



WENDY MCINDOO  
Direct (503) 595-3922  
wendy@mrg-law.com

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**Re: UM 1802 – Investigation to Examine PacifiCorp d/b/a Pacific Power's Non-Standard Avoided Cost Pricing..**

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Attached for filing in the above-captioned docket is an electronic copy of PacifiCorp's Opening Brief.

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Very truly yours,

Wendy McIndoo  
Office Manager

Attachment

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

In the Matter of

PUBLIC UTILITY COMMISSION OF  
OREGON

Investigation to Examine PacifiCorp d/b/a  
Pacific Power's Non-Standard Avoided Cost  
Pricing.

**UM 1802**

**PACIFICORP'S OPENING BRIEF**

**September 18, 2017**

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1 **I. INTRODUCTION**

2 PacifiCorp d/b/a Pacific Power respectfully submits this opening brief to the Public  
3 Utility Commission of Oregon (Commission), in support of its proposed methodology for  
4 determining non-standard avoided-cost pricing for qualifying facilities (QFs) that allow  
5 PacifiCorp to avoid compliance costs associated with Oregon’s renewable portfolio standards  
6 (RPS).

7 The Commission opened this docket to determine whether PacifiCorp’s non-standard  
8 avoided-cost pricing should include a renewable avoided-cost price option, and, if so, how  
9 that price option should be calculated.<sup>1</sup> PacifiCorp proposes to provide a non-standard  
10 renewable avoided-cost price stream when: (1) the preferred portfolio in the Company’s most  
11 recent integrated resource plan (IRP) identifies the need for a renewable resource of the same  
12 type; and (2) the identified need exists during the term of the QF’s power-purchase  
13 agreement (PPA). Thus, the dispute in this case is focused on how the renewable avoided-  
14 cost price stream should be calculated.

15 When evaluating the competing proposals in this case, the Commission balance the  
16 interests of customers and QF developers.<sup>2</sup> This balancing must consider the context of  
17 continued interest in non-standard QF contracts from developers while ensuring that  
18 customers remain truly indifferent to QF generation. PacifiCorp’s appropriately correctly  
19 strikes this balance.

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<sup>1</sup> *In the Matter of the Public Utility Commission of Oregon, Investigation into Qualifying Facility Contracting and Pricing*, Docket No. UM 1610, Order No. 16-429 at 1 (Nov. 9, 2016).

<sup>2</sup> *In the Matter of Idaho Power Company’s Applications to Lower Standard Contract Eligibility Cap and to Reduce the Standard Contract Term, for Approval of Solar Integration Charge, and for Change in Resource Sufficiency Determination*, Docket No. UM 1725, Order No. 15-199 at 6 (June 23, 2015).

1 PacifiCorp has three primary recommendations. First, PacifiCorp recommends that  
2 the Commission approve the Partial Displacement Differential Revenue Requirement  
3 (PDDRR) methodology for calculating renewable avoided-cost prices. The PDDRR  
4 methodology proposed here is consistent with the methodology that the Commission  
5 approved in Order No. 16-174 after concluding that it “improves non-standard QF avoided  
6 cost pricing for QFs selling to PacifiCorp” and “benefit[s] both QF development and  
7 ratepayer cost neutrality.”<sup>3</sup> PacifiCorp’s proposed methodology includes the following:

- 8 • **Deferral of like-for-like renewable resources:** The PDDRR methodology  
9 produces more accurate avoided costs when it assumes that a QF resource defers a  
10 similar type of resource in PacifiCorp’s most recent IRP preferred portfolio. To  
11 the extent no renewable resources of the same type as the QF are in the IRP  
12 preferred portfolio, the Commission has already established that the PDDRR  
13 methodology produces accurate non-renewable avoided costs when it assumes  
14 that a QF resource defers the next major thermal resource. By assuming QFs  
15 displace similar resources in calculating the renewable avoided-cost price stream,  
16 the PDDRR methodology maintains the same least-cost, least-risk resource  
17 portfolio, in part by accounting for costs and risks that materially and adversely  
18 impact customers but cannot be adequately captured by most avoided-cost  
19 modeling methodologies (not just the PDDRR methodology). Other parties’  
20 opposition to deferring like-for-like resources is grounded in the misconception  
21 that renewable resources are interchangeable because they are acquired simply for  
22 their renewable-energy credits (RECs). This assumption is incorrect; but even if  
23 it were correct, allowing deferral of the same type of resource by different types  
24 of QFs does not result in customer REC neutrality because different renewable  
25 resources provide different quantities of RECs.
- 26 • **Eliminate the market-price floor for non-standard avoided-cost prices:** The  
27 market-price floor incorrectly assumes that PacifiCorp can resell QF generation.  
28 The record demonstrates that transmission constraints exist today that limit  
29 PacifiCorp’s ability to resell QF generation; therefore, the market-price floor is  
30 inconsistent with the Public Utility Regulatory Policies Act’s (PURPA) customer  
31 indifference standard because, with the market-price floor, customers are paying a  
32 higher rate for QF generation than they otherwise would.
- 33 • **Calculate avoided-cost prices based on all the QFs that requested indicative  
34 pricing and are timely proceeding with negotiations:** This recommendation  
35 results in avoided-cost prices that are based on the most up-to-date information.

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<sup>3</sup> *In the Matter of the Public Utility Commission of Oregon, Investigation into Qualifying Facility Contracting and Pricing*, Docket No. UM 1610, Order No. 16-174 at 23 (May 13, 2016).

1 If PacifiCorp accounted for only QFs with signed contracts, there is a very real  
2 risk that multiple QFs will receive avoided-cost pricing that assumes the QFs  
3 displace the same energy and capacity. QFs can also obtain pricing that  
4 incorporates only previously signed contracts by completing negotiations and  
5 signing an execution-ready contract.

6 Second, PacifiCorp requests that the Commission find that the 2021 Wyoming wind  
7 resources included in the 2017 IRP preferred portfolio are not deferrable for purposes of  
8 avoided-cost pricing because of their unique factual circumstances. The cost-effectiveness of  
9 the Wyoming wind resources depends on their eligibility for federal wind production tax  
10 credits (PTCs). Modeling the impact of PTCs in the avoided-cost prices, however, is  
11 problematic. When avoided-cost prices include the PTCs in the first 10 years of the QF  
12 contracts, consistent with how PTCs would be received for the Wyoming wind resources, the  
13 avoided-cost prices are unreasonably low. But if the PTCs are levelized in the avoided-cost  
14 calculation, then customers lose out on PTC benefits beyond the term of the QF contract. In  
15 either scenario, the avoided-cost prices are unreasonable, which indicates that the Wyoming  
16 wind resources should not be deferrable.

