renewable resources and RECs RCW 19.285.040 (2)(a);
 - (ii) Incremental cost RCW 19.285.050; or
 - (iii) No-growth cost RCW 19.285.040 (2)(d).

- (b) The utility's load for the two years preceding the target year and the average load for those two years.
- (c) The utility's renewable energy target for the target year.
- (d) The amount of eligible renewable resources, RECs, and multiplier credits to be applied toward the utility's renewable energy target for the target year. The report must identify, by generating facility or hydroelectric project, including the WREGIS generating unit identification where applicable, and, in the case of RECs, by vintage year:
 - (i) The eligible renewable resources in megawatt-hours to be applied toward the renewable energy target for the target year;
 - (ii) The RECs to be applied toward the renewable energy target for the target year;
- (iii) Any additional credit for eligible renewable resources or RECs from generating facilities eligible for the apprentice labor provision in RCW 19.285.040 (2)(h), applied toward the renewable energy target for the target year;
- (iv) Any additional credit for RECs from generating facilities eligible for the distributed generation in RCW 19.285.040 (2)(b), applied toward the renewable energy target for the target year.
- (e) 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. Each utility must include in its report documentation of the calculations and inputs to this amount.
- (2) Incremental cost compliance method report. Each utility reporting pursuant to subsection (1)(a) of this section its use of the incremental cost compliance method for the target year must include the following information in its report:
 - (a) Annual revenue requirement for the target year;
 - (b) The annual levelized delivered cost of its eligible renewable resource(s) reported separately for each resource;
 - (c) The annual levelized delivered cost of its substitute resources and the eligible renewable resource with which it is being compared;
 - (d) The total cost of renewable energy credits to be applied in the reporting year;
 - (e) The percentage of its annual revenue requirement invested in the incremental cost of eligible renewable resources and the cost of RECs; and
 - (f) The most current information required by WAC 194-37-160 used for this financial demonstration.
- (3) **No-growth cost compliance method report.** Each utility reporting pursuant to subsection (1)(a) of this section its use of the no-growth cost compliance method for the target year must include the following information in its report:
 - (a) Annual revenue requirement for the target year;
 - (b) Actual and weather-adjusted load for each year used in determining that the utility's load did not increase;
- (c) Delivered cost of its eligible renewable resource(s), RECs or a combination of both for the target year to be applied to the one percent of annual revenue requirement, reported separately for each resource;
- (d) Generating facility identification, vintage, quantity and cost of any RECs to be retired as an offset for nonrenewable resource purchases pursuant to RCW 19.285.040 (2)(d).
- (4) **Final compliance report.** A utility must submit a final renewable compliance report by the later of (a) two years after the filing of the report required in subsections (1) through (3) of this section; or (b) ninety days after the issuance of the auditor's report for the target year. The final renewable compliance report must provide an update of any revisions to the information previously reported pursuant to this section or, if no revisions were made, notify the department that the initial report should be considered the final report. For any target year that a utility demonstrates to the auditor that it did not meet the annual renewable resource requirements in chapter 19.285 RCW due to events beyond the reasonable control of the utility per RCW

RENEWABLE ENERGY WORKSHEET - REVISIONS TO 2018 REPORT

In addition to submitting the 2020 report, each qualifying utility should review the renewable energy report it submitted in 2018. In many cases, the specific resources and quantities actually used to comply with the 2018 target differ from what the utility reported in June 2018. <u>Utilities should submit a revised 2018 report if the actual values differ from the values reported in 2018</u>.

WAC 194-37-110(4): Final compliance report. A utility must submit a final renewable compliance report by the later of (a) two years after the filing of the report required in subsections (1) through (3) of this section; or (b) ninety days after the issuance of the auditor's report for the target year. The final renewable compliance report must provide an update of any revisions to the information previously reported pursuant to this section or, if no revisions were made, notify the department that the initial report should be considered the final report.

Please use the 2018 template and mark it as "revised." Contact Commerce to obtain a copy of the 2018 reporting template if necessary.

Energy Independence Act (EIA) Renewable Energy Report 2020

Utility	Puget Sound Energy
Report Date	June 1, 2020
Utility Contact Name/Dept	Chris Schaefer / Regulatory Affairs
Phone	425-456-2932
Email	chris.schaefer@pse.com

Loads and Resources	
2018 Annual Load (MWh)	20,697,195
2019 Annual Load (MWh)	20,833,230
Average of 2018 & 2019 Annual Loads (MWh)	20,765,213
2020 Renewable Target (% of load)	15%
2020 Eligible Renewable Energy Target (MWh)	3,114,782
2020 Eligible Renewable Resources and RECs	3.114.782

2020 Compliance Method:

☑ RPS Target [RCW 19.285.040(2)(a)]

☐ Resource Cost [RCW 19.285.050]

