

May 30, 2014

**VIA ELECTRONIC FILING  
AND OVERNIGHT DELIVERY**

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

Attn: Steven V. King  
Executive Director and Secretary

**RE: Docket UE- \_\_\_\_\_ —June 1, 2014 Renewable Report**

Dear Mr. King:

In accordance with RCW 19.285.070 and WAC 480-109-040, Pacific Power & Light Company (Pacific Power or Company) submits its June 1, 2014, Renewable Report to the Washington Utilities and Transportation Commission in order to report the Company's progress in meeting the targets established in RCW 19.285.040.

Pacific Power requests confidential treatment for Attachment A and the work papers to the Renewable Report under RCW 80.04.095 and in accordance with WAC 480-07-160. The documents labeled as confidential include proprietary cost data, commercially sensitive load and resource projections, confidential market analyses and business projections, and confidential information related to renewable energy credits and/or compliance with RCW 19.285. This confidential business information is of significant commercial value, which could expose the Company to competitive injury if disclosure is unrestricted. Therefore, the Company requests confidential treatment on the basis that the documents contain "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 RCW 80.04.095 in accordance with WAC 480-07-160(2)(c).

Pacific Power submits thirteen (13) redacted copies and thirteen (13) confidential copies clearly designated with "Confidential per WAC 480-07-160" marked on each page of the confidential Attachment A. This information is printed on yellow paper, separately bound, and placed in a sealed envelope. Work papers are submitted on confidential CD.

In compliance with RCW 19.285.070(3) the Company has posted the redacted version of the Renewable Report on its website to make the information available to the Company's customers.

2014 JUN 2 AM 11:13  
STATE OF WASHINGTON  
UTILITY AND TRANSPORTATION COMMISSION  
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Washington Utilities & Transportation Commission

May 30, 2014

Page 2

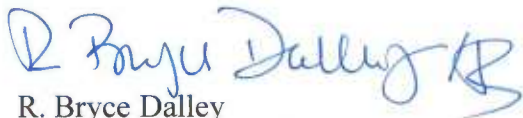
It is respectfully requested that any formal correspondence and staff requests regarding these reports be addressed to:

By e-mail (preferred) [datarequest@pacificorp.com](mailto:datarequest@pacificorp.com)

By regular mail: Data Request Response Center  
PacifiCorp  
825 NE Multnomah Street, Suite 2000  
Portland, OR 97232

Informal questions should be directed to Natasha Siores, Director, Regulatory Affairs & Revenue Requirement, at (503) 813-6583.

Sincerely,

A handwritten signature in blue ink that reads "R. Bryce Dalley". The signature is stylized and includes a large initial "R" and "B".

R. Bryce Dalley  
Vice President, Regulation

Enclosures



# Pacific Power & Light Company

## Washington Renewable Report

**May 30, 2014**

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## **Table of Contents**

Introduction.....	2
Executive Summary .....	3
Annual Load for Previous Two Years and Renewable Energy Target.....	4
Energy Independence Act (I-937) Commerce Renewable Report .....	8
Alternative Compliance .....	12
Resource Cost Compared To Annual Retail Revenue Requirement .....	13
Prior Year Progress .....	15
Current Year Progress.....	16
Supporting Documents for Renewable Report .....	17
Listing of Attachments.....	18
Attachment A (Confidential) – Washington Utilities and Transportation Commission RPS Report Tool .....	18
Attachment B – PacifiCorp Description of Incremental Hydro Methodology and Oregon Department of Energy Correspondence on Updated Certification for Efficiency Upgrades at Eleven Hydropower Generating Units.....	18

## Introduction

Pacific Power & Light Company, a division of PacifiCorp (PacifiCorp or Company) submits this 2014 Renewable Report (Renewable Report) to the Washington Department of Commerce (Commerce) and Washington Utilities and Transportation Commission (WUTC or Commission) in accordance with reporting requirements established as part of the Energy Independence Act (EIA). The report is consistent with RCW 19.285.070 which states, in relevant part:

- (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.*
- (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.*

This report is consistent with the collaborative workshop documents addressing annual reporting requirements, in Docket UE-110523, as well as Order 01 in Docket UE-120813, PacifiCorp's 2012 Renewable Energy Target Progress Report.

As directed in Docket UE-110523 memorandum dated May 4, 2012, two separate filings will be made, one for "Conservation" and a second for "Renewables". This report addresses the renewable targets and progress; the conservation report will be filed under separate cover.

This report demonstrates that PacifiCorp has met the 2013 renewable energy target of acquiring three percent of the Company's Washington retail load with a combination of eligible renewable resources and renewable energy credits (RECs). This report also demonstrates that the Company is in the position to meet the 2014 renewable energy target with a combination of eligible renewable resources and RECs to supply at least three percent of its average Washington retail load.



## Executive Summary

Under RCW 19.285.040(2)(a), each qualifying utility shall use eligible renewable resources or acquire equivalent RECs, or a combination of both, to meet annual targets. As will be demonstrated herein, the Company has met the targets in accordance with WAC 480-109-020. The Company has met the 2013 renewable energy target with a combination of eligible renewable resources and RECs and the Company is positioned to use eligible renewable resources and RECs to supply at least three percent of its Washington load to satisfy the 2014 renewable energy target. The Company plans to do so with a combination of RECs from company-owned resources, REC purchases, and eligible renewable resources, primarily hydroelectric facilities that were upgraded after March 1999.

A summary of the Company's 2013 and 2014 renewable resource targets and eligible renewable resources and RECs are provided below:

**Table 1**

<b>PacifiCorp Renewable Target, Eligible Resource and RECs</b>		
	<b>2013</b>	<b>2014</b>
Average Retail Sales (MWh)	4,023,881	4,067,293
Percentage Target	3%	3%
<b>Renewable Target</b>	<b>120,716</b>	<b>122,019</b>
<b>Qualifying Resources (MWh) &amp; RECs</b>	<b>120,716</b>	<b>122,019</b>

As such, the Company will not be relying on any of the alternative compliance mechanisms provided in WAC 480-109-030 for meeting either the 2013 or 2014 renewable energy targets.

## Annual Load for Previous Two Years and Renewable Energy Target

Under RCW 19.285.040(2)(c) and WAC 480-109-020(3), a utility must calculate its annual target based on its average load for the previous two years. Accordingly, using the average of the Washington annual retail loads for the prior two years, Table 2 calculates the annual renewable targets for 2013 and 2014.

**Table 2**

<b>Reporting Year 2013</b>	
Prior Year Retail Sales (2011)	4,005,863 MWh
Prior Year Retail Sales (2012)	4,041,898 MWh
Average Retail Sales	4,023,881 MWh
Percentage Target	3%
Renewable Target	<b>120,716 MWh/RECs</b>
<b>Reporting Year 2014</b>	
Prior Year Retail Sales (2012)	4,041,898 MWh
Prior Year Retail Sales (2013)	4,092,688 MWh
Average Retail Sales	4,067,293 MWh
Percentage Target	3%
Renewable Target	<b>122,019 MWh/RECs</b>

## Renewable Energy Acquired To Meet Renewable Energy Target

The Company has met its 2013 renewable resource target and plans to meet its 2014 renewable resource target with a combination of RECs from company-owned and third-party wind facilities and eligible renewable resources that are hydroelectric facilities with upgrades completed after March 1999.