17 Third, PacifiCorp requests that the Commission open a generic investigation to  
18 change the framework for determining avoided-cost prices for RPS-eligible QFs. The  
19 current framework for determining avoided-cost prices for RPS-eligible QFs incorrectly  
20 assumes that any renewable resources identified in an IRP are being acquired for RPS  
21 compliance. That assumption conflicts with unambiguous Commission policy. In Order  
22 No. 11-505, the Commission explicitly tied the availability of the renewable price stream to a  
23 QF's ability to "allow the utility to avoid building (or buying) renewable generation to meet  
24 their RPS requirements."<sup>4</sup> Thus, the fact that a QF generating resource is "renewable" does

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<sup>4</sup> *In the Matter of Public Utility Commission of Oregon, Investigation Into Resource Sufficiency Pursuant to Order No. 06-538, Docket No. UM 1396, Order No. 11-505 at 9 (Dec. 13, 2011).*

1 not necessarily mean that it is entitled to renewable pricing—the QF must defer the utility’s  
2 need to acquire or build resources for RPS compliance. While Wyoming wind resources are  
3 included in the preferred portfolio in PacifiCorp’s most recent IRP, those resources are not  
4 being built to address an RPS-compliance shortfall; instead, those resources represent the  
5 least-cost, least-risk option for serving customer load.

6 Correcting this assumption requires the application of the same methodology for  
7 determining the avoided costs of energy and capacity for all QFs, regardless of whether they  
8 are RPS-eligible. This treatment recognizes the fact that from a system-cost perspective,  
9 whether a QF is ceding its REC to PacifiCorp has no bearing on how the energy and capacity  
10 from that resource will displace alternatives. Additionally, renewable QFs that cede their  
11 RECs to PacifiCorp would be entitled to an incremental avoided cost reflecting the RPS-  
12 compliance cost that is avoided or deferred because of the RECs provided by the QF.  
13 PacifiCorp is not asking the Commission to rule on the merits of its recommended  
14 framework in this case; rather, PacifiCorp requests only that the Commission open a generic  
15 investigation that includes other investor-owned utilities with RPS-compliance obligations in  
16 Oregon and other stakeholders.

## 17 II. BACKGROUND

### 18 A. PacifiCorp proposes to use the PDDRR methodology to calculate renewable 19 avoided-cost pricing.

20 In its opening testimony filed in January 2017, PacifiCorp agreed that renewable  
21 avoided-cost pricing should be available for non-standard renewable QFs when two  
22 conditions are met:

1           1. The preferred portfolio in PacifiCorp’s most recent IRP identifies the need  
2           for a renewable resource of the same type;<sup>5</sup> and

3           2. The identified need exists during the term of the QF’s contract.<sup>6</sup>

4           PacifiCorp further proposed calculating its non-standard renewable avoided-cost  
5 prices using the PDDRR methodology that was approved in Order No. 16-174, issued in  
6 docket UM 1610, modified to account for the deferral of renewable, rather than thermal,  
7 resources identified in PacifiCorp’s most recent IRP preferred portfolio.<sup>7</sup>

8           The primary difference between renewable and non-renewable avoided-cost prices  
9 calculated using the PDDRR methodology is the deferred resource. When used to calculate  
10 non-renewable avoided-cost prices, PacifiCorp assumes that the QF defers the next major  
11 thermal resource.<sup>8</sup> For renewable avoided-cost prices, PacifiCorp assumes that a renewable  
12 QF defers the next major renewable resource *of the same type* in the IRP preferred portfolio,  
13 based on equivalent capacity contributions.<sup>9</sup>

14           PacifiCorp clarified that that the “type” is meant to reflect the operational  
15 characteristics of the QF on PacifiCorp’s system, not the specific technology of the resource  
16 identified in the preferred portfolio.<sup>10</sup> Assuming the deferral of the same type of renewable  
17 resource better ensures that PacifiCorp’s total resource portfolio remains unchanged, both in  
18 terms of costs and risks, so that customers remain indifferent to QF generation.<sup>11</sup> If the IRP  
19 preferred portfolio no longer includes renewable resources of the same type during the

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<sup>5</sup> PAC/100, MacNeil/2.

<sup>6</sup> PAC/100, MacNeil/2.

<sup>7</sup> PAC/100, MacNeil/2-3.

<sup>8</sup> PAC/100, MacNeil/3.

<sup>9</sup> PAC/100, MacNeil/3-4.

<sup>10</sup> PAC/300, MacNeil/19.

<sup>11</sup> PAC/100, MacNeil/5-6; PAC/300, MacNeil/19-25.

1 proposed contract term, a QF would partially displace the next major thermal resource in the  
2 IRP preferred portfolio, consistent with the existing PDDRR methodology.<sup>12</sup>

3 **B. PacifiCorp recommends that the Commission open a generic investigation to**  
4 **adopt an RPS avoided-cost price stream.**

5 On June 28, 2017, PacifiCorp moved to change the procedural schedule in this case to  
6 allow PacifiCorp to modify its initial proposal in light of changed circumstances and new  
7 policy considerations that were first discovered while PacifiCorp prepared its response  
8 testimony.<sup>13</sup> In July 2017, PacifiCorp filed testimony that responded to the parties' criticism  
9 of the proposed PDDRR methodology and provided a new request for a generic investigation  
10 into the framework for calculating avoided-cost prices for renewable resources.

11 PacifiCorp's July 2017 testimony clarified how the renewable PDDRR methodology  
12 would work in response to Public Utility Commission of Oregon Staff's (Staff) and  
13 intervenors' concerns.<sup>14</sup> PacifiCorp's July proposal also included a new framework for  
14 determining renewable avoided-cost pricing that would provide renewable QFs with the  
15 same energy and capacity payments whether or not the QF cedes their RECs to PacifiCorp,  
16 but would then include an additional payment to renewable QFs based on the avoided RPS-  
17 compliance cost resulting from the transfer of RECs from the QF to PacifiCorp.<sup>15</sup>

18 PacifiCorp's proposed framework, discussed in more detail below, is intended to align the  
19 renewable avoided-cost calculation with Federal Energy Regulatory Commission (FERC)  
20 and Commission precedent establishing that a renewable avoided-cost price is permissible

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<sup>12</sup> PAC/100, MacNeil/4.