☐ No Load Growth [RCW 19.285.040(2)(d)]

Expenditures on Renewable Resources and RECs - 2020	
Amount invested in incremental cost of eligible renewable resources and the cost of RECs	\$27,810,000
Total annual retail revenue requirement - 2020	
Investment in renewables and RECs as a percent of retail revenue requirement	

	Water	Wind	Solar	Geothermal	Landfill Gas	Wave, Ocean, Tidal	Gas from Sewage Treatment	Biodiesel	Biomass	Qualified Biomass (pre-1999)	Apprentice Labor Credit	Distributed Generation Credit
Eligible Renewable Resources (MWh)	88,091	-	-	-	-	-	-	-	-	-	-	
Renewable Energy Credits		2,697,317	-	-	2,361	-	-	-	•	-	327,013	-
Total Renewables (MWh+RECs)	88,091	2,697,317	-	-	2,361	-	-	-	-	-	327,013	_

2020 Reporting Year:

This renewable energy report summarizes the eligible renewables resources and renewable energy credits (RECs) that the utility has acquired by January 1, 2020 for the purpose of meeting its Energy Independence Act (EIA) renewables target for 2020. The actual resources and RECs used to comply with the 2020 EIA target may vary from those reported here. Utilities will report in June of 2022 on the actual results for 2020.

Compliance Methods:

The EIA provides three compliance methods for utilities:

- -- Meet the renewable energy target using any combination of renewable resources and RECs. The target for 2020 is 15% of the utility's load.
- -- Invest at least 4% of the utility's annual revenue requirement in the incremental cost of renewable resources and RECs.
 -- Invest at least 1% of its annual revenue requirement in renewable resources and RECs. This option is available only to certain utilities that are not growing.

All utilities must report the renewable resources and RECs acquired for the 2020 target year. Utilities that elect to use a compliance method based on renewable investments must provide additional information demonstrating compliance with that method. Refer to WAC 194-37-110(2) and (3) for specific requirements.

NOTE: This is a general explanation of the renewable energy requirements of the Energy Independence Act, intended to help members of the public understand the information reported by the utility. Consult Chapter 19.285 RCW and Chapter 194-37 WAC for details.

Renewable Resources

Utility	Puget Sound Energy
Compliance Year	2020

Apprentice

WREGIS ID	Facility Name	Resource Type	Apprentice Labor Eligibility	Amount (MWh)	Amount (MWh equiv.)	Explanatory Notes (as needed)
W4866	Snoqualmie Falls - Snoqualmie Falls Units 1-4	Water	No	17,398	-	Utilizes UTC Method 2 for incremental hyro-8.5% of generation
W4865	Baker River Project - Lower Baker Unit 3	Water	No	70,693	-	Utilizes UTC Method 2 for incremental hyro28.3% of generation
			No		-	
			No		-	
			No		-	
			No		-	
			No		-	
			No		-	
			No		-	
			No		-	
			No		-	
			No		-	
			No		-	
			No		-	
			No		-	
			No		-	
			No		-	
			No		-	
			No		-	
			No		-	
			No		-	