The Company is submitting the Commission's RPS Report Tool as Confidential Attachment A. The RPS Report Tool details the renewable resource target for 2013 and 2014 and the RECs and renewable resources to meet the 2013 and 2014 targets.

The Company will use RECs from the following Company-owned facilities or power purchase agreements:

**Table 3**

Resource Name	Fuel Source
Goodnoe Hills	Wind
Leaning Juniper	Wind
Marengo I	Wind
Marengo II	Wind
Wolverine Creek	Wind

These five wind facilities are located in the Pacific Northwest. Descriptions of the projects are referenced in the Supporting Documents for Renewable Report section.

Additionally, the Company has identified upgrades to hydroelectric facilities located in the Pacific Northwest that were completed after March 31, 1999, listed in Table 4 below.

**Table 4**

Resource Name	Fuel Source
Prospect 2	Water – Hydro Upgrade 1999
Lemolo 1	Water – Hydro Upgrade 2003
JC Boyle	Water – Hydro Upgrade 2005
Lemolo 2	Water – Hydro Upgrade 2009

The Company performed analyses to determine the incremental energy associated with upgrades to hydroelectric facilities. The methodology is described in Attachment B. This methodology is consistent with the methodology the Company submitted to the Oregon Department of Energy to certify these facilities and calculate the percentage of the incremental energy for the Oregon RPS program. The Company performed an updated analysis of the incremental energy for upgrades hydroelectric facilities to include actual generation data from 2007 through 2012. The Company re-submitted the analysis to the Oregon Department of Energy in December 2013 and the Oregon Department of Energy has approved the updated incremental hydropower efficiency percentages. The revised percentages are effective for generation starting in January 2014. The Company is providing the analyses in Confidential Work Papers – PacifiCorp Hourly Incremental Hydro Analyses.



PacifiCorp has two contracts for REC only transactions executed prior to January 1, 2012. The counterparties are to provide RECs from Washington RPS eligible resources.

The Company also has an executed power purchase contracts for the output from facilities owned by Grant Public Utilities District (PUD) – the Wanapum Dam, where Grant PUD has determined the average amount of incremental hydroelectric generation associated with the Wanapum Future Unit Fish Bypass and the Top Spill for Fish Passage associated with Priest Rapids Dam. The Company is providing the analysis conducted by Grant PUD in Confidential Work Papers – Grant PUD Incremental Hydro Analysis.

The generation and RECs are allocated to Washington based on the system generation inter-jurisdictional allocation factor except for any RECs that are situs assigned to Washington. For calendar year 2013, the company is using the actual system generation factor, and for calendar year 2014, the company is using an estimated system generation factor based on an October 2013 forecast. A summary of the 2013 and 2014 REC volumes and the incremental hydroelectric generation allocated to Washington are listed below:

**Table 5**

Type	Fuel Source	WA – Allocated Volume (MWh)	
		2013 Actual	2014 Forecast
RECs	Wind	104,946	129,245
Incremental Hydro Generation	Water	2,212	2,526
Total		107,158	131,771

Washington Senate Bill 5400 was passed in April 2013 that allows renewable resources located in states served by PacifiCorp to qualify as eligible to meet Washington’s Energy Independence Act. The Company is disclosing the renewable resources located in states served by PacifiCorp and are situated outside the Northwest, that PacifiCorp owns or has contracts with counterparties that own the following renewable resources:

**Table 6**

<b>Resource Name</b>	<b>Location</b>	<b>Type</b>	<b>Fuel Source</b>
Campbell Hill-Three Buttes	Wyoming	PPA	Wind
Chevron Casper Wind Farm	Wyoming	PPA	Wind
Dunlap I	Wyoming	Utility Owned	Wind
Foote Creek I	Wyoming	Utility Owned	Wind
Glenrock Wind	Wyoming	Utility Owned	Wind
Glenrock Wind III	Wyoming	Utility Owned	Wind
High Plains	Wyoming	Utility Owned	Wind
McFadden Ridge	Wyoming	Utility Owned	Wind
Mountain Wind Power	Wyoming	PPA	Wind
Mountain Wind Power II	Wyoming	PPA	Wind
Rock River I	Wyoming	PPA	Wind
Rolling Hills Wind	Wyoming	Utility Owned	Wind
Seven Mile Hill Wind I	Wyoming	Utility Owned	Wind
Seven Mile Hill Wind II	Wyoming	Utility Owned	Wind
Top of the World	Wyoming	PPA	Wind
Pioneer	Utah	Utility Owned	Water – Hydro Upgrade 1999
Big Fork	Montana	Utility Owned	Water – Hydro Upgrade 2001
Oneida	Idaho	Utility Owned	Water – Hydro Upgrade 2004
Cutler	Utah	Utility Owned	Water – Hydro Upgrade 2007

In the event of any shortfall in renewable energy generation in the 2014 or future years, PacifiCorp may utilize RECs or renewable generation from resources identified in Table 6. The Company has included the power purchase agreements for the renewable resources associated with the data in Table 5 in Confidential Work Papers - REC Only Contracts and Power Purchase Agreements.

In the following pages the Company has included, PacifiCorp's report submitted to Commerce that provides the summary of the forecasted number of megawatt-hours and renewable energy credits to meet the 2014 compliance target.

# Energy Independence Act (I-937) Commerce Renewable Report

## Energy Independence Act (EIA) Renewable Energy Report 2014

Utility Pacific Power & Light Company  
 Report Date 5/30/2014  
 Utility Contact Name/Dept Natasha Siores  
 Phone (503) 813-6583  
 Email natasha.siores@pacificorp.com

2014 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)]

Loads and Resources	
2012 Annual Load (MWh)	4,041,898
2013 Annual Load (MWh)	4,092,688
Average of 2012 & 2013 Annual Loads (MWh)	4,067,293
2014 Renewable Target (% of load)	3%
2014 Eligible Renewable Energy Target (MWh)	122,019
Eligible Renewables Acquisitions / Investments (MWh)	122,019

Expenditures on Renewable Resources and RECs - 2014	
Amount invested in incremental cost of eligible renewable resources and the cost of RECs	\$2,083,924
Total annual retail revenue requirement - 2014	\$321,059,953
Investment in renewables and RECs as a percent of retail revenue requirement	0.6%

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	Water	Wind	Solar Energy	Geothermal Energy	Landfill Gas	Wave, Ocean, Tidal	Gas from Sewage	Biodiesel	Biomass Energy	Apprentice Labor	Distributed Generation
	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh equiv.	MWh equiv.
Eligible Renewable Resources (MWh)	2,526	-	-	-	-	-	-	-	-	-	-
Renewable Energy Credits (MWh)	-	119,493	-	-	-	-	-	-	-	-	-
Total Renewables (MWh)	2,526	119,493	-	-	-	-	-	-	-	-	-

### 2014 Reporting Year:

This renewable energy report summarizes the eligible renewables resources and renewable energy credits (RECs) that the utility has acquired by January 1, 2014 for the purpose of meeting its Energy Independence Act (EIA) renewables target for 2014. The actual resources and RECs used to comply with the 2014 EIA target may vary from those reported here. Utilities will report in June of 2016 on the actual results for 2014.