<sup>13</sup> Motion to Amend the Procedural Schedule and Request for Expedited Consideration (June 28, 2017).

<sup>14</sup> See, e.g., PAC/300, MacNeil/19.

<sup>15</sup> See generally, PAC/200.

1 under the PURPA to the extent the renewable price accounts for no more than the avoided  
2 RPS-compliance costs.<sup>16</sup>

3 Because PacifiCorp’s modified framework would affect more parties than just  
4 PacifiCorp, and because of the expedited procedural schedule in this case, PacifiCorp has not  
5 asked the Commission to resolve its RPS-based avoided-cost proposal in this case.<sup>17</sup> Instead,  
6 PacifiCorp requests that the Commission approve its January 2017 proposal as an interim  
7 measure and begin a separate generic investigation into the larger issue of whether the  
8 framework for renewable avoided-cost prices should be modified to better align with  
9 PURPA.<sup>18</sup>

### 10 III. ARGUMENT

#### 11 A. The PDDRR method produces accurate avoided-cost prices and is not unduly 12 complex.

13 In Order No. 16-174, the Commission authorized PacifiCorp to use the PDDRR  
14 methodology to calculate non-standard avoided-cost prices after finding that the “GRID  
15 model-based method more accurately values energy and capacity on PacifiCorp’s system by  
16 taking into account the unique characteristics (including location, delivery pattern, and  
17 capacity contribution) of each QF.”<sup>19</sup> Staff supported allowing PacifiCorp to use the  
18 PDDRR methodology.<sup>20</sup> The Renewable Energy Coalition (Coalition) and Community  
19 Renewable Energy Association (CREA) both objected to the PDDRR method and argued  
20 that the existing methodology worked fine. The Commission rejected those arguments, and  
21 found that it is “responsible under PURPA to improve our implementation to benefit both QF

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<sup>16</sup> PAC/200, Lockey/2.

<sup>17</sup> PAC/200, Lockey/4-5.

<sup>18</sup> PAC/200, Lockey/4-5.

<sup>19</sup> Order No. 16-174 at 23.

<sup>20</sup> *Id.* at 20.

1 development and ratepayer cost neutrality.”<sup>21</sup> The Commission was “persuaded that the  
2 PDDRR method improves non-standard QF avoided cost pricing for QFs selling to  
3 PacifiCorp[.]”<sup>22</sup>

4 By using the same Commission-approved PDDRR methodology, PacifiCorp’s  
5 renewable and non-renewable avoided-cost prices will be calculated using a conceptually  
6 consistent framework that the parties already vetted, that Staff previously endorsed, and that  
7 the Commission already approved.<sup>23</sup> The PDDRR methodology improves the non-standard  
8 avoided-cost pricing when used to calculate avoided-cost prices for renewable QFs. The  
9 PDDRR methodology can be tailored to reflect deferral of various resource types and  
10 incorporates the unique characteristics of each QF resource and PacifiCorp’s system by using  
11 its Generation and Regulation Initiative Decision Tools model (GRID) to directly measure  
12 the impact each QF facility has on PacifiCorp’s power costs.<sup>24</sup> This accounts for QF  
13 location, delivery pattern, and capacity contribution.<sup>25</sup>

14 The PDDRR methodology also aligns with PacifiCorp’s long-term resource plan by  
15 incorporating the cost, timing, and characteristics of the preferred portfolio identified by the  
16 IRP; captures the impact of individual and aggregate QFs on PacifiCorp’s system, accounting  
17 for unique characteristics of each QF; and appropriately accounts for the seven factors  
18 identified in 18 C.F.R. § 292.304(e)(2).<sup>26</sup>

19 As in docket UM 1610, the Coalition argues that the PDDRR methodology is too  
20 complex.<sup>27</sup> But, as the Commission already found, a sophisticated model is necessary to

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<sup>21</sup> *Id.* at 23.

<sup>22</sup> *Id.*

<sup>23</sup> PAC/100, MacNeil/3.

<sup>24</sup> PAC/100, MacNeil/3.

<sup>25</sup> PAC/100, MacNeil/3.

<sup>26</sup> PAC/100, MacNeil/3.

<sup>27</sup> REC/100, Lowe/9.

1 accurately account for the wide-ranging conditions experienced in actual operations across  
2 six states—particularly as PacifiCorp integrates higher levels of intermittent solar and wind  
3 resources.<sup>28</sup> Moreover, the GRID model used to calculate avoided costs is the same model  
4 use to set rates, and is regularly vetted in PacifiCorp’s annual power cost dockets.<sup>29</sup> If the  
5 GRID model is reasonable for setting rates, it is reasonable for setting avoided cost prices.

6 Additionally, PacifiCorp has agreed to work with developers to ensure that the  
7 PDDRR methodology is transparent. PacifiCorp will provide access to the GRID model,  
8 including all inputs and outputs associated with an indicative pricing request, and assistance  
9 navigating the model.<sup>30</sup> PacifiCorp will also respond to specific inquiries from developers  
10 about their indicative prices. The Commission addressed these same concerns in docket  
11 UM 1610 and found that PacifiCorp’s same offers of access and assistance overcame  
12 concerns over the complexity of the PDDRR methodology.<sup>31</sup>

13 **B. Modeling the deferral of similar renewable resources better ensures customer**  
14 **indifference.**

15 **1. Calculating avoided costs by deferring similar resources more accurately**  
16 **accounts for the costs and risks of QF generation.**

17 Under the proposed renewable PDDRR methodology, the capacity costs of a  
18 renewable QF resource will be calculated based on the deferral of the next major renewable  
19 resource of the same type in the IRP preferred portfolio, as adjusted for an equivalent  
20 capacity contribution.<sup>32</sup> PacifiCorp’s approach recognizes that each resource in the preferred  
21 portfolio is a cost-effective component of PacifiCorp’s least-cost, least-risk strategy for

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<sup>28</sup> Order No. 16-174 at 23; PAC/300, MacNeil/16.

<sup>29</sup> PAC/300, MacNeil/16-17.

<sup>30</sup> PAC/300, MacNeil/17.

<sup>31</sup> Order No. 16-174 at 23.

<sup>32</sup> PAC/100, MacNeil/3-4.

