



**Portland General Electric Company**  
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July 24, 2015

***Via Electronic Mail***

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Public Utility Commission of Oregon  
Attention: Filing Center  
PO Box 1088  
Salem OR 97308-1088

**Re: UM 1610 -- Investigation into Qualifying Facility Contracting and Pricing - Phase II**

Attention Filing Center:

Enclosed for filing in Docket Number UM 1610 are Portland General Electric's Company's Response Testimony of Robert Macfarlane and John Morton.

If you have any questions or require further information, please call me at (503) 464-8718.  
Please direct all formal correspondence and requests to the following email address:  
[pge.opuc.filings@pgn.com](mailto:pge.opuc.filings@pgn.com).

Sincerely,

A handwritten signature in black ink that reads "Karla Wenzel". The signature is written in a cursive, flowing style.

Karla Wenzel  
Manager, Pricing & Tariffs

KW:kr

*encls.*

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**I. I. Introduction and Summary**

1 **Q. Please state your names and positions with Portland General Electric (“PGE”).**

2 A. My name is Robert Macfarlane. I am a senior analyst in Pricing and Tariffs. My  
3 qualifications appear in our phase 1 direct testimony, Exhibit 100.

4 My name is John Morton. I am a specialist in Structuring and Origination. My  
5 qualifications also appear in our phase 1 direct testimony, Exhibit 100.

6 **Q. What is the purpose of your testimony?**

7 A. Our testimony responds to the testimony of other parties in UM 1610 regarding the nine  
8 issues in the UM 1610 Phase II issues list established by the Administrative Law Judge  
9 on March 26, 2015.

## II. Discussion by Issue

1 *Issue 1: Who owns the Green Tags during the last five years of a 20-year fixed price PPA*  
2 *during which prices paid to the QF are at market?*

3 *Issue 2: Should avoided transmission costs for non-renewable and renewable proxy*  
4 *resources be included in the calculation of avoided cost prices?*

5 *Issue 3: Should the Commission revise the methodology approved in Order No. 14-058 for*  
6 *determining the capacity contribution adder for solar QFs selecting standard renewable*  
7 *avoided cost prices? If so, how?*

8 *Issue 4: Should the capacity contribution calculation for the standard non-renewable*  
9 *avoided cost prices be modified to mirror any change to the solar capacity contribution*  
10 *calculation used to calculate the standard renewable avoided cost price?*

11 *Issue 9: How should third-party transmission costs to move QF output in a load pocket to*  
12 *load be calculated for in the standard contract?*

13 **Q. Has PGE reviewed Phase II opening testimony from other parties on issues 1, 2, 3, 4,**  
14 **and 9?**

15 A. Yes. PGE reviewed testimony from PacifiCorp, Idaho Power, CREA, REC, OneEnergy,  
16 ODOE, and OPUC Staff.

17 **Q. Has PGE's position changed on these issues for response testimony?**

18 A. PGE's position from opening testimony remains the same and therefore not is restated  
19 here.

20 *Issue 5: What is the appropriate forum to resolve litigated issues and assumptions?*

21 **Q. What was PGE's position on Issue 5 in opening testimony?**

1 A. The Commission's rules and processes already allow parties ample opportunity to resolve  
2 issues related to the assumptions used in avoided cost filings.

3 **Q. Please summarize Staff's proposal regarding the appropriate forum to resolve**  
4 **litigated issues and assumptions.**

5 A. Starting on page 25 of Exhibit 500, Staff proposes that:

the Commission clarify that the utility's determinations of resource  
sufficiency/deficiency periods in its IRP are subject to challenge in the review of  
the utility's avoided cost filing in the same manner "as any other aspect of a  
utility's filing." Otherwise, singling out the determination of resource  
sufficiency/deficiency from all the other assumptions that are subject to  
investigation in the review of avoided cost filings could obtain illogical results.

6 Continuing on page 26, Staff proposes that:

the Commission require utilities to satisfy minimum filing requirements "MFRs"  
when they make avoided cost filings...[because MFRs] may significantly  
decrease the need for discovery and hasten implementation of avoided costs.

7 A list of the Staff's proposed MFRs is included in Staff Exhibit 503. It includes IRP  
8 references to inputs from the resource sufficiency/deficiency demarcation, gas price  
9 forecast, sufficiency period prices, standard proxy resource, and renewable proxy  
10 resource.