### 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 2014 is 3% 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 2014 target year. Utilities that elect to use a compliance method based on renewable investments must provide additional information demonstrating compliance with that method.

*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.*









## Energy Independence Act (I-937) Commerce Renewable Report – Continued

Utility Pacific Power & Light Company

Target Year 2014

**Documentation of the calculation and inputs for percentage of revenue requirement invested in renewables:**

2014 revenue requirement is from Docket UE-130043. For description of incremental cost for resources, please refer to the renewable report for Pacific Power & Light Company, a division of PacifiCorp filed with the Washington Utilities and Transportation Commission on May, 30, 2014.

**Other notes and explanations:**

2014 data is an estimate and subject to change.

### **Alternative Compliance**

Under WAC 480-109-040(c), the utility must state in its report if it is relying upon one of the alternative compliance mechanisms provided in WAC 480-109-030 instead of meeting its renewable resource target. The Company does not anticipate that it will invest at least four percent of its total annual retail revenue requirement on the incremental costs of eligible renewable resources, renewable energy credits, or a combination of both.

Further, the Company does not plan to rely on any other alternative compliance mechanisms to meet its renewable resource targets for 2013 or 2014.

## **Resource Cost Compared To Annual Retail Revenue Requirement**

Under RCW 19.285.070(1), a utility must report 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. Similarly, under WAC 480-109-040(1)(b), a utility must report the incremental cost of eligible renewable resources and renewable energy credits, and the ratio of this investment relative to the utility's total annual retail revenue requirement. The incremental cost of an eligible renewable resource is defined in RCW 19.285.050(1)(b) 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, where the resources being compared have the same contract length or facility life. The incremental cost of an eligible renewable resource is also defined in WAC 480-109-030(1) as the difference between the levelized delivered system cost of the eligible renewable resource and the levelized delivered cost of an equivalent amount of reasonably available nonrenewable resource.

On October 2, 2013, the Commission filed with the Office of the Code Reviser a Preproposal Statement of Inquiry (CR-101) to examine whether revised regulations are needed to govern the Commission's implementation EIA. One of the items under review is incremental cost calculation. Since this docket is ongoing, the company has performed the incremental cost calculations in the same manner as the Company's prior compliance reports.

### REC Costs for Wind Resources

The cost of the RECs from renewable wind resources is the nominal levelized cost of the renewable resource or contractual price for energy delivered from the renewable resource compared to an equivalent amount of a substitute resource, in this case, the market purchases (Mid-Columbia) shaped to the output of the renewable resource.

### REC Costs for RECs Only Purchases

The cost of the RECs from REC only purchases are based on the contractual price set-forth in the applicable bilateral agreements between the Company and the counterparty.

### Incremental Costs for Renewable Energy from Incremental Hydro Upgrades

The incremental cost of the eligible incremental renewable energy from owned hydro and purchase power agreements was deemed to be zero.

The majority of the equipment replacements associated with the Company-owned hydroelectric facilities was made in conjunction with facility overhauls; the incremental cost associated with the equipment replacements is zero on the economic basis that the marginal cost of gaining output was less than the cost of an equivalent alternative. The upgrades to the hydroelectric facilities were economic decisions, as the upgrades were

made to increase efficiency and to prevent forced outages from old and less reliable equipment. As such, the Company would have made the upgrades regardless of the RPS requirement.

The cost associated with incremental renewable energy from the Wanapum facility is based on the average estimated energy cost for the compliance years. The equivalent volume is compared to the monthly heavy load hour and light load hour market price (Mid-Columbia) shaped to the output of the incremental generation for the target compliance year to determine the incremental cost. Because the nominal levelized cost associated with the incremental energy is less than the levelized cost of the substitute resource, in this case market, the incremental cost is zero.

Confidential Work Papers - PacifiCorp Resource Cost Analysis provides the key assumptions and analysis that the Company used to forecast the estimated resource costs associated with the renewable resources and RECs for the target years 2012 and 2013.

#### Revenue Requirement

The revenue requirement amounts are from recent general rate cases. The 2013 revenue requirement is \$307,695,000 from Docket UE-111190 and the 2014 revenue requirement is \$321,059,953 from Docket UE-130043.

#### Resource Costs Compared to Revenue Requirement

Table 7 shows the expected Washington allocated resource costs (incremental cost of eligible renewable resources and the cost of renewable energy credits) compared to the annual revenue requirement for 2013 and 2014.

**Table 7**

<b>Calendar Year</b>	<b>Washington Allocated Resource Costs</b>	<b>Washington Annual Revenue Requirement</b>	<b>% of Washington Expected Allocated Resource Costs to Annual Revenue Requirement</b>
2013	\$ 2,017,077	\$307,695,000	0.66%
2014	\$ 2,103,380	\$321,059,953	0.66%

Based on this analysis, the Company will not exceed the four percent threshold.

## **Prior Year Progress**

As evidenced in this report, the Company has met its Washington 2013 renewable compliance target with a combination of RECs from wind resources, unbundled REC purchases and renewable energy from hydroelectric facilities with upgrades completed after March 1999. The Company has set aside the WREGIS certificates for the 2013 compliance target and upon Commission approval, the Company will retire these WREGIS certificates. Under RCW 19.285.030(17) no RECs shall be created from generation facilities powered by fresh water; however, the Company has set aside the WREGIS certificates associated with the renewable generation from facilities powered by fresh water so that those WREGIS certificates may not be transferred, sold or otherwise claimed by another third-party. The Company is providing a listing of the WREGIS certificates in Confidential Work Papers – WREGIS Certificates for Washington Compliance for 2013.

The Company will invest less than four percent of its total annual retail Washington revenue requirement on the incremental costs of eligible renewable resources, renewable energy credits, or a combination of both for 2013.

Further, the Company does not rely on any other alternative compliance mechanisms to meet its renewable resource targets for 2013.



## **Current Year Progress**

The Company is positioned to meet its Washington 2014 renewable compliance target with a combination of RECs from wind resources, unbundled REC purchases and renewable energy from hydroelectric facilities with upgrades completed after March 1999. The Company has also identified, to date, the WREGIS certificates that it intends to use toward the 2014 compliance target. The Company is providing a listing of the WREGIS certificates in Confidential Work Papers – WREGIS Certificates for Washington Compliance for 2014.

The Company will invest less than four percent of its total annual retail Washington revenue requirement on the incremental costs of eligible renewable resources, renewable energy credits, or a combination of both for 2014.

Further, the Company does not rely on any other alternative compliance mechanisms to meet its renewable resource targets for 2014.

## Supporting Documents for Renewable Report

Provided below are links to supporting documents in support of the Company's Renewable Report.