1 serving customers.<sup>33</sup> The IRP preferred portfolio analysis does not include any value for  
2 renewable attributes—it accounts only for each resource’s operating characteristics and the  
3 composition and dispatch of PacifiCorp’s portfolio of resources.<sup>34</sup> By calculating avoided  
4 costs based on similar resources, PacifiCorp’s proposal better ensures reasonable alignment  
5 between the operating characteristics of a QF and the resources it defers from the preferred  
6 portfolio.<sup>35</sup> This results in customer indifference to QF generation because PacifiCorp’s  
7 resource portfolio including the QF remains unchanged.

8           Deferring similar resources also ensures that the QF transaction does not materially  
9 increase customer risk.<sup>36</sup> If a solar QF resource were to displace a wind resource, for  
10 example, it would shift generation from the winter to the summer, which could create  
11 transmission risks in actual operations due to inadequate transmission capacity to deliver the  
12 QF generation to load.<sup>37</sup> The PDDRR methodology cannot quantify or account for this  
13 increased risk in developing the avoided-cost price, except by modeling the deferral of the  
14 same type of resource.

15           The PDDRR methodology also does not currently quantify and account for the full  
16 costs of flexible resources necessary to integrate wind and solar resources.<sup>38</sup> So, when a  
17 solar QF resource replaces a wind resource, there are additional costs that are incurred but  
18 not captured by the PDDRR methodology, except by maintaining equivalence by deferring  
19 the same type of resource.

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<sup>33</sup> PAC/300, MacNeil/18.

<sup>34</sup> PAC/300, MacNeil/18.

<sup>35</sup> PAC/300, MacNeil/18.

<sup>36</sup> PAC/300, MacNeil/20-21.

<sup>37</sup> PAC/300, MacNeil/20.

<sup>38</sup> PAC/300, MacNeil/20.

1           Moreover, when the PDDRR methodology allows a renewable QF to replace any  
2 other type of renewable QF, it produces results that are inconsistent with PacifiCorp’s actual  
3 avoided costs.<sup>39</sup> For example, PacifiCorp’s 2017 IRP assumes an Oregon tracking-solar  
4 resource costs \$61 per MWh in 2021. But if the PDDRR methodology assumes that an  
5 Oregon tracking-solar resource can displace a wind resource, the Oregon tracking-solar QF  
6 resource has an avoided cost of \$92 per MWh—150 percent higher than the costs modeled in  
7 the IRP.<sup>40</sup>

8           To be clear, the fact that the PDDRR methodology does not fully capture all costs  
9 does not indicate that it should be abandoned or that it is reasonable to revert back to the  
10 previous methodology, which was overly simplistic and generated inaccurate avoided-cost  
11 prices.<sup>41</sup> The PDDRR methodology is far superior to the previous approach, as the  
12 Commission found when approving its use.<sup>42</sup> But the accuracy of the PDDRR methodology  
13 can be increased when it is applied in a way that results in an avoided-cost price that  
14 accounts for costs and risks in the best possible way and produces customer neutrality, to the  
15 best extent possible, based on the information that is known when the pricing is developed.<sup>43</sup>

16           **2. Renewable resources are not interchangeable because they are not**  
17           **acquired just for their RECs.**

18           Staff, the Coalition, CREA, and the Oregon Department of Energy (ODOE) oppose  
19 PacifiCorp’s like-for-like approach to resource deferrals.<sup>44</sup> Staff’s rationale, similar to the  
20 rationales of the Coalition, CREA, and ODOE, is: “Thermal resources planned for in the IRP  
21 are intended to serve load, but renewable resources planned for in the IRP are intended to

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<sup>39</sup> PAC/300, MacNeil/22-23.

<sup>40</sup> PAC/300, MacNeil/23.

<sup>41</sup> PAC/400, MacNeil/7-8.

<sup>42</sup> Order No. 16-174 at 23.

<sup>43</sup> *Id.*

<sup>44</sup> Staff/100, Andrus/10; ODOE/100, Broad/4; REC-CREA/100, Higgins/4.

1 meet the utility’s obligation under the RPS.”<sup>45</sup> Because the parties reason that renewable  
2 resources are acquired purely to comply with the RPS, they claim that a megawatt-hour of  
3 energy from a wind resource provides the same compliance value as a megawatt-hour of  
4 energy from a solar resource.<sup>46</sup> Thus, according to Staff, a “renewable QF defers the next  
5 renewable resource in the IRP preferred portfolio, with no capacity equivalence constraint.”<sup>47</sup>

6 That argument, however, incorrectly assumes that PacifiCorp is acquiring renewable  
7 resources for RPS compliance. PacifiCorp has been clear that its renewable-resource  
8 acquisitions included in the 2017 IRP preferred portfolio are not needed to meet an RPS-  
9 compliance obligation—meaning that PacifiCorp would be acquiring the renewable  
10 resources even if they did not provide RECs that could be used to comply with Oregon’s  
11 RPS.<sup>48</sup> In fact, if PacifiCorp were acquiring renewable resources strictly for RPS  
12 compliance, as the parties’ claim, then those resource costs would be situs assigned to  
13 Oregon.<sup>49</sup>

14 For avoided-cost purposes, the critical inquiry is the performance characteristics of  
15 the QF relative to the displaced resource and, as discussed above, the costs and risks  
16 associated with a solar resource are not the same as a wind resource and cannot be fully  
17 captured in the PDDRR methodology without the like-for-like approach.<sup>50</sup> Thus, the fact

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<sup>45</sup> Staff/100, Andrus/10. Other parties make similar arguments. *See also* REC/100, Lowe/8, 10; ODOE/100, Broad/4; CREA/100, Skeahan/8.

<sup>46</sup> Staff/100, Andrus/10.

<sup>47</sup> Staff/100, Andrus/10; *id.* at 15 (planned renewable resources are the “least cost, least risk path to RPS compliance” and “any technology that is eligible under the RPS can fill this need for compliance.”).

<sup>48</sup> PAC/300, MacNeil/9.

<sup>49</sup> PAC/100, MacNeil/9; *In the Matter of PacifiCorp d/b/a Pacific Power Petition for Approval of the 2017 PacifiCorp Inter-Jurisdictional Allocation Protocol*, Docket No. UM 1050, Order No. 16-319, Appendix A at 6 (Aug. 23, 2016) (“Costs associated with Resources acquired to comply with a Jurisdiction’s Portfolio Standard adopted, either through legislative enactment or a State’s Commission, the portion of which exceeds the costs PacifiCorp would have otherwise incurred, will be assigned on a situs basis to the Jurisdiction adopting the Portfolio Standard.”).

