

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF THE STATE OF OREGON**

**UM 1610**

**Phase II**

In the Matter of

PUBLIC UTILITY COMMISSION  
OF OREGON

Investigation into Qualifying Facility  
Contracting and Pricing.

**REPLY TESTIMONY OF**

**KEVIN C. HIGGINS**

**ON BEHALF OF**

**RENEWABLE ENERGY COALITION (“REC”),**

**COMMUNITY RENEWABLE ENERGY ASSOCIATION (“CREA”),**

**ONEENERGY and**

**OBSIDIAN RENEWABLES, LLC**

**AUGUST 7, 2015**

**REPLY TESTIMONY OF KEVIN C. HIGGINS**

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**Introduction**

**Q. Please state your name and business address.**

A. Kevin C. Higgins, 215 South State Street, Suite 200, Salt Lake City, Utah, 84111.

**Q. By whom are you employed and in what capacity?**

A. I am a Principal with Energy Strategies, LLC. Energy Strategies is a private consulting firm specializing in economic and policy analysis applicable to energy production, transportation, and consumption.

**Q. Are you the same Kevin C. Higgins who previously filed opening testimony in this docket on behalf of the Renewable Energy Coalition (“REC”), the Community Renewable Energy Association (“CREA”), OneEnergy, and Obsidian Renewables, LLC (“Joint QF Parties”)?**

A. Yes, I am.

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

A. My reply testimony responds to the response testimonies of Staff witness Brittany Andrus, PacifiCorp witness Brian S. Dickman, Idaho Power Company (“IPC”) witness Michael J. Youngblood, Portland General Electric (“PGE”) witnesses Robert Macfarlane and John Morton, and Oregon Department of Energy (“ODOE”) witness Phillip Carver.

1 **Response to Parties' Testimony on PacifiCorp's Assumed Renewal of Small QF**  
2 **Contracts**

3 **Q. Have you reviewed the response testimonies of Ms. Andrus, Mr. Dickman,**  
4 **and Mr. Youngblood regarding your recommendation that PacifiCorp be**  
5 **required to remove its assumption that small QF contracts are extended**  
6 **beyond their expiration dates when determining the value of QF capacity?**

7 A. Yes, I have.

8 **Q. What is Staff's position regarding your recommendation, according to Ms.**  
9 **Andrus?**

10 A. Staff agrees with my recommendation that PacifiCorp stop utilizing a  
11 resource stack that assumes that terminating QFs are renewed for the purpose of  
12 developing avoided cost prices.<sup>1</sup>

13 **Q. What is PacifiCorp's position regarding your recommendation, according to**  
14 **Mr. Dickman?**

15 A. Mr. Dickman argues that if the Commission determines that the  
16 Company's preferred portfolio should be updated to reflect small QF  
17 terminations, then new QF contracts, executed since the preparation of the 2013  
18 IRP, should also be accounted for. According to Mr. Dickman, reflecting changes  
19 since the last finalized IRP would result in more accurate QF capacity valuation.<sup>2</sup>

20 **Q. What is your response to Mr. Dickman's argument?**

21 A. Mr. Dickman's counterargument speaks to the issue of how frequently the  
22 QF pricing analysis is updated, which is an entirely separate matter from the

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<sup>1</sup> Staff/600, Andrus/19.

<sup>2</sup> PAC/ 1100, Dickman/17-18.

1 logical problem associated with PacifiCorp’s modeling assumption that the  
2 expiring contracts of small QF contracts will be extended (while simultaneously  
3 purporting to determine the amount of capacity these same QFs will avoid), as  
4 explained in detail in my Opening Testimony. The contract extension assumption  
5 the Company makes is logically circular whether that assumption is made on the  
6 first day the IRP is released – before any other variables of concern to Mr.  
7 Dickman have changed – or a year or two year later. Thus, the correction of the  
8 circularity in the analysis should not be linked to updating other variables.  
9 Rather, the argument I have presented concerning the circularity of the  
10 Company’s analysis with respect to contract extensions should be addressed on its  
11 own merit.

12 **Q. How does IPC witness Mr. Youngblood respond to your recommendation?**

13 A. Mr. Youngblood cites to REC’s recommendation that a more accurate fix for  
14 existing QFs would be to adopt the same solution as the Idaho Public Utilities  
15 Commission (“IPUC”) has done, paying existing QFs for capacity during the  
16 resource sufficiency period.<sup>3</sup>

17 **Q. Would adoption of the IPUC approach, under which existing QFs are paid  
18 for capacity during the resource sufficiency period, address your concerns?**

19 A. Yes, adopting this approach would ameliorate the impact on existing QFs  
20 of PacifiCorp’s assumed renewal of small QF contracts. However, unless the  
21 IPUC approach is adopted in Oregon, it is necessary to remedy the logical  
22 circularity of PacifiCorp’s renewal assumption.

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<sup>3</sup> Idaho Power/1000, Youngblood/14.