### 1. Wind Project Fact Sheets

Goodnoe Hills

[http://www.pacificorp.com/content/dam/pacificorp/doc/Energy\\_Sources/EnergyGeneration\\_FactSheets/PP\\_GFS\\_Goodnoe\\_Hills.pdf](http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/EnergyGeneration_FactSheets/PP_GFS_Goodnoe_Hills.pdf)

Leaning Juniper

[http://www.pacificorp.com/content/dam/pacificorp/doc/Energy\\_Sources/EnergyGeneration\\_FactSheets/PP\\_GFS\\_Leaning\\_Juniper.pdf](http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/EnergyGeneration_FactSheets/PP_GFS_Leaning_Juniper.pdf)

Marengo

[http://www.pacificorp.com/content/dam/pacificorp/doc/Energy\\_Sources/EnergyGeneration\\_FactSheets/PP\\_GFS\\_Marengo.pdf](http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/EnergyGeneration_FactSheets/PP_GFS_Marengo.pdf)

Marengo II

[http://www.pacificorp.com/content/dam/pacificorp/doc/Energy\\_Sources/EnergyGeneration\\_FactSheets/PP\\_GFS\\_Marengo\\_II.pdf](http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/EnergyGeneration_FactSheets/PP_GFS_Marengo_II.pdf)

Wolverine Creek

<http://www.pacificorp.com/es/re/wc.html>

### 2. Collaborative group documents from workshops conducted at the Commission and through a number of multiple issues-specific teleconference meetings, filed in Docket UE-110523.

<http://www.utc.wa.gov/docs/Pages/DocketLookup.aspx?FilingID=110523>

## **Listing of Attachments**

Attachment A (Confidential) – Washington Utilities and Transportation Commission RPS Report Tool

Attachment B – PacifiCorp Description of Incremental Hydro Methodology and Oregon Department of Energy Correspondence on Updated Certification for Efficiency Upgrades at Eleven Hydropower Generating Units

**PacifiCorp  
Annual Report Requirements  
RCW 19.285.070  
Washington Renewable Report  
May 30, 2014**

**Attachment A**

**CONFIDENTIAL  
Washington Utilities & Transportation  
Commission  
RPS Report Tool**

**WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**Pacific Power & Light Company**

**Renewable Report**

**RPS Reporting Tool**

**REDACTED**

**May 30, 2014**



**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
<b>Instructions in the section are for the cells B2:F31. Each row represents a different facility.</b>					
	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
<b>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.</b>					
	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
	16	Adjustment for Events Beyond Control	Number	D62:F62	Enter the annual MWh not produced due to events beyond control as outlined in RCW 19.285.040 (2)(i)

**Reporting Entity:**

**Pacific Power & Light Company**

**Reporting Date:**

**May 30, 2014**

**RCW 19.285 Compliance Need**

	2010	2011	2012	2013	2014
Delivered Load to Retail Customers (MWh)	3,984,631	4,005,863	4,041,898	4,092,688	
WA State RCW 19.285 Requirement		0%	3%	3%	3%
Quantity Required for Compliance			119,857	120,716	122,019

**Eligible Quantity Acquired**

	2010	2011	2012	2013	2014
Qualifying MWh Allocated to WA		104,826	107,711	107,159	
Quantity from Non REC Eligible Generation		-	-	-	-
<b>Total Quantity Available for RCW 19.285 Compliance</b>		<b>104,826</b>	<b>107,711</b>	<b>107,159</b>	

**Sales and Transfers**

	2010	2011	2012	2013	2014
Quantity of RECs Sold		-	-	-	-
Bonus Incentives Transferred		-	-	-	-
Bonus Incentives Not Realized		-	-	-	-
<b>Total Sold / Transferred / Unrealized</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**Adjustments**

	2010	2011	2012	2013	2014
2011 Surplus Applied to 2012		(104,826)	104,826		
2012 Surplus Applied to 2011		-	-		
2012 Surplus Applied to 2013			(92,680)	92,680	
2013 Surplus Applied to 2012			-	-	
2013 Surplus Applied to 2014				(79,122)	79,122
2014 Surplus Applied to 2013					-
2014 Surplus Applied to 2015					-
<b>Net Surplus Adjustments</b>		<b>(104,826)</b>	<b>12,146</b>	<b>13,558</b>	

**Adjustment for Events Beyond Control**

		-	-	-	-
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**RCW 19.285 Compliance Surplus / (Deficit)**

	2010	2011	2012	2013*	2014*
		(0)	(0)	0	0

\* Any surplus shown in 2014 or 2015 may be sold or used for compliance in subsequent years. Compliance deficits shown in 2015 may be filled by REC procurement from subsequent years.

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

**PACIFICORP Notes and Assumptions**

**Retail Sales:**

2010, 2011, 2012 and 2013 actual retail sales, 2014 forecast based on load forecast October 2013.

**Facility Generation:**

2011 -2013 is based on actual generation or REC purchase data. 2014 is the generation forecast as of April 2014. The Company uses one of three patterning methods to model wind resources. First, and if the appropriate data is available, historical monthly/seasonal patterns are developed using hourly data. This is the Company's preferred method. Second, if historical information is unavailable, but hourly data from wind site studies is, on/off peak engineering estimate patterns are developed. Third, if neither of the first two types of data is available, Energy Information Agency (EIA) wind patterning is used.

**REC Sales:**

The company does not plan to sell any excess RECs and will hold any excess RECs and apply to a future year target.

Facility Name:	Facility WREGIS ID:	Facility Type	Extra Apprenticeship Credit Eligibility:	Distributed Generation Bonus Eligibility:	Online Date:
Goodnoe Hills	W536	Wind	Not Eligible	Not Eligible	31-May-08
Leaning Juniper	W200	Wind	Not Eligible	Not Eligible	14-Sep-06
Marengo I	W185	Wind	Not Eligible	Not Eligible	1-Aug-07
Marengo II	W772	Wind	Not Eligible	Not Eligible	28-Jun-08
Bennett Creek Windfarm - REC Only	W542	Wind	Not Eligible	Not Eligible	30-Sep-08
Hot Springs Windfarm - REC Only	W543	Wind	Not Eligible	Not Eligible	30-Sep-08
Tuana Springs - REC Only	W1503	Wind	Not Eligible	Not Eligible	14-May-10
Wanapum (Upgrade)	NA	Water (Incremental Hydro)	Not Eligible	Not Eligible	1-Jul-63
Prospect 2 (Upgrade 1999)	W180	Water (Incremental Hydro)	Not Eligible	Not Eligible	1-Oct-58
Lemolo 1 (Upgrade 2003)	W157	Water (Incremental Hydro)	Not Eligible	Not Eligible	1-Jul-55
JC Boyle (Upgrade 2005)	W140	Water (Incremental Hydro)	Not Eligible	Not Eligible	1-Jan-28
Lemolo 2 (Upgrade 2009)	W158	Water (Incremental Hydro)	Not Eligible	Not Eligible	1-Nov-56
Wolverine Creek	W188	Wind	Not Eligible	Not Eligible	25-Apr-05
Priest Rapids	NA	Water (Incremental Hydro)	Not Eligible	Not Eligible	
Facility 15					
Facility 16					
Facility 17					
Facility 18					
Facility 19					
Facility 20					
Facility 21					
Facility 22					
Facility 23					
Facility 24					
Facility 25					
Facility 26					
Facility 27					
Facility 28					
Facility 29					
Facility 30					