<sup>50</sup> *See, e.g.*, PAC/300, MacNeil/19.

1 that a REC from a solar QF is the same as a REC from a wind QF is irrelevant here because  
2 PacifiCorp is not acquiring resources for their RECs.

3 Moreover, if RECs are the relevant metric, then PacifiCorp’s proposal remains  
4 superior. PacifiCorp provided un rebutted evidence that if a solar QF resource defers a wind  
5 resource, PacifiCorp will lose RECs because the wind resource would have generated more  
6 energy and produced more RECs than the solar QF resource.<sup>51</sup> Therefore, when a solar QF  
7 resource defers a wind resource, RPS-compliance costs are higher and customers are not  
8 indifferent.

9 Staff’s own analysis also demonstrates that assuming all renewable resources are  
10 interchangeable unreasonably results in different avoided RPS-compliance costs for different  
11 types of resources. Based on PacifiCorp’s standard avoided-cost prices, the avoided RPS-  
12 compliance cost is more than \$29.90 per MWh for a tracking-solar QF, \$24.10 per MWh for  
13 a wind QF, and \$33.50 per MWh for a baseload renewable QF.<sup>52</sup> If these QFs are  
14 interchangeable, they should all receive the same avoided RPS-compliance cost because they  
15 are all providing an identical REC. The fact that each QF receives a different avoided-  
16 compliance-cost payment demonstrates that they are not interchangeable.<sup>53</sup> The most  
17 effective way to prevent this customer harm is to calculate avoided-cost prices by deferring  
18 similar resources in the preferred portfolio.

19 Staff also argues that any differences between diverse types of QFs can be accounted  
20 for by adjusting the capacity contribution, similar to how the capacity contribution is adjusted

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<sup>51</sup> PAC/300, MacNeil/25; PAC/400, MacNeil/22; *see also* Staff/100, Andrus/15 (recognizing “RPS obligation expressed in annual energy terms, in MWhs.”).

<sup>52</sup> Staff/100, Andrus/12 (calculated as the difference between the standard non-renewable and standard renewable prices set forth in Tables 1 and 2).

<sup>53</sup> PAC/300, MacNeil/11-12.

1 for standard avoided-cost prices.<sup>54</sup> The method used to adjust the capacity contribution for  
2 standard contracts is an approximation that assumes capacity is essentially interchangeable.  
3 As discussed above, however, the capacity and energy provided by different types of  
4 renewable QFs is materially different and can be best accounted for by assuming that a  
5 renewable QF defers a similar resource in PacifiCorp's preferred portfolio.<sup>55</sup>

6 **3. All renewable QFs are eligible for renewable avoided-cost prices using**  
7 **the deferral of similar resources.**

8 Staff, the Coalition, and CREA claim that PacifiCorp's proposal may effectively  
9 preclude some renewable QFs from obtaining renewable avoided-cost prices.<sup>56</sup> But  
10 PacifiCorp clarified that when determining a similar type of QF for purposes of avoided  
11 costs, the operating characteristics would govern, not the technology.<sup>57</sup> Thus, under  
12 PacifiCorp's proposal, wind, solar, geothermal, biomass, biogas, and hydro QFs would all be  
13 eligible for a renewable avoided-cost price.<sup>58</sup>

14 **4. Reverting back to the pre-PDDRR methodology produces unreasonable**  
15 **avoided-cost prices.**

16 Staff and the Coalition recommend that if the PDDRR methodology does not  
17 accurately calculate avoided costs when renewable QFs are treated as interchangeable  
18 regardless of operating characteristics, then the Commission should revert back to the old  
19 methodology for calculating non-standard renewable avoided-cost prices.<sup>59</sup> But the old  
20 methodology is fundamentally flawed because it relies on adjustments to PacifiCorp's  
21 standard renewable avoided-cost prices—which include unreasonable avoided RPS-  
22 compliance costs that harm customers. The difference between PacifiCorp's standard

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<sup>54</sup> Staff/100, Andrus/11.

<sup>55</sup> PAC/300, MacNeil/19.

<sup>56</sup> Staff/100, Andrus/9; REC-CREA/Higgins/10.

<sup>57</sup> PAC/400, MacNeil/4-6.

<sup>58</sup> PAC/300, MacNeil/19; PAC/400, MacNeil/4-6.

<sup>59</sup> Staff/300, Andrus/3.REC/100, Lowe/17.

1 renewable and non-renewable avoided-cost prices represents the RPS-compliance costs that  
2 PacifiCorp purportedly avoids when the renewable QF transfers its RECs.<sup>60</sup> The current  
3 standard renewable avoided-cost prices include an implied RPS compliance cost that rises to  
4 \$33.16 per MWh in 2028—meaning that customers will pay renewable QFs \$33.16 for each  
5 REC provided to PacifiCorp.<sup>61</sup>

6 This RPS-compliance cost is patently unreasonable when PacifiCorp has *three*  
7 *different types* of cost-effective renewable resources in its 2017 IRP preferred portfolio, and  
8 those resources are all cost-effective assuming zero RPS-compliance costs.<sup>62</sup> The renewable  
9 resources in the 2017 IRP preferred portfolio provide capacity and energy at a cost that is less  
10 than the available non-renewable alternatives without even considering the RPS-compliance  
11 value associated with their RECs.<sup>63</sup>

12 Moreover, the Commission has found that an additional REC received today provides  
13 value only to the extent it defers a future compliance obligation and that a reasonable  
14 estimate of the benefits from deferring a future compliance obligation “would be *de minimus*  
15 when discounted to today’s dollars.”<sup>64</sup> If customers pay QFs \$33.16 per REC, they are not  
16 indifferent under PacifiCorp’s standard renewable avoided-cost prices and are, in fact, paying  
17 substantially more for RPS compliance than PacifiCorp would otherwise.

18 **C. The Commission should eliminate the market-price floor.**

19 In Order No. 16-174, the Commission imposed a price floor for non-standard avoided  
20 costs, which is set at the wholesale-power-price forecast that is used to set standard avoided-

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<sup>60</sup> See REC/100, Lowe/4-5 (agreeing that the difference between renewable and non-renewable avoided costs represents the value of the RECs).

<sup>61</sup> PAC/300, MacNeil/13.

<sup>62</sup> PAC/400, MacNeil/8.

<sup>63</sup> PAC/400, MacNeil/8.