1 **Response to Parties' Testimony on the Uncertainty Surrounding Compliance with**  
2 **Proposed Section 111(d) Rules**

3 **Q. Have you reviewed the response testimonies of Ms. Andrus, Mr. Youngblood,**  
4 **Messrs. Macfarlane and Morton, and Mr. Dickman, regarding the**  
5 **uncertainty surrounding implementation of Section 111(d)?**

6 A. Yes, I have.

7 **Q. Have there been any new developments regarding Section 111(d) that are**  
8 **relevant in your response to these parties' arguments regarding uncertainty?**

9 A. Yes, on August 3, 2015, the EPA finalized the Clean Power Plan under  
10 Section 111(d). While the precise implications of PacifiCorp's compliance with  
11 Section 111(d) are not known to me at this time, I am not aware of any  
12 developments that would change the conclusion in my Opening Testimony that it  
13 is unwise to discourage the development of renewable QFs and zero-emitting QFs  
14 by signaling that their capacity is of little long-term value.

15 **Q. Please explain these parties' positions regarding the uncertainty surrounding**  
16 **Section 111(d) implementation.**

17 A. Ms. Andrus explains that Staff is unable to find authority for my  
18 recommended interim capacity pricing mechanism in the Public Utility  
19 Regulatory Policies Act ("PURPA"), and explains that FERC has found that an  
20 avoided cost rate may not include "compensation for environmental externalities  
21 that are not real costs that would be incurred by the utilities."<sup>4</sup>

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<sup>4</sup> Staff/600, Andrus/19-20.

1            Similarly, Mr. Youngblood argues that since utilities' responses to Section  
2            111(d) are unknown at this time, such impacts do not constitute "real cost  
3            avoidance with any certainty," and are not relevant under PURPA.<sup>5</sup>

4            PGE witnesses Messrs. Macfarlane and Morton argue that it is  
5            inappropriate to include costs for uncertain regulations in the calculation of  
6            avoided cost prices because the avoided cost prices derived could be much higher  
7            or lower than true avoided costs when regulations become certain.<sup>6</sup>

8            Mr. Dickman argues that imputing additional costs into the avoided cost  
9            formula based on unknown and uncertain future changes to the proposed  
10           regulations will overstate avoided costs and violate the ratepayer indifference  
11           standard embodied in PURPA. Further, Mr. Dickman notes that in Oregon, the  
12           Company does not receive RECs during the sufficiency period and future  
13           regulations will be needed to determine how ownership rights for RECs will be  
14           treated under Section 111(d).<sup>7</sup>

15    **Q.    What is your response to Ms. Andrus's argument regarding the objections to**  
16    **setting an avoided cost rate based on environmental externalities?**

17    A.            That objection is not applicable to my proposal, as I am not  
18            recommending an avoided cost rate that is based on environmental externalities,  
19            but rather one which is based on the per unit cost of environmental upgrades.

20    **Q.    Are environmental upgrades that are needed to retain existing generation**  
21    **capacity "real costs" for which PacifiCorp would seek rate recovery?**

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<sup>5</sup> Idaho Power/1000, Youngblood/14.

<sup>6</sup> PGE/700, Macfarlane – Morton/7-8.

<sup>7</sup> PAC/1100, Dickman/16.

1 A. Yes. PacifiCorp's prudent investments in environmental upgrades have  
2 been and will likely continue to be included in rate base to enable the Company to  
3 earn a return on and of these investments.

4 **Q. What is your response to the argument that it is inappropriate to include**  
5 **capacity costs in the avoided cost calculation to recognize the unknown and**  
6 **uncertain future changes to the proposed regulations?**

7 A. There appears to be no disagreement between me and the parties opposing  
8 my interim pricing proposal that the implementation of Section 111(d) is creating  
9 significant uncertainty with respect to utility resource plans. The difference is in  
10 our views of how the Commission should respond to that uncertainty in setting  
11 avoided cost prices. The implication of the opposing argument is that the  
12 uncertainty surrounding the implementation of Section 111(d) justifies a  
13 continued capacity valuation of near zero for the foreseeable future for renewable  
14 QFs and zero-emitting QFs that are seeking to sell power to PacifiCorp. I believe  
15 it is more reasonable to come to a different conclusion. I question whether it is  
16 wise to be signaling to renewable QFs and zero-emitting QFs that their capacity is  
17 of little long-term value, and consequently discouraging their development, at this  
18 critical time of changing environmental regulations. This question is particularly  
19 important when it is understood that development of renewable QFs and zero-  
20 emitting QFs is encouraged by the Section 111(d) rules as a means of gaining  
21 compliance.

22 In this circumstance, I believe the interim pricing proposal I have  
23 recommended strikes a reasonable balance of interests because it does not credit

1 QFs with full resource cost displacement but only the average unit cost of  
2 projected environmental upgrades, from which we can ascertain the cost of  
3 PacifiCorp's planned capacity retentions.