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

Facility Name: Goodnoe Hills

**MWh Allocated to WA Compliance**

Total MWh Produced / Purchased from Goodnoe Hills  
 Percent of MWh Qualifying Under RCW 19.285  
 Percent of Qualifying MWh Allocated to WA  
 Eligible MWh Available for RCW 19.285 Compliance

	2011	2012	2013	2014	2015
Total MWh Produced / Purchased from Goodnoe Hills	239,431	221,156	227,258		
Percent of MWh Qualifying Under RCW 19.285	100%	100%	100%	100%	100%
Percent of Qualifying MWh Allocated to WA	8%	8%	8%		
Eligible MWh Available for RCW 19.285 Compliance	18,896	17,609	17,896		

**Non REC Eligible Generation**

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

	2011	2012	2013	2014	2015
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

	2011	2012	2013	2014	2015
Quantity of RECs Sold					
Bonus Incentives Transferred					
Bonus Incentives Not Realized					
Total Sold / Transferred / Unrealized					

**Adjustments**

2011 Surplus Applied to 2012  
 2012 Surplus Applied to 2011  
 2012 Surplus Applied to 2013  
 2013 Surplus Applied to 2012  
 2013 Surplus Applied to 2014  
 2014 Surplus Applied to 2013  
 2014 Surplus Applied to 2015  
 Net Surplus Adjustments

	2011	2012	2013	2014	2015
2011 Surplus Applied to 2012	18,896	18,896			
2012 Surplus Applied to 2011					
2012 Surplus Applied to 2013		17,609	17,609		
2013 Surplus Applied to 2012					
2013 Surplus Applied to 2014			17,896	17,896	
2014 Surplus Applied to 2013					
2014 Surplus Applied to 2015					
Net Surplus Adjustments	(18,896)	1,287	(287)		

Adjustment for Events Beyond Control

	2011	2012	2013	2014	2015
Adjustment for Events Beyond Control					

**Contribution to RCW 19.285 Compliance**

	2011	2012	2013	2014	2015
Contribution to RCW 19.285 Compliance		18,896	17,609	17,896	

Facility Name: Leaning Juniper

**MWh Allocated to WA Compliance**

Total MWh Produced / Purchased from Leaning Juniper  
 Percent of MWh Qualifying Under RCW 19.285  
 Percent of Qualifying MWh Allocated to WA  
 Eligible MWh Available for RCW 19.285 Compliance

	2011	2012	2013	2014	2015
Total MWh Produced / Purchased from Leaning Juniper	234,789	190,905	206,164		
Percent of MWh Qualifying Under RCW 19.285	100%	100%	100%	100%	100%
Percent of Qualifying MWh Allocated to WA	8%	8%	8%		
Eligible MWh Available for RCW 19.285 Compliance	18,530	15,200	16,235		

**Non REC Eligible Generation**

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

	2011	2012	2013	2014	2015
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

	2011	2012	2013	2014	2015
Quantity of RECs Sold					
Bonus Incentives Transferred					
Bonus Incentives Not Realized					
Total Sold / Transferred / Unrealized					

**Adjustments**

2011 Surplus Applied to 2012  
 2012 Surplus Applied to 2011  
 2012 Surplus Applied to 2013  
 2013 Surplus Applied to 2012  
 2013 Surplus Applied to 2014  
 2014 Surplus Applied to 2013  
 2014 Surplus Applied to 2015  
 Net Surplus Adjustments

	2011	2012	2013	2014	2015
2011 Surplus Applied to 2012	18,530	18,530			
2012 Surplus Applied to 2011	-	-			
2012 Surplus Applied to 2013		15,200	15,200		
2013 Surplus Applied to 2012		-	-		
2013 Surplus Applied to 2014			16,235	16,235	
2014 Surplus Applied to 2013				-	
2014 Surplus Applied to 2015					-
Net Surplus Adjustments	(18,530)	3,330	(1,035)		

Adjustment for Events Beyond Control

	2011	2012	2013	2014	2015
Adjustment for Events Beyond Control					

**Contribution to RCW 19.285 Compliance**

	2011	2012	2013	2014	2015
Contribution to RCW 19.285 Compliance	0	18,530	15,200	21,585	

Facility Name: Marengo I

**MWh Allocated to WA Compliance**

Total MWh Produced / Purchased from Marengo I  
 Percent of MWh Qualifying Under RCW 19.285  
 Percent of Qualifying MWh Allocated to WA  
 Eligible MWh Available for RCW 19.285 Compliance

	2011	2012	2013	2014	2015
Total MWh Produced / Purchased from Marengo I	403,408	358,669	331,240		
Percent of MWh Qualifying Under RCW 19.285	100%	100%	100%	100%	100%
Percent of Qualifying MWh Allocated to WA	8%	8%	8%		
Eligible MWh Available for RCW 19.285 Compliance	31,837	28,557	26,084		

**Non REC Eligible Generation**

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

	2011	2012	2013	2014	2015
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

	2011	2012	2013	2014	2015
Quantity of RECs Sold					
Bonus Incentives Transferred					
Bonus Incentives Not Realized					
Total Sold / Transferred / Unrealized					

**Adjustments**

2011 Surplus Applied to 2012  
 2012 Surplus Applied to 2011  
 2012 Surplus Applied to 2013  
 2013 Surplus Applied to 2012  
 2013 Surplus Applied to 2014  
 2014 Surplus Applied to 2013  
 2014 Surplus Applied to 2015  
 Net Surplus Adjustments

	2011	2012	2013	2014	2015
2011 Surplus Applied to 2012	31,837	31,837			
2012 Surplus Applied to 2011	-	-			
2012 Surplus Applied to 2013		28,557	28,557		
2013 Surplus Applied to 2012		-	-		
2013 Surplus Applied to 2014			26,084	26,084	
2014 Surplus Applied to 2013				-	
2014 Surplus Applied to 2015					-
Net Surplus Adjustments	(31,837)	3,280	2,473		

Adjustment for Events Beyond Control

	2011	2012	2013	2014	2015
Adjustment for Events Beyond Control					

**Contribution to RCW 19.285 Compliance**

	2011	2012	2013	2014	2015
Contribution to RCW 19.285 Compliance	0	31,837	28,557	26,084	



Facility Name: Marengo II

**MWh Allocated to WA Compliance**

Total MWh Produced / Purchased from Marengo II  
 Percent of MWh Qualifying Under RCW 19.285  
 Percent of Qualifying MWh Allocated to WA  
 Eligible MWh Available for RCW 19.285 Compliance

	2011	2012	2013	2014	2015
Total MWh Produced / Purchased from Marengo II	194,378	177,552	154,612		
Percent of MWh Qualifying Under RCW 19.285	100%	100%	100%	100%	100%
Percent of Qualifying MWh Allocated to WA	8%	8%	8%		
Eligible MWh Available for RCW 19.285 Compliance	15,341	14,137	12,175		

**Non REC Eligible Generation**

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

	2011	2012	2013	2014	2015
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

	2011	2012	2013	2014	2015
Quantity of RECs Sold					
Bonus Incentives Transferred					
Bonus Incentives Not Realized					
Total Sold / Transferred / Unrealized					