<sup>64</sup> *In the Matter of PacifiCorp, dba Pacific Power, 2017 Transition Adjustment Mechanism*, Docket No. UE 307, Order No. 16-482 at 22 (Dec. 20, 2016).

1 cost prices during the sufficiency period.<sup>65</sup> The Commission reasoned that the benefit to QF  
2 developers of understanding the floor outweighed the “minimal risk” that the market-price  
3 floor would be higher than PacifiCorp’s avoided costs.<sup>66</sup> On reconsideration, the  
4 Commission affirmed the market-price floor, concluding that “even if the incremental cost of  
5 generation is lower than the market price,” if there are no transmission constraints a “utility  
6 may sell the QF generation on the market.”<sup>67</sup> Thus, until transmission constraints limit the  
7 ability to resell QF power, the Commission affirmed the market-price floor. The  
8 Commission should eliminate the market-price floor because it not legally or factually  
9 defensible.

10 First, neither PURPA nor Oregon law allow avoided-cost prices based on the  
11 assumption that a utility can resell QF generation. On the contrary, the definition of  
12 “avoided cost” makes no reference to valuing QF energy based on off-system sales.  
13 “Avoided costs” are defined in both FERC’s regulations and Oregon law as the incremental  
14 costs to an electric utility that, but for the purchase of the QF, the utility would *generate* itself  
15 or *purchase* from another source.<sup>68</sup> In fact, when FERC adopted its PURPA rules in 1980, it  
16 made clear that its “rules impose no requirement on the purchasing utility to deliver unusable  
17 energy or capacity to another utility for subsequent sale.”<sup>69</sup>

18 The Commission has also recognized more than once that avoided-cost prices do not  
19 account for the value of off-system sales. In Order No. 84-720, the Commission directly

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<sup>65</sup> Order No. 16-174 at 23.

<sup>66</sup> *Id.*

<sup>67</sup> *In the Matter of the Public Utility Commission of Oregon, Investigation into Qualifying Facility Contracting and Pricing*, Docket No. UM 1610, Order No. 16-337 at 6 (Sept. 8, 2016).

<sup>68</sup> 18 C.F.R. § 292.101(b)(6); ORS 758.505(1).

<sup>69</sup> *Small Power Production and Cogeneration Facilities; Regulations Implementing Section 210 of the Public Utility Regulatory Policies Act of 1978*, 45 Fed. Reg. 12,224, Order No. 69 at 12,219 (Feb. 25, 1980); *New PURPA Section 210(m) Regulations Applicable to Small Power Production and Cogeneration Facilities*, Order No. 688 ¶ 24 (2006) (utilities not obligated to pay for QF energy that is not needed) (citing *So. Cal. Ed. Co.*, 70 FERC ¶ 61,215, 61,677-78, reh’g denied, 71 FERC ¶ 61,269, 62,078 (1995)).

1 addressed whether PURPA avoided costs can account for the resale value of QF generation.<sup>70</sup>  
2 In that case, the Commission found that the “language of ORS 758.505(1) clearly is directed  
3 at resource acquisitions through purchase or generation.”<sup>71</sup> Reselling QF generation “is  
4 neither a generation cost nor a purchase cost under the terms of the statutes, rules, or  
5 regulations.”<sup>72</sup> Therefore, the Commission found that requiring a resale “violate[s] the  
6 definition of avoided cost found in both federal and state law.”<sup>73</sup>

7 Further, in a 2009 order, the Commission explained the “avoided cost standard  
8 ignores a utility’s ability to sell power in the wholesale market at higher rates.”<sup>74</sup> Applying  
9 the same reasoning as Order No. 84-720, the Commission concluded that “when the utility  
10 has excess generating capacity, avoided costs measure only the utility’s cost to generate  
11 additional electricity . . . the avoided costs standard fails to capture any increased value of  
12 that excess capacity if sold on the market.”<sup>75</sup>

13 The Commission’s application of a similar market-price floor during the sufficiency  
14 period for standard avoided-cost prices is distinguishable. In Order No. 05-584, the  
15 Commission adopted market prices as avoided costs after concluding that market purchases  
16 were likely to be the transactions avoided during the sufficiency period.<sup>76</sup> Thus, the

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<sup>70</sup> *In the Matter of the Investigation of Avoided Costs and of Cost Effective Fuel Use and Resource Development*, Docket No. UM 21, Order No. 84-720 (Sept. 12, 1984).

<sup>71</sup> *Id.* at 21.

<sup>72</sup> *Id.*

<sup>73</sup> *Id.* at 22 (using resale prices as avoided costs “would push the price paid to QF’s above the cost of alternative resources available to the utility. The ratepayers would pay more for the output of the QF than they would have paid for resources absent the QF purchase.”).

<sup>74</sup> *Wah Chang v. PacifiCorp*, Docket No. UM 1002, Order No. 09-343 at 33 (Sept. 2, 2009).

<sup>75</sup> *Id.*

<sup>76</sup> *In the Matter of the Public Utility Commission of Oregon Staff’s Investigation Relating to Electric Utility Purchases from Qualifying Facilities*, Docket No. UM 1129, Order No. 05-584 at 28 (May 13, 2005) (adopting the use of market prices for resource sufficiency period because of the “likelihood that a utility will address probable gaps between increasing demand and actual resources, in the absence of incremental QF capacity, with purchases of energy and capacity on the market.”) (emphasis added).

1 Commission correctly calculated avoided costs based on avoided purchases—not resales.<sup>77</sup>  
2 In contrast, in Order No. 16-337, the Commission explicitly noted that the market price may  
3 exceed a utility’s avoided cost, but applied it anyway because the “utility may sell the QF  
4 generation on the market.”<sup>78</sup> The Commission never reconciled this conclusion with the  
5 clear language in FERC’s regulations, ORS 758.505(1), and the Commission’s own prior  
6 orders—all of which unequivocally preclude establishing avoided-cost prices based on a  
7 resale price.