11 **Q. Do you agree with Staff's approach relating to the appropriate forum to resolve**  
12 **litigated issues and assumptions?**

13 A. Yes. Stakeholders have always had the option to challenge the avoided cost filings of the  
14 utility. PGE no longer files avoided costs as a tariffed advice filing. Therefore, the filed  
15 avoided costs do not become effective until the Commission issues an order declaring  
16 them effective, allowing stakeholders to challenge the utility's avoided cost filing before  
17 then.

18 **Q. Do you agree with Staff's ideas regarding minimum filing requirements (MFRs)?**

1 A. No. PGE already provides the information identified by Staff in its avoided cost filings.

2 There is no need to add a new formal requirement to the process. For both the traditional  
3 and renewable avoided cost, PGE includes work papers that provide a clear indication of  
4 the delineation between resource sufficiency and deficiency consistent with the IRP or  
5 IRP update.

6 **Q. Do you agree with CREA's statement that it is unclear whether QFs can raise issues**  
7 **related to avoided cost calculations in the IRP dockets and actually get the**  
8 **Commission to address that level of detail in an IRP?**

9 A. No. The history of PGE's IRP proceedings indicates that issues related to avoided cost  
10 calculations are often subject to extensive discovery and comment by the parties and are  
11 ultimately addressed by the Commission. For example, in PGE's last two IRPs gas price  
12 forecasts, wind integration costs, the production tax credit and solar integration costs  
13 have been subject to thorough discovery requests and comments by the parties.

14 **Q. CREA also states that it is unclear that the procedural safeguards QFs are entitled**  
15 **to exist in the present IRP process. Do you agree?**

16 A. No. CREA has not identified any instances where the lack of procedural safeguards  
17 prevented it from raising an issue pertaining to avoided cost calculations.

18 **Q. Please summarize the proposals of REC and ODOE regarding the appropriate**  
19 **forum to resolve litigated issues and assumptions.**

20 A. REC proposes an expanded IRP or post-filing process to provide parties an opportunity to  
21 challenge inputs and assumptions made in the IRP that affect avoided cost prices. REC  
22 favors the first option, an expanded IRP review process.

1 ODOE proposes establishing a contested case docket in parallel to a utility's IRP  
2 docket in order to resolve issues and assumptions related to calculating the utility's  
3 avoided costs.

4 **Q. Does PGE support any of the proposals of REC and ODOE?**

5 A. No. The proposals are duplicative and unnecessary. Parties currently have ample  
6 opportunity to participate in the IRP process in order to provide input and challenge  
7 assumptions. The IRP process is the appropriate place to challenge assumptions used in  
8 the IRP. A separate concurrent forum as ODOE proposes is redundant. If the utility  
9 deviates from the assumptions used in the IRP, parties have an opportunity to challenge  
10 the avoided cost filing.

11 **Q. Do you see any potential issues with RECs backup proposal: a post-filing process?**

12 A. Yes, we see issues to the extent that a post-filing process leads to changes to assumptions  
13 included in the IRP. The utilities file avoided cost prices that are consistent with the IRP.  
14 Certain inputs such as forward market energy prices and the natural gas price forecast are  
15 updated to the most current prices at the time of the avoided cost filing. The source of  
16 the input should remain the same as that used in the IRP.

17 **Q. Can you provide an example?**

18 A. Yes, PGE's long-term gas price forecast is provided by a third party. If a contesting party  
19 thinks the long-term gas price forecast is too low and requests that the utility find another  
20 gas price forecast, the new long-term gas price forecast would be inconsistent with the  
21 one used in the IRP. Since the basis of avoided cost prices is the utility's IRP, this  
22 inconsistency would not be appropriate.

1 **Q. What if the utility were to decide to change the third party long-term gas price**  
2 **forecast provider?**

3 A. In this case, the utility would be using an input that is inconsistent with the IRP. Parties  
4 would have the opportunity to challenge the input when the utility files updated avoided  
5 cost prices.

6 **Q. What is your recommendation regarding the appropriate forum to resolve litigated**  
7 **issues and assumptions?**

8 A. We recommend no change to the current process. Parties have the opportunity to  
9 participate in the IRP to challenge assumptions used in the IRP and challenge any  
10 deviations from the IRP that are used in proposed avoided costs in the avoided cost filing.