**Adjustments**

2011 Surplus Applied to 2012  
 2012 Surplus Applied to 2011  
 2012 Surplus Applied to 2013  
 2013 Surplus Applied to 2012  
 2013 Surplus Applied to 2014  
 2014 Surplus Applied to 2013  
 2014 Surplus Applied to 2015  
 Net Surplus Adjustments

	2011	2012	2013	2014	2015
2011 Surplus Applied to 2012	15,341	15,341			
2012 Surplus Applied to 2011	-	-			
2012 Surplus Applied to 2013	-	14,137	14,137		
2013 Surplus Applied to 2012		-	-		
2013 Surplus Applied to 2014			12,175	12,175	
2014 Surplus Applied to 2013			-	-	
2014 Surplus Applied to 2015				-	-
Net Surplus Adjustments	(15,341)	1,204	1,961		

Adjustment for Events Beyond Control

	2011	2012	2013	2014	2015
Adjustment for Events Beyond Control					

**Contribution to RCW 19.285 Compliance**

	2011	2012	2013	2014	2015
Contribution to RCW 19.285 Compliance	(0)	15,341	14,137	12,175	

Facility Name: Bennett Creek Windfarm - REC Only

**MWh Allocated to WA Compliance**

Total MWh Produced / Purchased from Bennett Creek Windfarm - 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

	2011	2012	2013	2014	2015
Total MWh Produced / Purchased from Bennett Creek Windfarm - REC Only	12,259				
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	12,259				

**Non REC Eligible Generation**

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

	2011	2012	2013	2014	2015
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

	2011	2012	2013	2014	2015
Quantity of RECs Sold					
Bonus Incentives Transferred					
Bonus Incentives Not Realized					
Total Sold / Transferred / Unrealized					

**Adjustments**

2011 Surplus Applied to 2012  
 2012 Surplus Applied to 2011  
 2012 Surplus Applied to 2013  
 2013 Surplus Applied to 2012  
 2013 Surplus Applied to 2014  
 2014 Surplus Applied to 2013  
 2014 Surplus Applied to 2015  
 Net Surplus Adjustments

	2011	2012	2013	2014	2015
2011 Surplus Applied to 2012	12,259	12,259			
2012 Surplus Applied to 2011	-	-			
2012 Surplus Applied to 2013	-	-			
2013 Surplus Applied to 2012		-	-		
2013 Surplus Applied to 2014					
2014 Surplus Applied to 2013					
2014 Surplus Applied to 2015					
Net Surplus Adjustments	(12,259)	12,259			

Adjustment for Events Beyond Control

	2011	2012	2013	2014	2015
Adjustment for Events Beyond Control					

**Contribution to RCW 19.285 Compliance**

	2011	2012	2013	2014	2015
Contribution to RCW 19.285 Compliance	-	12,259	-	-	-



Facility Name: Hot Springs Windfarm - REC Only

**MWh Allocated to WA Compliance**

Total MWh Produced / Purchased from Hot Springs Windfarm - 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

	2011	2012	2013	2014	2015
Total MWh Produced / Purchased from Hot Springs Windfarm - REC Only	7,963				
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	7,963				

**Non REC Eligible Generation**

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

	2011	2012	2013	2014	2015
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

	2011	2012	2013	2014	2015
Quantity of RECs Sold					
Bonus Incentives Transferred					
Bonus Incentives Not Realized					
Total Sold / Transferred / Unrealized					

**Adjustments**

2011 Surplus Applied to 2012  
 2012 Surplus Applied to 2011  
 2012 Surplus Applied to 2013  
 2013 Surplus Applied to 2012  
 2013 Surplus Applied to 2014  
 2014 Surplus Applied to 2013  
 2014 Surplus Applied to 2015  
 Net Surplus Adjustments

	2011	2012	2013	2014	2015
2011 Surplus Applied to 2012	7,963	7,963			
2012 Surplus Applied to 2011					
2012 Surplus Applied to 2013					
2013 Surplus Applied to 2012					
2013 Surplus Applied to 2014					
2014 Surplus Applied to 2013					
2014 Surplus Applied to 2015					
Net Surplus Adjustments	(7,963)	7,963			

Adjustment for Events Beyond Control

	2011	2012	2013	2014	2015
Adjustment for Events Beyond Control					

**Contribution to RCW 19.285 Compliance**

	2011	2012	2013	2014	2015
Contribution to RCW 19.285 Compliance		7,963			

Facility Name: Tuana Springs - REC Only

**MWh Allocated to WA Compliance**

Total MWh Produced / Purchased from Tuana Springs - 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

	2011	2012	2013	2014	2015
Total MWh Produced / Purchased from Tuana Springs - REC Only		29,430	32,556		
Percent of MWh Qualifying Under RCW 19.285		100%	100%	100%	100%
Percent of Qualifying MWh Allocated to WA		100%	100%		
Eligible MWh Available for RCW 19.285 Compliance		29,430	32,556		

**Non REC Eligible Generation**

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

	2011	2012	2013	2014	2015
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

	2011	2012	2013	2014	2015
Quantity of RECs Sold					
Bonus Incentives Transferred					
Bonus Incentives Not Realized					
Total Sold / Transferred / Unrealized					

**Adjustments**

2011 Surplus Applied to 2012  
 2012 Surplus Applied to 2011  
 2012 Surplus Applied to 2013  
 2013 Surplus Applied to 2012  
 2013 Surplus Applied to 2014  
 2014 Surplus Applied to 2013  
 2014 Surplus Applied to 2015  
 Net Surplus Adjustments

	2011	2012	2013	2014	2015
2011 Surplus Applied to 2012					
2012 Surplus Applied to 2011					
2012 Surplus Applied to 2013		17,177	17,177		
2013 Surplus Applied to 2012					
2013 Surplus Applied to 2014			6,731	6,731	
2014 Surplus Applied to 2013					
2014 Surplus Applied to 2015					
Net Surplus Adjustments		(17,177)	10,446		

Adjustment for Events Beyond Control

	2011	2012	2013	2014	2015
Adjustment for Events Beyond Control					

**Contribution to RCW 19.285 Compliance**

	2011	2012	2013	2014	2015
Contribution to RCW 19.285 Compliance		12,253	43,002	41,752	

Facility Name: Wanapum (Upgrade)

**MWh Allocated to WA Compliance**

Total MWh Produced / Purchased from Wanapum (Upgrade)  
 Percent of MWh Qualifying Under RCW 19.285  
 Percent of Qualifying MWh Allocated to WA  
 Eligible MWh Available for RCW 19.285 Compliance

	2011	2012	2013	2014	2015
Total MWh Produced / Purchased from Wanapum (Upgrade)		8,509	8,015		
Percent of MWh Qualifying Under RCW 19.285		100%	100%	100%	
Percent of Qualifying MWh Allocated to WA		8%	8%		
Eligible MWh Available for RCW 19.285 Compliance		678	631	492	