8           Second, PacifiCorp provided evidence that the market-price floor does not have a  
9 minimal customer impact. PacifiCorp provided the indicative pricing results for six Oregon  
10 solar QFs, totaling 399 MW of capacity. The imposition of the market-price floor increased  
11 the indicative prices by 54 percent, or \$242 million over the fixed-price term of the  
12 contracts.<sup>79</sup> If the indicative pricing ignores the QFs in the development queue, the market-  
13 price floor still increases avoided costs by eight percent.<sup>80</sup> Thus, customers are paying prices  
14 to QFs that exceed avoided costs because of the market-price floor and are therefore not  
15 indifferent to QF generation. The impacts described above may understate the magnitude of  
16 the risk the market-price floor poses to customers, as at the time the July testimony was  
17 prepared, PacifiCorp was in negotiations with over 700 MW of QFs in Oregon.<sup>81</sup>

18           Staff appears to concede that transmission constraints cause the difference between  
19 indicative avoided-cost prices with and without the market-price floor.<sup>82</sup> Staff therefore  
20 appears to concede that transmission constraints have limited PacifiCorp’s ability to resell

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<sup>77</sup> 18 C.F.R. § 292.101(b)(6); ORS 758.505(1).

<sup>78</sup> Order No. 16-337 at 6.

<sup>79</sup> PAC/300, MacNeil/37.

<sup>80</sup> PAC/300, MacNeil/39.

<sup>81</sup> PAC/300, MacNeil/45.

<sup>82</sup> Staff/200, Andrus/12.

1 QF generation (otherwise, the market-price floor would not be implicated in the indicative  
2 avoided-cost prices). Thus, the record in this proceeding demonstrates: (1) the impact of the  
3 market-price floor is not minimal and adversely impacts customers; and (2) PacifiCorp has  
4 already reached the point where transmission constraints have undermined the assumption  
5 that PacifiCorp can resell QF generation.

6 The Commission's imposition of a market-price floor based on the assumption that  
7 PacifiCorp can sell excess QF generation is contrary to federal and state law. And even if  
8 using resale prices to calculate avoided costs was legally permissible, the record in this  
9 proceeding demonstrates that transmission constraints have already limited PacifiCorp's  
10 ability to resell excess QF generation. Thus, the Commission should eliminate the market-  
11 price floor in this case.

12 Finally, the market price floor clashes with PURPA's customer bedrock indifference  
13 standard. Under PURPA, utility customers must be economically indifferent to purchases of  
14 QF power by paying no more for power than the amount they would have paid but-for the  
15 purchase from the QF.<sup>83</sup> State utility commissions implement PURP A's mandatory  
16 customer indifference standard by setting the prices paid to QFs at no more than a utility's  
17 avoided costs.

18 The Commission has repeatedly recognized the importance of the customer  
19 indifference standard. As early as 1981, the Commission explained that the primary goal of  
20 its PURP A policies was:

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<sup>83</sup> *Indep. Energy Producers Ass'n, Inc. v. Cal. Pub. Utils. Comm'n*, 36 F.3d 848, 858 (9th Cir. 1994) ("If purchase rates are set at the utility's avoided cost, consumers are not forced to subsidize QFs because they are paying the same amount they would have paid if the utility had generated energy itself or purchased energy elsewhere.")

1 [T]o provide maximum economic incentives for development of  
2 qualifying facilities while insuring that the costs of such development do  
3 not adversely impact utility ratepayers who ultimately pay these costs.<sup>84</sup>

4 Since then, the Commission has continually acknowledged the importance of ratepayer  
5 indifference when setting PURP A policies.<sup>85</sup> Indeed, the Commission has identified  
6 ratepayer indifference as its "primary aim."<sup>86</sup>

7 FERC has likewise affirmed the need to ensure ratepayer indifference to utility  
8 purchases of QF power, noting that, in enacting PURPA, "[t]he intention [of Congress] was  
9 to make ratepayers indifferent as to whether the utility used more traditional sources of  
10 power or the newly-encouraged alternatives."<sup>87</sup> As PURPA's legislative history makes clear,  
11 PURP A was intended to encourage cogeneration and small power production, but it was not  
12 intended to subsidize QFs by paying them prices that exceed avoided costs.<sup>88</sup>

13 The market price floor cannot be reconciled with the customer indifference standard.  
14 The Commission has determined that the PDDRR methodology produces the most accurate

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<sup>84</sup> *In the Matter of the Investigation into Electric Utility Tariffs for Cogeneration and Small Power Production Facilities*, Docket No. R-58, Order No. 81-319 at 3 (May 6, 1981).

<sup>85</sup> See, e.g., Order No. 05-584 at 11 (May 13, 2005) ("We seek to provide maximum incentives for the development of QFs of all sizes, while ensuring that ratepayers remain indifferent to QF power by having utilities pay no more than their avoided costs."); *In the Matter of the Public Utility Commission of Oregon Staff's Investigation Relating to Electric Utility Purchases from Qualifying Facilities*, Docket No. UM 1129, Order No. 06-538 at 37 (Sept. 20, 2006) ("[O]ur overriding goals in this docket are to encourage QF development, while ensuring that ratepayers are indifferent to QF power."); *In the Matter of the Public Utility Commission of Oregon Staff's Investigation Relating to Electric Utility Purchases from Qualifying Facilities*, Docket No. UM 1129, Order No. 07-360 at 1 (Aug. 20, 2007) ("This Commission's goal is to encourage the economically efficient development of QFs, while protecting ratepayers by ensuring that utilities incur costs no greater than they would have incurred in lieu of purchasing QF power (avoided costs)"); *In the Matter of the Public Utility Commission of Oregon, Investigation into Qualifying Facility Contracting and Pricing*, Docket No. UM 1610, Order No. 14-058 at 12 (Feb. 24, 2014) ("We first return to the goal of this docket: to ensure that our PURP A policies continue to promote QF development while ensuring that utilities pay no more than avoided costs.").

<sup>86</sup> Order No. 05-584 at 45 ("In balancing the goals of facilitating QF contracts while sufficiently protecting ratepayers, we recognize that the primary aim is to ensure that ratepayers remain indifferent to the source of power that serves them.").

<sup>87</sup> *S. Cal. Edison Co., et al.*, 71 FERC ¶ 61,269, 62,080 (1995) *overruled on other grounds*, *California Public Utilities Comm'n*, 133 FERC ¶ 61,059 (2010).

<sup>88</sup> See Conference Report on PURPA, H.R. Rep. No. 1750, 95th Cong., 2nd Sess. 97-98 ("The provisions of this section are not intended to require the rate payers of a utility to subsidize co-generators or small power producers.").