11 *Issue 6: Whether the market prices used during the Resource Sufficiency Period sufficiently*  
12 *compensate for capacity?*

13 **Q. What was PGE's position on Issue 6 in opening testimony?**

14 A. No additional payment for capacity is warranted during the sufficiency period. PGE is  
15 capacity sufficient through the sufficiency period. A capacity payment during the  
16 sufficiency period results in prices that exceed the avoided cost of the utility.

17 **Q. Does PGE continue to support this proposal?**

18 A. Yes.

19 **Q. Please summarize the proposal from the Joint QF Parties.**

20 A. The Joint QF Parties starting on page 17 of Exhibit 100, propose that:  
21 the Commission adopt an interim capacity pricing mechanism for renewable QFs and  
22 zero-emitting QFs selling power to PacifiCorp under the Schedule 37 until the  
23 uncertainty surrounding implementation of Section 111(d) is resolved. Under this interim



1 approach, the value of QF capacity would be determined by the net present value of the  
2 revenue requirement associated with environmental upgrades that PacifiCorp is planning  
3 for the sufficiency period. For a renewable QF or zero-emitting QF entering a contract  
4 during the interim period, the capacity value would be added to the market energy price  
5 until the pricing in the contract was governed either by the displaceable renewable IRP  
6 resource or displaceable IRP thermal resource, whichever is applicable to that contract.

7 **Q. Does Mr. Higgins propose to include an interim capacity pricing mechanism for**  
8 **renewable and zero-emitting QFs selling power to PGE until the uncertainty**  
9 **surrounding implementation of Section 111(d) is resolved?**

10 A. No, Mr. Higgins only recommends the interim capacity pricing mechanism for  
11 PacifiCorp. However, he proposes a more generic applicability if the sufficiency periods  
12 for other utilities become “greatly extended while the uncertainty surrounding  
13 implementation of 111(d) remained.”

14 **Q. How are uncertain environmental costs treated in avoided costs currently?**

15 A. In PGE’s traditional avoided costs, carbon tax assumptions are not explicitly considered  
16 in the cost of the avoided natural gas plant. In addition, Commission Order No. 14-058  
17 specifies that the utility must update for whether production tax credits are or are not in  
18 the law at the time of the annual avoided cost update.

19 **Q. Why is it inappropriate to include costs for uncertain regulations in the calculation**  
20 **of avoided cost prices?**

21 A. If costs for uncertain regulations were included in the calculation of avoided cost prices,  
22 the avoided cost prices could be much higher or lower than true avoided costs when  
23 regulations become certain. For instance, before Order 14-058, PGE included production

1 tax credits in the calculation of avoided cost prices. If the production tax credits were not  
2 approved, the avoided cost prices would be lower than the costs the utility truly avoids.  
3 Similarly, if PGE were to include compliance costs of future carbon regulation and  
4 regulation is not adopted at the anticipated time, the avoided cost prices would be higher  
5 than the costs the utility truly avoids and thus burden utility customers with superfluous  
6 costs.

7 **Q. Do you agree with the Joint QF Parties proposal to include an interim capacity**  
8 **pricing mechanism for renewable and zero-emitting QFs selling power to PGE until**  
9 **the uncertainty surrounding implementation of Section 111(d) is resolved?**

10 A. No. Once Section 111(d) is resolved, any changes will be reflected in the IRP and may  
11 or may not affect the resource sufficiency/deficiency demarcation, consistent with the  
12 Commission's policy on standard avoided cost pricing.

13 *Issue 7: What is the appropriate methodology for calculating non-standard avoided cost*  
14 *prices? Should the methodology be the same for all three electric utilities operating in*  
15 *Oregon?*

16 **Q. What was PGE's position on Issue 7 in opening testimony?**

17 A. PGE supports the use of the methodology established in Order No. 07-360, adjusting  
18 avoided costs for QF specific characteristics consistent with the seven factors outlined in  
19 18 CFR 292.304(e)(2)<sup>1</sup>. The three utilities should have flexibility in the implementation  
20 of adjustments using the seven FERC adjustment factors.

