

May 30, 2017

Oregon Public Utility Commission ATTN: Filing Center 201 High Street SE, Suite 100 Salem, OR 97301-3612

RE: 2016 Redacted RPS Report for Calpine Energy Solutions, LLC;

Docket No: UM -

To Whom It May Concern:

Please find attached the Redacted Renewable Portfolio Standard Report for Calendar Year 2016 for Calpine Energy Solutions, LLC ("Calpine Solutions"). A version of this report that states the figures Calpine Solutions has redacted here is being sent to the Public Utility Commission via FedEx.

In addition to the requirements of this report, Calpine Solutions is including Attachment C in both the confidential and public version. This attachment shows the location, resource type, vintage year, and percentage of total RECs coming from each state that will be used for Calpine Solutions' Oregon RPS compliance in 2016.

Should you have any questions or concerns, please contact me at 619-684-8200.

Thank you,

Byz G WIX

Bryan C. White

Regulatory Compliance Analyst

Enclosures

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

	UM	
In the Matter of		CALPINE ENERGY
Calpine Energy Solutions, LLC's		SOLUTIONS, LLC'S RPS REPORT
2016 RPS Report		

2016 RPS Report

for

Calpine Energy Solutions, LLC

DATED: May 30, 2017

Bryan White 619-684-8200 Regulatory Compliance Analyst Calpine Energy Solutions, LLC 401 West A Street, Ste 500 San Diego, CA 92101

Calpine Energy Solutions, LLC ("Calpine Solutions") Renewable Portfolio Standard Oregon Compliance Report 2016 UM -

As an introduction and summary of the Compliance Report, answer the following questions:

Why is Calpine Solutions submitting a Compliance Report? What information was used as the basis of the Compliance Report?

Calpine Solutions is submitting a Compliance Report to demonstrate compliance with the Oregon Department of Energy's RPS guidelines for 2016.

Did the company meet its Renewable Portfolio Standard (RPS) target, and if not, describe in detail why not?

Calpine Solutions

Provide the following information in response to the requirements of OAR 860-083-0350:

OAR 860-083-0350(2)(a): The total number of megawatt-hours sold to retail electricity consumers covered by ORS 469A.052 by the electric company or sold in the service areas of each electric company covered by ORS 469A.052 by the electricity service supplier.

Calpine Solutions' load in 2016

OAR 860-083-0350(2)(b): The total number of renewable energy certificates, identified as either unbundled or bundled certificates, acquired in the compliance year and used to meet the renewable portfolio standard.

₹ECs.

OAR 860-083-0350(2)(c): The total number of renewable energy certificates, identified as either unbundled or bundled certificates, acquired on or before March 31 of the year following the compliance year and used to meet the renewable portfolio standard.

RECs.

OAR 860-083-0350(2)(d): The total number and cost of unbundled renewable energy certificates, identified as either banked or non-banked certificates, used to meet the renewable portfolio standard.

7 RECs at a cost of \$

OAR 860-083-0350(2)(e): The total number of banked bundled renewable energy certificates that were used to meet the renewable portfolio standard.

RECs.

OAR 860-083-0350(2)(f): The total number of renewable energy certificates, identified as either bundled or unbundled certificates, issued in the compliance year that were banked to serve Oregon electricity customers.

RECs.

OAR 860-083-0350(2)(g): For electric companies, unless otherwise provided under subsection (2)(k) of this rule, the total number of renewable energy certificates included in the rates of Oregon retail electricity consumers that were sold since the last compliance report, including:

- (A) The names of the associated generating facilities; and
- (B) For each facility, the year or years the renewable energy certificates were issued.

N/A

OAR 860-083-0350(2)(h): Unless otherwise provided under subsection (2)(k) of this rule, for each generating facility associated with the renewable energy certificates included in subsections (2)(b), (c), (f), or (g) of this rule the following information:

- (A) The name of the facility;
- (B) The county and state where the facility is located;
- (C) The type of renewable resource;
- (D) The total nameplate megawatt capacity of the facility;
- (E) For an electric company, the Oregon share of the nameplate megawatt capacity of the facility;
- (F) The year of the first delivery of qualifying electricity or the first year of the contract for the purchase of unbundled renewable energy certificates; and
- (G) The duration of the contract or the amortization period of a facility owned by the electric company or the planned lifetime of a facility owned by the electricity service supplier.

Please see Attachment A.

OAR 860-083-0350(2)(i): The amounted of alternative compliance payments the electric company or electricity service supplier elected to use or was required to use to comply with the applicable renewable portfolio standard.

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OAR 860-083-0350(2)(j): For an electric company, sufficient data, documentation, and other information to demonstrate that any voluntary alternative compliance payments were a reasonable compliance method.

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OAR 860-083-0350(2)(k): Documentation of use of renewable energy certificates from the system under OAR 330-160-0020 established for compliance with the applicable renewable portfolio standard.

Please see Attachment B for a printout of the RECs set to be retired in WREGIS upon the Commission's approval of this filing.

