

ORDER NO. 11 441

ENTERED NOV 09 2011

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 1466

In the Matter of

PORTLAND GENERAL ELECTRIC
COMPANY

Renewable Portfolio Standard Standardized
Forms.

ORDER

DISPOSITION: FORMS AND PROCESS ADOPTED

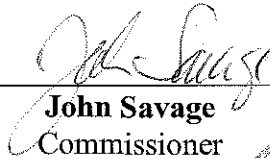
Standardized forms for the Implementation Plan and Compliance Report were developed during workshops in compliance with Order Nos. 10-172 and 10-173. The details and Staff's recommendation are described in the Staff Report, attached as Appendix A, and incorporated by reference.

At its Public Meeting on November 1, 2011, the Commission adopted Staff's recommendation.

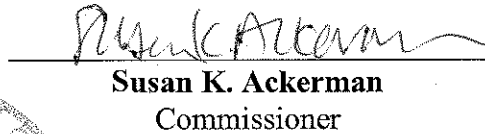
ORDER

IT IS ORDERED that the Renewable Portfolio Standard Implementation Plan and Compliance Report standardized forms, and the parties' recommended process for resolving the remaining issues are adopted.

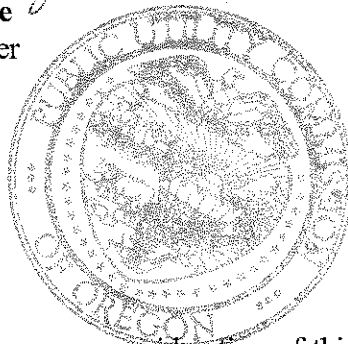
Made, entered, and effective NOV 09 2011.



John Savage
Commissioner



Susan K. Ackerman
Commissioner



A party may request rehearing or reconsideration of this order under ORS 756.561. A request for rehearing or reconsideration must be filed with the Commission within 60 days of the date of service of this order. The request must comply with the requirements in OAR 860-001-0720. A copy of the request must also be served on each party to the proceedings as provided in OAR 860-001-0180(2). A party may appeal this order by filing a petition for review with the Court of Appeals in compliance with ORS 183.480 through 183.484.

ITEM NO. 1

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: November 1, 2011

REGULAR X CONSENT _____ EFFECTIVE DATE Upon
Commission Approval

DATE: October 24, 2011

TO: Public Utility Commission

FROM: Erik Colville ^{MG} ^{EC}
_U

THROUGH: Lee Sparling and Maury Galbraith ^{MG}

SUBJECT: OREGON PUBLIC UTILITY COMMISSION STAFF:
(Docket Nos. UM 1466 and UM 1467) Renewable Portfolio Standard
Standardized Forms.

STAFF RECOMMENDATION:

Staff recommends the Commission adopt the standardized forms presented herein, and concur with the parties' recommended process for resolving the remaining issues.

DISCUSSION:

In Order Nos. 10-172 and 10-173 the Commission adopted Staff's recommendation that parties convene workshops in order to work towards an agreement on standardized forms to be used in future renewable portfolio standards (RPS) filings, and to submit these standardized forms to the Commission no later than October 31, 2011.

Two workshops were held, with the latest being September 19, 2011. Following the September workshop, numerous iterations of proposed standardized forms flowed through email among the parties. As a result of the workshops and subsequent emailing, standardized forms for the Implementation Plan and Compliance Report were developed. These forms are presented in Attachments 1 and 2. An additional document was developed listing Preliminary Key Incremental Cost Assumptions. This form is presented in Attachment 3. The key assumptions document is titled "preliminary" because it is intended to be refined and expanded as parties gain experience, and agreement, with the calculation of incremental cost of the RPS.

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October 24, 2011
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While agreement was not reached on all issues, progress was made. Several issues requiring resolution were identified. The identified issues are: proxy plant definition/identification; methodology for including fuel cost hedging in the incremental cost calculation; definition of and methodology for including shaping and firming costs in the incremental cost calculation; and clarification of how hydro upgrades are included in the incremental cost calculation. Parties agreed to the following process for resolving these, and other, remaining issues. Parties request the Commission to concur.