Renewable Energy Credits

Utility	Puget Sound Energy
Compliance Year	2020

WREGIS ID	Facility Name	REC Vintage (Year)	Resource Type	Apprentice Labor Eligibility	Distributed Generation Eligibility	Quantity RECs	Apprentice Labor Amount MWh equiv.	Distributed Generation Amount MWh equiv.	Explanatory Notes (as needed)
W183	Wild Horse - Wild Horse	2019		No	No	343,366	www.equiv.	www.equiv.	Quantity reflects planned RPS Compliance Usage Only
W184	Hopkins Ridge - Hopkins Ridge	2019		No	No	324.844	-		Quantity reflects planned RPS Compliance Usage Only
W1364	Wild Horse - Wild Horse - Phase II	2019		Yes	No	99.359	19,872	-	Quantity reflects planned RPS Compliance Usage Only
W1382	Hopkins Ridge - Hopkins Ridge Phase II	2019		No	No	15,655	19,072		Quantity reflects planned RPS Compliance Usage Only
W2669	Lower Snake River - Dodge Junction - LSR-Dodge Junction	2019		Yes	No	412,098	82,420		Quantity reflects planned RPS Compliance Usage Only
W2670	Lower Snake River - Phalen Gulch - LSR-Phalen Gulch	2019		Yes	No	298,679	59,736		Quantity reflects planned RPS Compliance Usage Only
W237	Klondike III - Klondike Wind Power III LLC	2019		No	No	93.031	-		Quantity reflects planned RPS Compliance Usage Only
W1875	Camp Reed Wind Park - Camp Reed Wind Park	2019		No	No	18.037	_	_	Quantity reflects planned RPS Compliance Usage Only
W1862	Golden Valley Wind Park - Golden Valley Wind Park	2019		No	No	8,707	_	_	Quantity reflects planned RPS Compliance Usage Only
W237	Klondike III - Klondike Wind Power III LLC	2019		No	No	15,341	_		Quantity reflects planned RPS Compliance Usage Only
W3186	Meadow Creek Wind Farm - Five Pine Project	2019		No	No	25,276	-	-	Quantity reflects planned RPS Compliance Usage Only
W3185	Meadow Creek Wind Farm - North Point Wind Farm	2019	Wind	No	No	49,724	-	-	Quantity reflects planned RPS Compliance Usage Only
W697	Nine Canyon Wind Project - Nine Canyon Phase 3	2019		No	No	3,486	-	_	Quantity reflects planned RPS Compliance Usage Only
W1882	Oregon Trail Wind Park, LLC - Oregon Trail Wind Park	2019	Wind	No	No	9.879	-	-	Quantity reflects planned RPS Compliance Usage Only
W1844	PaTu Wind Farm - PaTu Wind	2019	Wind	No	No	12,375	-	-	Quantity reflects planned RPS Compliance Usage Only
W2616	Roseburg LFG - Roseburg LFG Energy	2019	Landfill Gas	No	No	2,361	-	-	Quantity reflects planned RPS Compliance Usage Only
W1885	Salmon Falls Wind Park, LLC - Salmon Falls Wind Park	2019	Wind	No	No	17,090	-	-	Quantity reflects planned RPS Compliance Usage Only
W2323	Sawtooth Wind Project - Sawtooth Wind Project	2019	Wind	No	No	30,077	-	-	Quantity reflects planned RPS Compliance Usage Only
W1881	Thousand Springs Wind Park, LLC - Thousand Springs Wind Park	2019	Wind	No	No	8,681	-	-	Quantity reflects planned RPS Compliance Usage Only
W1883	Tuana Gulch Wind Park, LLC - Tuana Gulch Wind Park	2019	Wind	No	No	7,912	-	-	Quantity reflects planned RPS Compliance Usage Only
W1503	Tuana Springs Energy, LLC - Tuana Springs	2019	Wind	No	No	17,961	-	-	Quantity reflects planned RPS Compliance Usage Only
W360	White Creek Wind 1 - White Creek	2019	Wind	No	No	2,797	-	-	Quantity reflects planned RPS Compliance Usage Only
W2670	Lower Snake River - Phalen Gulch - LSR-Phalen Gulch	2020	Wind	Yes	No	310,207	62,041	-	Quantity reflects planned RPS Compliance Usage Only
W1364	Wild Horse - Wild Horse - Phase II	2020	Wind	Yes	No	90,930	18,186	-	Quantity reflects planned RPS Compliance Usage Only
W2669	Lower Snake River - Dodge Junction - LSR-Dodge Junction	2020	Wind	Yes	No	423,793	84,759	-	Quantity reflects planned RPS Compliance Usage Only
W237	Klondike III - Klondike Wind Power III LLC	2020	Wind	No	No	40,467	-	-	Quantity reflects planned RPS Compliance Usage Only
W1382	Hopkins Ridge - Hopkins Ridge Phase II	2020	Wind	No	No	17,545	-	-	Quantity reflects planned RPS Compliance Usage Only

Utility Puget Sound Energy

Compliance Year 2020

Other notes and explanations:

Please note actual resources and RECs used to comply with the 2020 EIA Target may vary from those reported here. PSE will report in June of 2022 on the actual results for 2020.