**Non REC Eligible Generation**

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

	2011	2012	2013	2014	2015
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

	2011	2012	2013	2014	2015
Quantity of RECs Sold					
Bonus Incentives Transferred					
Bonus Incentives Not Realized					
Total Sold / Transferred / Unrealized					

**Adjustments**

2011 Surplus Applied to 2012  
 2012 Surplus Applied to 2011  
 2012 Surplus Applied to 2013  
 2013 Surplus Applied to 2012  
 2013 Surplus Applied to 2014  
 2014 Surplus Applied to 2013  
 2014 Surplus Applied to 2015  
 Net Surplus Adjustments

	2011	2012	2013	2014	2015
2011 Surplus Applied to 2012					
2012 Surplus Applied to 2011					
2012 Surplus Applied to 2013					
2013 Surplus Applied to 2012					
2013 Surplus Applied to 2014					
2014 Surplus Applied to 2013					
2014 Surplus Applied to 2015					
Net Surplus Adjustments					

Adjustment for Events Beyond Control

	2011	2012	2013	2014	2015
Adjustment for Events Beyond Control					

**Contribution to RCW 19.285 Compliance**

	2011	2012	2013	2014	2015
Contribution to RCW 19.285 Compliance		678	631	492	

Facility Name: Prospect 2 (Upgrade 1999)

**MWh Allocated to WA Compliance**

Total MWh Produced / Purchased from Prospect 2 (Upgrade 1999)  
 Percent of MWh Qualifying Under RCW 19.285  
 Percent of Qualifying MWh Allocated to WA  
 Eligible MWh Available for RCW 19.285 Compliance

	2011	2012	2013	2014	2015
Total MWh Produced / Purchased from Prospect 2 (Upgrade 1999)		4,118	3,722		
Percent of MWh Qualifying Under RCW 19.285		100%	100%	100%	
Percent of Qualifying MWh Allocated to WA		8%	8%		
Eligible MWh Available for RCW 19.285 Compliance		328	293	262	

**Non REC Eligible Generation**

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

	2011	2012	2013	2014	2015
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

	2011	2012	2013	2014	2015
Quantity of RECs Sold					
Bonus Incentives Transferred					
Bonus Incentives Not Realized					
Total Sold / Transferred / Unrealized					

**Adjustments**

2011 Surplus Applied to 2012  
 2012 Surplus Applied to 2011  
 2012 Surplus Applied to 2013  
 2013 Surplus Applied to 2012  
 2013 Surplus Applied to 2014  
 2014 Surplus Applied to 2013  
 2014 Surplus Applied to 2015  
 Net Surplus Adjustments

	2011	2012	2013	2014	2015
2011 Surplus Applied to 2012					
2012 Surplus Applied to 2011					
2012 Surplus Applied to 2013					
2013 Surplus Applied to 2012					
2013 Surplus Applied to 2014					
2014 Surplus Applied to 2013					
2014 Surplus Applied to 2015					
Net Surplus Adjustments					

Adjustment for Events Beyond Control

	2011	2012	2013	2014	2015
Adjustment for Events Beyond Control					

**Contribution to RCW 19.285 Compliance**

	2011	2012	2013	2014	2015
Contribution to RCW 19.285 Compliance		328	293	262	

Facility Name: Lemolo 1 (Upgrade 2003)

**MWh Allocated to WA Compliance**

Total MWh Produced / Purchased from Lemolo 1 (Upgrade 2003)  
 Percent of MWh Qualifying Under RCW 19.285  
 Percent of Qualifying MWh Allocated to WA  
 Eligible MWh Available for RCW 19.285 Compliance

	2011	2012	2013	2014	2015
Total MWh Produced / Purchased from Lemolo 1 (Upgrade 2003)		17,021	12,661		
Percent of MWh Qualifying Under RCW 19.285		100%	100%	100%	
Percent of Qualifying MWh Allocated to WA		8%	8%		
Eligible MWh Available for RCW 19.285 Compliance		1,355	997	923	

**Non REC Eligible Generation**

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

	2011	2012	2013	2014	2015
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

	2011	2012	2013	2014	2015
Quantity of RECs Sold					
Bonus Incentives Transferred					
Bonus Incentives Not Realized					
Total Sold / Transferred / Unrealized					

**Adjustments**

2011 Surplus Applied to 2012  
 2012 Surplus Applied to 2011  
 2012 Surplus Applied to 2013  
 2013 Surplus Applied to 2012  
 2013 Surplus Applied to 2014  
 2014 Surplus Applied to 2013  
 2014 Surplus Applied to 2015  
 Net Surplus Adjustments

	2011	2012	2013	2014	2015
2011 Surplus Applied to 2012					
2012 Surplus Applied to 2011					
2012 Surplus Applied to 2013					
2013 Surplus Applied to 2012					
2013 Surplus Applied to 2014					
2014 Surplus Applied to 2013					
2014 Surplus Applied to 2015					
Net Surplus Adjustments					

Adjustment for Events Beyond Control

	2011	2012	2013	2014	2015
Adjustment for Events Beyond Control					

Contribution to RCW 19.285 Compliance

	2011	2012	2013	2014	2015
Contribution to RCW 19.285 Compliance		1,355	997	923	

Facility Name: JC Boyle (Upgrade 2005)

**MWh Allocated to WA Compliance**

Total MWh Produced / Purchased from JC Boyle (Upgrade 2005)  
 Percent of MWh Qualifying Under RCW 19.285  
 Percent of Qualifying MWh Allocated to WA  
 Eligible MWh Available for RCW 19.285 Compliance

	2011	2012	2013	2014	2015
Total MWh Produced / Purchased from JC Boyle (Upgrade 2005)		3,462	2,402		
Percent of MWh Qualifying Under RCW 19.285		100%	100%	100%	
Percent of Qualifying MWh Allocated to WA		8%	8%		
Eligible MWh Available for RCW 19.285 Compliance		276	189	210	

**Non REC Eligible Generation**

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

	2011	2012	2013	2014	2015
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

	2011	2012	2013	2014	2015
Quantity of RECs Sold					
Bonus Incentives Transferred					
Bonus Incentives Not Realized					
Total Sold / Transferred / Unrealized					

**Adjustments**

2011 Surplus Applied to 2012  
 2012 Surplus Applied to 2011  
 2012 Surplus Applied to 2013  
 2013 Surplus Applied to 2012  
 2013 Surplus Applied to 2014  
 2014 Surplus Applied to 2013  
 2014 Surplus Applied to 2015  
 Net Surplus Adjustments

	2011	2012	2013	2014	2015
2011 Surplus Applied to 2012					
2012 Surplus Applied to 2011					
2012 Surplus Applied to 2013					
2013 Surplus Applied to 2012					
2013 Surplus Applied to 2014					
2014 Surplus Applied to 2013					
2014 Surplus Applied to 2015					
Net Surplus Adjustments					

Adjustment for Events Beyond Control

	2011	2012	2013	2014	2015
Adjustment for Events Beyond Control					

Contribution to RCW 19.285 Compliance

	2011	2012	2013	2014	2015
Contribution to RCW 19.285 Compliance		276	189	210	

Facility Name: Lemolo 2 (Upgrade 2009)