Recommended process for resolving the remaining issues will be as follows:

- Open dockets for the Implementation Plans as they are filed.
- Within the Implementation plan dockets, allow for comment on the Company's approach to including fuel cost hedging and shaping/firming in its cost calculation.
- Within the Implementation Plan dockets, allow for comment on the proxy plant, hydro, and other issues.
- Use the provision in OAR 860-083-0005(2) to waive the time periods/limits in OAR 860-083-0400(8), if necessary, to allow adequate time to address comments.

Staff highlights the last bullet item. The content of this bullet is intended to allow extension of the implementation plan dockets, if needed, to address issues.

PROPOSED COMMISSION MOTION:

The RPS Implementation Plan and Compliance Report standardized forms and the parties' recommended process for resolving the remaining issues be adopted.

Docket No. UM 1466 and 1467 RPS Standardized Forms

ORDER NO.

99-221

Attachment 1
RPS Implementation Plan
Standardized Form

<Company Name>
Renewable Portfolio Standard
Oregon Implementation Plan
 <Years>

As an introduction and summary of the Implementation Plan, answer the following questions:

Why is <company name> submitting an Implementation Plan? What information was used as the basis of this Implementation Plan?

How does the company intend to meet the renewable portfolio standard (RPS) target?

Provide responses below following the citation of each element of OAR 860-083-0400.

Implementation Plan

OAR 860-083-0400(2)(a)

The annual megawatt-hour target for compliance with the applicable renewable portfolio standard base on the forecast of electricity sales to its Oregon retail electricity customers.

Response:

OAR 860-083-0400(2)(b)

An accounting of the planned method to comply with the application renewable portfolio standard, including number of banked RECs by year of issuance, the number of other bundled and unbundled renewable energy certificates, and alternative compliance payments.

Response:

OAR 860-083-0400(2)(c)

Identification of generating facilities, either owned by the company or under contract, that are expected to provide renewable energy certificates for compliance with renewable portfolio standard. Information on each generating facility must include: (A) the renewable energy source; (B) the year the facility or contract became operational or is expected to become operational; (C) the state where the facility is located or is planned to be located; and (D) expected annual megawatt-hour output for compliance from the facility for the compliance year covered by the implementation plan.

Response:

OAR 860-083-0400(2)(d)

A forecast of the expected incremental costs of new qualifying electricity for facilities or contracts planned for first operation in the compliance year, consistent with the methodology in OAR 860-083-0100.

Response:

OAR 860-083-0400(2)(e)

A forecast of the expected incremental costs of compliance, the costs of using unbundled renewable energy certificates and alternative compliance payments for compliance, compared to annual revenue requirements, consistent with the methodologies in OAR 860-083-0100 and 860-083-0200, absent consideration of the cost limit in OAR 860-083-0100.

Response:

OAR 860-083-0400(2)(f)

A forecast of the number and cost of bundled renewable energy certificates issued, consistent with the methodology in OAR 860-083-0100.

Response:

OAR 860-083-0400(4)

If there are material differences in the planned actions in [OAR 860-083-0400(2)] of this rule from the action plan in the most recently filed or updated integrated resource plan by the electric company, or if conditions have materially changed from the conditions assumed in such filing, the company must provide sufficient documentation to demonstrate how the implementation plan appropriately balances risks and expected costs as required by the integrated resource planning guidelines in 1.b and c. of Commission Order No. 07-047 and subsequent guidelines related to implementation plans set forth by the Commission. Unless provided in the most recently filed or updated integrated resource plan, an implementation plan for an electric company subject to ORS 469A.052 must include the following information: (a) At least two forecasts for subsections (2)(d), (e), and (f) of this rule: one forecast assuming existing government incentives continue beyond their current expiration date and another forecast assuming existing government incentives do not continue beyond their current expiration date; (b) A reasonable range of estimates for the forecasts in subsections (2)(d), (e), and (f) of this rule, consistent with subsection (4)(a) of this rule and the analyses or methodologies in the company's most recently filed or updated integrated resource plan.

Response:

OAR 860-083-0400(5)

Under the following circumstances, the electric company must, for the applicable compliance year, provide sufficient documentation or citations to demonstrate how the implementation plan appropriately balances risks and expected costs as required by the integrated resources planning guidelines in 1.b and c. of Commission Order No. 07-047 and subsequent guideline related to implementation plans set forth by the Commission.