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5 **Response to Mr. Dickman Regarding an Interim Capacity Pricing Mechanism**

6 **Based on Sufficiency Period Environmental Upgrades**

7 **Q. Have you reviewed Mr. Dickman's testimony regarding your**  
8 **recommendation that PacifiCorp adopt an interim capacity pricing**  
9 **mechanism based on the cost of sufficiency period environmental upgrades?**

10 A. Yes, I have. Mr. Dickman argues that my testimony conflates issues  
11 surrounding compliance with Section 111(d) rules and certain capital investments  
12 at existing coal facilities during the resource sufficiency period to comply with the  
13 EPA's Regional Haze Rule under the Clean Air Act – a different compliance  
14 issue.<sup>8</sup>

15 Mr. Dickman further argues that my recommendation is flawed for the  
16 following reasons: 1. The referenced environmental upgrades include capital  
17 investment that cannot be avoided by the addition of an Oregon QF; 2. Several of  
18 the referenced environmental upgrades that were included in the IRP for planning  
19 are not currently required, and alternative compliance scenarios may eliminate the  
20 need for the investment irrespective of any new QF generation and; 3. There is no  
21 accounting for the benefits of the existing generation resources that will be lost if  
22 the environmental upgrades are eliminated.<sup>9</sup>

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<sup>8</sup> PAC/1100, Dickman/12.

<sup>9</sup> PAC/1100, Dickman/12-13.



1 **Q. What is your response to Mr. Dickman's arguments?**

2 A. I recognize that the referenced environmental upgrades are being carried  
3 out (or planned) separately from 111(d) compliance. As I stated above and in my  
4 Opening Testimony, the uncertainty surrounding 111(d) should give the  
5 Commission pause about sending a near-zero price signal for capacity for  
6 renewable QFs and zero-emitting QFs. The subject environmental upgrades,  
7 while planned for a distinct purpose, provide a very useful indicator of the cost of  
8 capacity retention, information which can be used for sending a reasonable price  
9 signal to renewable QFs and zero-emitting QFs on an interim basis, during the  
10 period of significant uncertainty surrounding 111(d) implementation.

11 Regarding the first two flaws asserted by Mr. Dickman, the Company  
12 appears to be arguing that the subject environmental upgrades cannot be used  
13 properly as the basis for avoided cost either because the projects are underway  
14 and therefore cannot be avoided or else are not yet underway and may not ever be  
15 built. Taken together, the arguments represent a "Catch 22" scenario for using  
16 environmental upgrades to value capacity: only "real" projects should be used for  
17 avoided cost pricing, but once a project is "real" it can no longer be avoided.

18 I attempted to avoid this problem by proposing that the Company's full  
19 portfolio of planned environmental upgrades should be used for determining the  
20 per-kW value of retained capacity, in order to derive a reasonably representative  
21 value. Nevertheless, if the Commission determined to eliminate from the  
22 calculation projects that are currently under construction, such a change could be  
23 readily accommodated in my approach.

1           Regarding the apparently fluid status of environmental upgrades not yet  
2 consummated, it appears that these projects are indeed potentially avoidable by  
3 some combination of factors, and I believe it is plausible that renewable and zero-  
4 emitting QFs could contribute to such avoidance. Again, I believe this  
5 circumstance supports using a portfolio of environmental upgrades to value  
6 retained capacity.

7 **Q. What is your response to Mr. Dickman's third criticism, that your proposal**  
8 **fails to account for the benefits lost if the environmental upgrades are**  
9 **eliminated?**

10 A.           I believe Mr. Dickman's argument is misplaced. My proposal does not  
11 attempt to value QF capacity using the full replacement cost of thermal capacity,  
12 but rather the much lower cost of capacity *retention*, which is demonstrated in the  
13 modest capacity price in the sample calculation I presented in my Opening  
14 Testimony. Further, the capacity calculation would be subject to shaping into on-  
15 peak energy prices per the Schedule 37 method, which would reflect the  
16 difference in capacity contributions between intermittent QF resources and a  
17 baseload thermal resource.

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19 **Response to Mr. Carver Regarding Procedural Matters**

20 **Q. Have you reviewed the response testimony of ODOE witness Mr. Carver**  
21 **regarding procedural matters as they relate to your testimony**  
22 **recommendations?**

23 A.           Yes, I have.

1 **Q. What is Mr. Carver's response to your testimony?**

2 A. Mr. Carver believes that the reasoning in my testimony is sound, while not  
3 endorsing the particular values used in my calculations. Mr. Carver believes that  
4 there should be a parallel contested case docket to dispute the inputs used in the  
5 avoided cost filing associated with the next IRP. Mr. Carver argues that estimates  
6 of capacity value during the sufficiency period covered by a specific IRP should  
7 not be resolved in this docket because this docket is a one-time event to settle  
8 questions of policy.<sup>10</sup>

9 **Q. Do you have a response to Mr. Carver's position?**

10 A. I appreciate Mr. Carver's recognition of the concept I am proposing. With  
11 respect to the appropriate venue for determining specific capacity values, I note  
12 that the capacity values I calculated for this proceeding are illustrative and are  
13 intended to demonstrate the interim pricing approach I am proposing. The actual  
14 capacity prices derived using that method would be performed in a separate  
15 proceeding.

16 **Q. Does this conclude your Reply Testimony?**

17 A. Yes, it does.

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<sup>10</sup> ODOE/900, Carver/8-9.