**MWh Allocated to WA Compliance**

Total MWh Produced / Purchased from Lemolo 2 (Upgrade 2009)  
 Percent of MWh Qualifying Under RCW 19.285  
 Percent of Qualifying MWh Allocated to WA  
 Eligible MWh Available for RCW 19.285 Compliance

2011	2012	2013	2014	2015
	1,781	1,290		
	100%	100%	100%	
	8%	8%		
	142	102	85	

**Non REC Eligible Generation**

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

2011	2012	2013	2014	2015

**REC Sales / Transfers**

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

2011	2012	2013	2014	2015

**Adjustments**

2011 Surplus Applied to 2012  
 2012 Surplus Applied to 2011  
 2012 Surplus Applied to 2013  
 2013 Surplus Applied to 2012  
 2013 Surplus Applied to 2014  
 2014 Surplus Applied to 2013  
 2014 Surplus Applied to 2015  
 Net Surplus Adjustments

2011	2012	2013	2014	2015

Adjustment for Events Beyond Control

2011	2012	2013	2014	2015

**Contribution to RCW 19.285 Compliance**

2011	2012	2013	2014	2015
	142	102	85	

Facility Name: Wolverine Creek

**MWh Allocated to WA Compliance**

Total MWh Produced / Purchased from Wolverine Creek  
 Percent of MWh Qualifying Under RCW 19.285  
 Percent of Qualifying MWh Allocated to WA  
 Eligible MWh Available for RCW 19.285 Compliance

2011	2012	2013	2014	2015
		100%	100%	100%
		0%		

**Non REC Eligible Generation**

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

2011	2012	2013	2014	2015

**REC Sales / Transfers**

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

2011	2012	2013	2014	2015

**Adjustments**

2011 Surplus Applied to 2012  
 2012 Surplus Applied to 2011  
 2012 Surplus Applied to 2013  
 2013 Surplus Applied to 2012  
 2013 Surplus Applied to 2014  
 2014 Surplus Applied to 2013  
 2014 Surplus Applied to 2015  
 Net Surplus Adjustments

2011	2012	2013	2014	2015

Adjustment for Events Beyond Control

2011	2012	2013	2014	2015

**Contribution to RCW 19.285 Compliance**

2011	2012	2013	2014	2015

Facility Name: Priest Rapids (Upgrade)

**MWh Allocated to WA Compliance**

Total MWh Produced / Purchased from Priest Rapids (Upgrade)  
 Percent of MWh Qualifying Under RCW 19.285  
 Percent of Qualifying MWh Allocated to WA  
 Eligible MWh Available for RCW 19.285 Compliance

2011	2012	2013	2014	2015
			100%	
			554	

**Non REC Eligible Generation**

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

2011	2012	2013	2014	2015

**REC Sales / Transfers**

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

2011	2012	2013	2014	2015

**Adjustments**

2011 Surplus Applied to 2012  
 2012 Surplus Applied to 2011  
 2012 Surplus Applied to 2013  
 2013 Surplus Applied to 2012  
 2013 Surplus Applied to 2014  
 2014 Surplus Applied to 2013  
 Net Surplus Adjustments  
 Net Surplus Adjustments

2011	2012	2013	2014	2015

Adjustment for Events Beyond Control

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**Contribution to RCW 19.285 Compliance**

			554	
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### Compliance Contribution by Generation Type

	2011	2012	2013	2014
Wind	(0)	117,079	118,505	
Solar	-	-	-	-
Water (Incremental Hydro)	-	2,778	2,212	
Biomass	-	-	-	-
Geothermal	-	-	-	-
Landfill Gas	-	-	-	-
Sewage Treatment Gas	-	-	-	-
Wave, Ocean, Tidal	-	-	-	-
Biodiesel Fuel	-	-	-	-



**PacifiCorp  
Annual Report Requirements  
RCW 19.285.070  
Washington Renewable Report  
May 30, 2014**

**Attachment B**

**Description of Methodology for  
Calculating Incremental Hydro for  
Company Owned Hydro Electric Projects  
and Updated Incremental Hydro  
Percentages**



## **Attachment B**

### Description of Hydroelectric Efficiency Analysis

The incremental hydro generation resulting from efficiency gains from hydropower upgrades were calculated using the same method that PacifiCorp submitted to the Oregon Department of Energy for certification of PacifiCorp's facilities as eligible for the Oregon Renewable Portfolio Standard program.

Historical hourly generation data for the period 2007 through 2012 was collected for each unit that was upgraded. Each hour of generation was modified to create two additional hourly profiles representing the efficiency of the unit before and after the upgrade. The hourly pre- and post- efficiency values were based on curves developed from the unit index tests or manufacturer-provided theoretical curves. Efficiency gain for each hour was calculated by taking the difference between the new and old efficiency value and dividing it by the old efficiency value. This gain was then multiplied by the post upgrade generation value to produce an incremental megawatt-hour gain. The initial calculated incremental gain was subtracted from the pre/post upgraded generation profiles to exclude the generation associated with the upgrade.

Generation improvements were calculated for every instance when efficiency improvements were positive including those periods when the unit was ramping up to maximum efficiency. In some cases, portions of the post efficiency upgrade curve are less than the pre upgrade curve. In instances that the efficiency gain was negative, generation was not included in the calculation. Further, since in some cases the post upgrade curve extended beyond the pre upgrade curve (i.e. the new turbine had a higher generation capacity) generation improvements were capped at the point when flows on the pre and post upgrade curve were equal.



# Oregon

John A. Kitzhaber, MD, Governor

## Department of Energy

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April 4, 2014

Teri Ikeda  
PacifiCorp  
825 NE Multnomah St.  
Portland, OR 97232



**RE: Updated Certification for Efficiency Upgrades at Eleven Hydropower Generating Units**

Dear Ms. Ikeda:

The Oregon Department of Energy has approved Pacific Power's request for an updated incremental hydropower efficiency percentage for the following eleven generating units. As part of the update, Pacific Power provided the department with hourly generation data for the time period 2007 through 2012.

Generating Unit	WREGIS Number	Approval Number	New Incremental Percentage
Prospect 2	W140	12alt002or	1.68%
Yale 1 & 2	W141	12alt003wa	1.35%
Copco 1	W142	12alt004ca	0.52%
Cutler	W151	12alt005ut	3.10%
Lemolo 1	W157	12alt006or	10.16%
Lemolo 2	W158	12alt007or	0.78%
Oneida	W160	12alt008id	7.87%
Pioneer	W162	12alt009ut	6.74%
Prospect 3	W164	12alt010or	10.71%
Big Fork	W179	12alt011mt	4.22%
JC Boyle	W180	12alt012or	1.33%

The Department notified WREGIS of this change on April 4, 2014 and generation sourced from the following units will continue to be marked as "alternate use" fuel in WREGIS. If any changes are made to these facility that could affect their eligibility for the Oregon RPS, the Department must be notified.

Please contact me with any questions about this letter or approval.

Best,

Julie Peacock  
WREGIS Program Administrator-Oregon  
Oregon Department of Energy  
503.373.2125  
[Julie.peacock@state.or.us](mailto:Julie.peacock@state.or.us)