- (a) The sum of costs in subsection (2) (e) of this rule is expected to be four percent or more of the annual revenue required in subsection (2)(e) of this rule for any compliance year covered by the implementation plan,
- (b) The company plans, for reasons other than to meet unanticipated contingencies that arise during a compliance year to use any of the following compliance methods: (A) Unbundled renewable energy certification; (B) Bundled renewable energy certificates issued between January 1 through March 31 of the year following the compliance year; or (C) Alternative compliance payment, or
- (c) The company plans to sell any bundled renewable energy certificates included in the rates of Oregon retail electricity consumers.

Response:

(a):

(b):

(c):

OAR 860-083-0400(6)

An implementation plan must provide a detailed explanation of how the implementation plan complies, or does not comply, with any conditions specified in a Commission acknowledgement order on the previous implementation plan and any relevant condition specified in the most recent acknowledgement order on an integrated resource plan filed or updated by the electric company.

Response:

OAR 860-083-0400(7)

If there are funds in holding accounts under ORS 469A.180 (4) and if the electric company has not filed a proposal for expending such funds for the purpose allowed under ORS 469A. 180(5), the implementation plan must include the electric company's plans for expending or holding such funds. If the plan is to hold such funds, the plan should indicate under what conditions such funds should be expended.

Response:

Attachment 2
RPS Compliance Report
Standardized Form

**<Company Name>
Renewable Portfolio Standard
Oregon Compliance Report
<Years>**

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

Why is <company name> submitting a Compliance Report? What information was used as the basis of this Compliance Report?

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

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.
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Response:

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.

Response:

OAR 860-083-0350(2)(c)

The total number 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.

Response:

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.

Response:

OAR 860-083-0350(2)(e)

The total number of banked bundled renewable energy certificates that were used to meet the renewable portfolio standard.

Response:

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 consumers.

Response:

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.

Response:

Generating Facility Name	Year(s) RECs Issued

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.

Response:

Facility Name	County, State	Resource Type	Total Nameplate (MW)	OR Share Nameplate (MW)	First Year Delivery or Contract	Duration

OAR 860-083-0350(2)(i)

The amount 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.

Response:

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.

Response:

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.

Response:

OAR 860-083-0350(2)(l)

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.

Response:

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.

Response:

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.

Response:

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.

Response:

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.100(1) is reached for the compliance year.

Response:

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.

Response:

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.

Response:

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.

Response:

OAR 860-083-0350(6)

Each electric company subject to ORS 469A.052 and each electricity service supplier subject to ORS 469A.065 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.

Response:

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.

Response:

Attachment 3
Preliminary Key Incremental Cost Assumptions

**<Company Name>
Renewable Portfolio Standard
Oregon Implementation Plan
<Years>**

Preliminary Key Assumptions – Incremental Cost Calculation

This document is intended to be refined and expanded as parties gain experience, and agreement, with calculation of incremental cost. It is not intended to be a document or template that firmly defines, on a going-forward basis, all of the key incremental cost calculation assumptions.

Background

As part of its compliance with ORS 469A, <company name> is required to file an implementation plan by January 1, <year>, that provides, among other things, a forecast of incremental costs of renewable resources from <year> through <year>. The incremental cost calculation compares the nominal levelized cost of a renewable resource against the nominal levelized cost of a proxy plant, a combined cycle combustion turbine (unless otherwise specified by the Commission). The proxy plant used in this analysis has the following characteristics: <describe facility>. The annual incremental cost calculation for <year> through <year> is the difference between the nominal levelized cost of the renewable resource and the nominal levelized cost of the proxy plant.

Methodology

The levelized costs have been developed using the same approach as was used to create the supply-side resource tables in the <year> Integrated Resource Plan (IRP). For renewable resources currently in service, the capital investment values have been updated to the values in the <year> Oregon renewable resource adjustment clause, while operation and maintenance costs have been based on current forecasts. Data for renewable resources acquired through a Power Purchase Agreement (PPA) are from the Company's Request for Proposal (RFP) analysis and reflect the associated contract terms. The cost for wind (or other variable resource) integration is based on the <year> IRP (<\$> per megawatt hour).

Renewable resources under 20 megawatts have been included in the analysis where the total renewable additions for the year exceed a 20 megawatt threshold.

As with the supply-side resource tables, capital carrying costs have been stated on a real levelized basis with the effects of inflation removed. A discount rate of <X> percent has been used in this analysis, which is consistent with the discount rate used in the <year> IRP.