21 **Q. Does PGE continue to support this approach?**

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<sup>1</sup> <https://www.law.cornell.edu/cfr/text/18/292.304>

1 A. Yes. The methodology, consistent with the seven factors outlined in 18 CFR  
2 292.304(e)(2), ensures that the utility pays QFs prices that truly reflect its avoided costs  
3 and thus does not burden its customers with superfluous costs. Below, we also discuss  
4 our support of computer modeling to calculate avoided cost prices for negotiated  
5 contracts.

6 **Q. Please summarize CREA's position on computer modeling from their opening**  
7 **testimony.**

8 A. Starting on page 17 of CREA's Exhibit 500:

9 CREA opposes the mandatory use of computer models to establish non-standard avoided  
10 cost rates. CREA believes that the developer is inherently at a disadvantage in negotiation  
11 with IOUs that primarily rely on sophisticated computer modeling.

12 **Q. What are the characteristics of a QF seeking non-standard avoided cost prices?**

13 A. Under PGE's Schedule 202, which provides avoided cost price guidelines for non-  
14 standard QFs, QFs are over 10 MW in size.

15 **Q. Why is computer modeling justified to adjust for the non-standard QF's specific**  
16 **characteristics?**

17 A. As Staff notes on page 34 of their Exhibit 500:

18 the complexity of the modeling approach for larger QFs is justified, as it is likely to  
19 provide a more accurate quantification of the impact of a QF based on its specific  
20 characteristics than a generic CCCT calculation with adjustments applied to it. To put it  
21 simply, an estimate (the adjustments) overlaid onto a simplified estimate (the avoided  
22 CCCT resource) will likely be less accurate than a single complex estimate.

23 **Q. Does PGE support the use of computer modeling for larger QFs?**

1 A. Yes, modeling enables a utility to be more precise with its avoided cost prices. Computer  
2 modeling is also a widely accepted practice in other forums. For instance, the Aurora  
3 model designed to model wholesale electricity prices in a competitive market is used in  
4 the IRP process.

5 Initial avoided cost pricing is calculated during the IRP process with IRP inputs.  
6 Computer modeling enables the utility to incorporate more information related to details  
7 on the IRP inputs and results in more accurate prices. Any adjustments to the initial IRP  
8 inputs are readily observable in a standard spreadsheet. This process ensures utility  
9 customers do not pay superfluous costs.

10 *Issue 8: When is there a legally enforceable obligation?*

11 **Q. What was PGE's position on Issue 8 in opening testimony?**

12 A. PGE recommends that the Commission set criteria for establishing a legally enforceable  
13 obligation ("LEO") using the final executable draft contract as the basis for potential  
14 commitment by the QF. The terms of a QF agreement prior to the utility providing a  
15 final draft are not sufficiently known and clear for the QF to make such a commitment.  
16 This is especially true for negotiated contracts. Under Guideline 4 of the Commission's  
17 Guidelines for Negotiation of Power Purchase Agreements for QFs 10 MW or Larger,  
18 adopted in Order No 07-360, the specified energy and term as well as security, default,  
19 damage and termination provisions have to be negotiated. Under PGE's Schedule 202  
20 governing negotiated QF agreements, information necessary to establish these terms and  
21 conditions may be exchanged until a final draft is issued by the utility in Step 7. At that  
22 point, the terms and conditions are known such that a QF may commit.

23 **Q. Has PGE reviewed Phase II opening testimony from other parties on this issue?**

1 A. Yes. PGE reviewed testimony from PacifiCorp, Idaho Power, CREA, REC, Gardner  
2 Capital, and OPUC Staff.

3 **Q. Has PGE's position changed on this issue for response testimony?**

4 A. PGE's position remains largely the same. PGE requests that the Commission set clear  
5 criteria establishing affirmative obligations for a QF to create a LEO. The contents and  
6 information required for a final executable draft contract should be the basis for  
7 determining that an unequivocal commitment by the QF has been made sufficient to  
8 establish a LEO. These required information and terms are readily set forth in PGE's  
9 Schedules 201, 202 and Commission-approved contracts, and are established through  
10 deadlines prescribed in the schedules. Using this approach, QFs would have an objective  
11 standard by which to achieve a LEO, short of execution of a contract. PGE supports  
12 PacifiCorp's and Staff's analogous Phase II opening testimony on this issue.

13 **Q. Does this conclude your testimony?**

14 A. Yes.