OAR 860-083-0350(2)(1): For each electric company, a detailed explanation of any material deviations from the applicable implementation plan filed under OAR 860-083-0400, as acknowledged by the Commission.

OAR 860-083-0350(2)(m): As specified in OAR 860-083-0100, the total number and cost of bundled renewable energy certificates used for compliance.

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OAR 860-083-0350(2)(n): For each electric company, its projected annual revenue requirement as calculated in OAR 860-083-0200 and its total cost of compliance.

OAR 860-083-0350(2)(o): For each electricity service supplier, its total cost of compliance, its average cost of compliance, and its cost limit as specified in OAR 860-083-0300(2), including all calculations.

Row	<u>Description</u>	<u>Pacificorp</u>	Portland General
Α	Utility Load (retail + ESS)	54,127,172	16,960,746
В	Utility Revenue per MWh	\$90.40	\$98.70
С	Calpine Retail Load in MWh		
D	Calpine Total Revenue		
E	Calpine Average Rev. = Calpine Rev. (D) / Calpine MWh (C)		
F	Calpine Load (C) / Utility Load (A)	4.5	
G	Weighted Average = (Row	F X E) + ([1-F] X B)
Н	Weighted Average		
1	Weighted Average X 4%		
J	Total Cost of RECs = RECs at	! _ <i>I</i>	RECS at
K	ESS Cost of Compliance =	' Calpine	Load in MWh
L	/ Calpine Load in MWh (C)	2	
М	Is Cost of Comp. > Weighted Avg. X 4%?		

OAR 860-083-0350(2)(p): For each electric company, an accounting of the use of the renewable energy certificates and alternative cost payments consistent with OAR 860-083-0300(3) if the cost limit in ORS 469A.l 00(1) is reached for the compliance year.

OAR 860-083-0350(2)(q): For each electricity service supplier, an accounting of the use of the renewable energy certificates and alternative cost payments consistent with OAR 860-083-0300(3) if the cost limit in OAR 860-083-0300(2) is reached for the compliance year.

OAR 860-083-0350(2)(r): As specified in OAR 860-083-0100, the number and total cost of all bundled renewable energy certificates issued.

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OAR 860-083-0350(2)(s): As specified in OAR 860-083-0100, the number and total cost of bundled renewable energy certificates issued that are associated with new qualifying electricity since the last compliance report.

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OAR 860-083-0350(6): Each electric company subject to ORS 469A052 and each electricity service supplier subject to ORS 469A065 must post on its web site the public portion of the four most recent annual compliance reports required under this rule and provide a copy of the most recent such report to any person upon request The public portions of the most recent compliance report must be posted within 30 days of the Commission decision in section (5) of this rule. The posting must include any Commission determinations under section (5) of this rule.

Calpine Solutions will post the public portion of this report on its website within 30 days of the Commission's decision.

OAR 860-083-0350(7): Consistent with Commission orders for disclosure under OAR 860-038-0300, each electric company subject to ORS 469A.052 and each electricity service supplier subject to ORS 469A.065 must provide information about its compliance report to its customers by bill insert or other Commission-approved method. The information must be provided within 90 days of the Commission decision in section (5) of this rule or coordinated with the next available insert required under OAR 860-038-0300. The information must include the URL address for the compliance reports posted under section (6) of this rule.

Calpine Solutions will, on its physical invoices, include a link to the public information in this report to its customers within 90 days of the Commission's decision.

Attachment A

Name of Generator	County of Facility	State of Facility	acility Iype of Resource	I otal Nameplate Capacity	Oregon share of Nameplate Capacity	Year of First Delivery Duration of Contract	Duration of Contract
		OR	Wind				
		λM	Wind				
		ΑM	Wind				
		λM	Wind				
		λM	Wind				
		WA	Wind				
		λM	Wind				
		OR	Wind				
		WA	Wind				
		WA	Wind				
		ΑM	Wind				
		ΜY	Wind				
		WY	Wind				
		ΜY	Wind				
		λM	Wind				
		QI	Wind				

Attachment B

Quantity Oregon										•																											
Certificate Serial Numbers																																					
Vintage Month																																					
Vintage Year																																					
Fuel Type	Wind																																				
Generator Plant-Unit Name																																					
WREGIS GU ID																																					

| Wind |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
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Wind	
Wind	

| Wind |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| : | | | | | | | | | | | | | | | | | | |

Attachment C

Location	<u>Resource</u> <u>Type</u>	<u>Vintage</u> <u>Year</u>	% of 2016 RPS Compliance
ID	Wind	2014	3.5%
ID	Wind	2015	1.3%
OR	Wind	2012	19.5%
OR	Wind	2014	2.7%
OR	Wind	2015	0.4%
WA	Wind	2014	10.4%
WA	Wind	2015	2.8%
WY	Wind	2014	36.9%
WY	Wind	2015	22.5%

Attachment D

Note: All RECs proposed to be retired for 2016 RPS either are marked "Yes" in WREGIS or have vintages subsequent to the month specified in the attached attestation from the ODOE stating their earliest eligible vintage month.