Inflation has been generally modeled as <X> percent per year. For the proxy plant from <year> to <year> a weighted rate composed of forecast capital and O&M escalations have been used. The escalation rate for capital investments on the proxy plant has been

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Preliminary Key Assumptions – Incremental Cost Calculation

Table 2 provides the PPA nominal prices, which are based on bid evaluation in the applicable RFP. The nominal prices do not include the cost of wind/renewable integration, which are added as adjustments to this Implementation Plan.

Table 2

Resource	Contract Term (Years)	Average Capacity (MW)	PPA Contract Price (\$/MWh)

<Company name> receives Production Tax Credits (PTC) associated with owned wind projects, whereas it does not from PPAs. PTC values have been adjusted as prescribed by Federal tax regulation to correspond to the in-service year of each resource.

The “cost of firming, shaping, and integrating qualifying electricity” (ORS 469A.075(2)(b)) has been included. <Company name> defines that cost as follows: <describe>. Integration costs (<\$> per megawatt hour in <year> dollars) are from the <describe the source> and have been adjusted by inflation to correspond to the in-service year of each resource. Shaping and firming costs, if in addition to integration costs, are estimated as follows: <describe>.

Capacity factors for existing renewable resources correspond to the capacity factors indicative of what would be used in setting Oregon rates, subject to then-applicable Commission orders. Generic renewables will follow the assumptions used in the most recent acknowledged or updated IRP.

Bonneville Power Administration (BPA) transmission and, if applicable, integration costs have been included in the incremental cost calculation for <facility name>, which is located in BPA’s control area.

The <facility name> renewable energy project(s) has been excluded from this cost analysis.

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Preliminary Key Assumptions – Incremental Cost Calculation

Proxy Plant

The proxy plant is representative of <describe facility>. The proxy plant estimated heat rate is <X> BTU/kW, availability factor is <X> percent, operation and maintenance costs are <\$> per MW-hr, and initial capital costs are <\$>. Proxy plant capital costs in the incremental cost calculation for a specific renewable resource are fixed once the decision to acquire that renewable resource has been made. The fuel prices have been updated to reflect the <facility name> location.

Scenarios considered in the analysis include:

- Medium CO2 and low proxy plant fuel costs
- Medium CO2 and medium proxy plant fuel costs
- Medium CO2 and high proxy plant fuel costs
- Low CO2 and medium proxy plant fuel costs
- High CO2 and medium proxy plant fuel costs
- No CO2 and medium proxy plant fuel costs

Proxy plant fuel costs are included in compliance with the OAR 860-083-0100(7)(b) requirement: "Proxy plant fuel prices may be based on forecasts of spot prices for fuel at an appropriate market trading hub plus an estimate of the cost of hedging as much fuel price risk as can be reasonably achieved for remainder of the time horizon of such plant." The hedging methodology is <describe>.

Levelized Calculation

The levelized calculation is based on the year that the renewable resource is placed into service. Costs per megawatt hour are escalated over the economic life of the resource. The annual cost per megawatt hour is multiplied by the expected annual generation to develop the dollar cost in each year. Once the annual costs are calculated, the net present value of such costs over the resource life is used to calculate an annual nominal levelized cost.

A similar methodology, with the same in-service date, has been applied to the proxy plant. The calculations have accounted for the different resource lives and contract terms.

For ease and clarity, several simplifying assumptions have been made. For example, generation has been included for the full year in the renewable resource's in-service year. Economic life of resources has been rounded to a full year. In annual megawatt hour calculations, leap year effects have been ignored.

**<Company Name>
Renewable Portfolio Standard
Oregon Implementation Plan
<Years>**

Preliminary Key Assumptions – Incremental Cost Calculation

Allocation Factor

The analysis uses the <year> forecasted system generation (SG) allocation factor from <month and year> to calculate Oregon's share of each levelized incremental cost. For the purposes of this implementation, the SG allocation factor used is <X> percent.

Incremental Cost

The analysis has been completed for each of the six scenarios mentioned in the above discussion of the proxy plant.

The annual calculated nominal levelized cost of the renewable resource has been compared to the annual calculated nominal levelized cost of the proxy plant. The difference between these values is the annual incremental nominal levelized cost. The incremental nominal levelized cost is presented for each year of the compliance period.