Energy Independence Act (EIA) Incremental Cost and REC Cost Report 2020

Incremental Cost of Renewable Resources

Utility	Puget Sound Energy
Compliance Year	2020

			Renewable Resource Annual	Renewable Resource Cost		Substitute Resource Annual	Substitute Resource Cost per	Incremental Cost of Renewable
Facility Name	WREGIS ID	MWh	Cost in 2020	per MWH	Description of Substitute Resource	Cost in 2020	MWH	Resource in 2020
aker River Project - Lower Baker Unit	W4865	109,500	\$8,600,000	79	Long Term PPA	\$9,290,000	85	-\$690,000
qualmie Falls - Snoqualmie Falls Units	W4866	34,164	\$3,850,000	113	Long Term PPA	\$3,180,000	93	\$670,000
Wild Horse - Wild Horse	W183	642,984	\$34,940,000	54	Peaker + LT Mkt Purchase	\$29,740,000	46	\$5,200,000
Hopkins Ridge - Hopkins Ridge	W184	466,908	\$18,770,000	40	Peaker + LT Mkt Purchase	\$20,970,000	45	-\$2,200,000
Wild Horse - Wild Horse - Phase II	W1364	91,980	\$10,030,000	109	Peaker + LT Mkt Purchase	\$5,900,000	64	\$4,130,000
Hopkins Ridge - Hopkins Ridge Phase	W1382	21,024	\$1,280,000	61	Peaker + LT Mkt Purchase	\$1,360,000	65	-\$80,000
Lower Snake River - Dodge Junction -	W2669	500,172	\$39,330,000	79	Peaker + LT Mkt Purchase	\$27,960,000	56	\$11,370,000
Lower Snake River - Phalen Gulch - L	W2670	397,728	\$31,280,000	79	Peaker + LT Mkt Purchase	\$22,230,000	56	\$9,050,000
Klondike III - Klondike Wind Power III	W237	157,680	\$10,270,000	65	Peaker + LT Mkt Purchase	\$9,910,000	63	\$360,000
	0	ı						\$0
	0	ı						\$0
	0	-						\$0
	0	-						\$0
	0	-						\$0
	0	-						\$0
	0	-						\$0
	0	-						\$0
	0	•						\$0
	0	-						\$0
	0	-						\$0
	0	-						\$0
Totals		2,422,140	\$158,350,000			\$130,540,000		\$27,810,000

Cost of	Renewable	Energy	Credits
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Utility Puget Sound Energy

Compliance Year 2020

Facility Name	WREGIS ID	REC Vintage (Year)	Number of RECs	Annual Cost of Renewable Energy Credits	Cost per REC	Documentation of the calculation and inputs for percentage of revenue requirement invested in renewables:
racinty Name		(Teal)	NEOS	Lifetyy Oreuns	NEO .	Note: Formulas were modified to reflect ownership of REC generating facilities, rather than just purchased RECs. Additionally, incremental cost calculations based on requirements outlined in WAC 480-109-210 (2)(a)(i) (A) through (G), which require the calculation of incremental costs for each eligible resource to be performed at the time of acquisition.
Total				\$0		



STATE OF WASHINGTON

DEPARTMENT OF LABOR AND INDUSTRIES

Apprenticeship Section
PO Box 44530; Olympia, Washington 98504-4530
(360) 902-5320; fax (360) 902-4248
website: www.apprenticeship.lni.wa.gov

April 25, 2012

Puget Sound Energy Attn: Brian Doughty, Consulting Project Manager Lower Snake River Wind Project - Phase 1 P.O. Box 97034 Bellevue, WA 98009-9734

RE: Certification of Apprentice Labor Standard on Lower Snake River Wind Project - Phase 1

Dear Brian Doughty:

Thank you for submitting a request for certification of the apprentice labor standard on your project to the Washington State Apprenticeship and Training Council (Council). Department staff completed a review and we received confirmation that you indeed provided sufficient evidence to verify the claim of greater than 15 percent Washington approved apprentice labor hours utilized on the Lower Snake River Wind Project - Phase 1.

The Council voted unanimously on April 19, 2012 to approve the apprentice labor standard certification request for this project. Please accept this letter as confirmation that Puget Sound Energy achieved greater than 15 percent of the total labor hours performed by registered apprentices in programs approved by the Washington State Apprenticeship and Training Council on the Lower Snake River Wind Project - Phase 1. Thank you for supporting the use of registered apprentices in the renewable energy field.

Sincerely,

Lee Newgent, Chair

Washington State Apprenticeship and Training Council

LN/jr

Cc: Council Members

Jose Rodriguez, Assistant Director/Secretary Melinda Nichols, Apprenticeship Program Manager Troy W. Nutter, PSE Manager for Training & Procedures



STATE OF WASHINGTON

DEPARTMENT OF LABOR AND INDUSTRIES

Washington State Apprenticeship and Training Council PO Box 44530; Olympia, Washington 98504-4530 (360) 902-5320; fax (360) 902-4248

website: www.apprenticeship.lni.wa.gov

Scott Williams, Project manager Puget Sound Energy PO Box 90868 Bellevue, WA 98009-0868

RE: Apprentice Utilization on Wild Horse Wind Farm Expansion Project

Dear Mr. Williams:

Thank you for attending our recent Washington State Apprenticeship and Training Council (Council) meeting in Tumwater and the overview of the Wild Horse Wind Farm Expansion project. Department staff completed their review and I received confirmation that you have indeed provided sufficient evidence to verify your claim of greater than 15 percent Washington approved apprentice labor hours utilized during facility construction.

Please accept this letter as confirmation that Puget Sound Energy Company achieved greater than 15 percent of the total labor hours performed by registered apprentices in programs approved by the Council on the Wild Horse Wind Farm Expansion project.

Sincerely,

David D'Hondt, Chair

2040

Washington State Apprenticeship and Training Council

DD/jr

Cc: Council Members

Steve McLain, Council Secretary

Elizabeth Smith, Apprenticeship Program Manager