1 avoided costs; therefore, customers purchasing QF output at prices generated from that  
2 methodology are indifferent. But when PDDRR-generated avoided costs are lower than  
3 market prices, PacifiCorp is arbitrarily compelled to purchase the power at the higher-than-  
4 avoided-cost market price. As a result, PacifiCorp’s customers are not indifferent to the  
5 market price purchase for the simple reason that market prices exceed avoided costs as  
6 determined by the PDDRR methodology. If left in place, the market price floor ensures that  
7 PacifiCorp’s customers will unlawfully bear the cost of QF contracts that violate PURPA’s  
8 foundational indifference standard. For that reason alone, the market price floor should be  
9 eliminated.

10 **D. The 2021 Wyoming wind resources are not deferrable for purposes of avoided-**  
11 **cost pricing.**

12 The preferred portfolio in PacifiCorp’s 2017 IRP includes 1,100 MW of new PTC-  
13 eligible Wyoming wind resources added in 2021 that rely on the Aeolus-to-Bridger/Anticline  
14 transmission line (Energy Gateway Sub-Segment D2) to interconnect.<sup>89</sup> The new Wyoming  
15 wind and transmission resources associated with this project provide all-in economic benefits  
16 to PacifiCorp customers and will meet an identified capacity need in the IRP.<sup>90</sup> In  
17 accordance with the PDDRR methodology adopted by the Commission in Order No. 16-174,  
18 including the new Wyoming wind and transmission resources in the preferred portfolio is  
19 subject to change only with a known change to the IRP action plan (such as abandonment of  
20 the project) or the filing of an IRP or IRP update, and is not affected by acknowledgment or  
21 non-acknowledgment of the IRP. Because of the unique characteristics of these resources—  
22 including their location and PTC-eligibility—PacifiCorp cannot defer these resources

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<sup>89</sup> PAC/300, MacNeil/25. The 2021 date is used as a proxy for a December 31, 2020, in-service date that is required to ensure the assumed tax benefits are achieved.

<sup>90</sup> PAC/300, MacNeil/25.

1 because of an Oregon QF.<sup>91</sup> Therefore, the 2021 Wyoming wind resources should not be  
2 considered deferrable for purposes of calculating avoided-cost pricing.

3 First, the Wyoming wind resources cannot be deferred by a QF resource because their  
4 economic benefits rely on their time-limited PTC eligibility.<sup>92</sup> If the Wyoming wind  
5 resources are not operational by 2021, they lose the PTC benefits.<sup>93</sup> Without the PTC  
6 benefits, these Wyoming wind resources would not be part of PacifiCorp's least-cost, least-  
7 risk portfolio because, if these Wyoming wind resources are deferred, they will cost  
8 substantially more.<sup>94</sup> Typically, when avoided-cost prices are calculated, they assume that a  
9 resource built in 2021 would have the same cost if it were deferred by a QF and built at a  
10 later date.<sup>95</sup> Based on this assumption, the resource cost can be reasonably used to determine  
11 an avoided-cost price. This reasoning does not apply to the Wyoming wind resources.<sup>96</sup>

12 Second, the economics of the transmission line that enables interconnection of these  
13 new wind resources also depends on building as much cost-effective wind generation as  
14 possible.<sup>97</sup> So even if Oregon QFs generate in the same time frame, PacifiCorp will still max  
15 out the cost-effective Wyoming wind resources. Moreover, PacifiCorp has made clear that  
16 pursuit of the Wyoming wind resources is not a zero-sum opportunity—PacifiCorp will  
17 pursue additional opportunities for least-cost, least-risk resources to meet PacifiCorp's  
18 resource needs in addition to the Wyoming wind resources.<sup>98</sup> In short, if the Wyoming wind  
19 resources remain cost-effective even with Oregon QFs, PacifiCorp will pursue the wind  
20 resources.

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<sup>91</sup> PAC/300, MacNeil/21-22, 25-29; PAC/400, MacNeil/10-17.

<sup>92</sup> PAC/300, MacNeil/26.

<sup>93</sup> PAC/300, MacNeil/26.

<sup>94</sup> PAC/300, MacNeil/26.

<sup>95</sup> PAC/300, MacNeil/27.

<sup>96</sup> PAC/300, MacNeil/27.

<sup>97</sup> PAC/300, MacNeil/26-27.

<sup>98</sup> PAC/400, MacNeil/15.

1 Third, there is no reasonable methodology to account for the PTCs in the avoided-  
2 cost calculation.<sup>99</sup> If avoided costs are calculated by levelizing the PTCs over the thirty-year  
3 life of the Wyoming wind resources, then customers will lose out on substantial PTC benefits  
4 if the Wyoming wind resources are displaced by an Oregon QF.<sup>100</sup> If an Oregon QF that is  
5 assumed to defer a Wyoming wind resource has a 15-year fixed-price contract, with levelized  
6 PTCs, then retail customers lose at least half of the assumed benefits of the PTCs.<sup>101</sup>

7 The only way to properly account for PTC benefits in avoided-cost pricing is  
8 therefore to model their receipt in the first 10 years of the QF contract, consistent with how  
9 the PTC benefits would be received for the Wyoming wind resources.<sup>102</sup> But under this  
10 scenario, the avoided-cost prices are low, and sometimes even negative.<sup>103</sup> The deferral of  
11 the 2021 Wyoming wind resources with PTC benefits assumed in the first 10 years of the  
12 contract results in lower avoided costs than PacifiCorp's proposal.<sup>104</sup> Therefore, to avoid this  
13 result, PacifiCorp recommends that the Commission find that the Wyoming wind resources  
14 are non-deferrable for purposes of avoided costs.

15 Staff argues that the treatment of the 2021 Wyoming wind resources is beyond the  
16 scope of this case because it should be resolved in the avoided-cost update that will follow  
17 the acknowledgment of the 2017 IRP.<sup>105</sup> But the PDDRR methodology updates PacifiCorp's  
18 resource portfolio based on the most recent IRP, even if the most recent IRP is not yet  
19 acknowledged.<sup>106</sup> PacifiCorp explained this aspect of the methodology to the parties and  
20 Commission in docket UM 1610, and the Commission approved the methodology without

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<sup>99</sup> PAC/400, MacNeil/12.

<sup>100</sup> PAC/300, MacNeil/6; PAC/400, MacNeil/14.

<sup>101</sup> PAC/400, MacNeil/14.

<sup>102</sup> PAC/400, MacNeil/14.

<sup>103</sup> PAC/400, MacNeil/13.

<sup>104</sup> PAC/401-403.

<sup>105</sup> Staff/200, Andrus/9; Staff/300, Andrus/1.

<sup>106</sup> PAC/400, MacNeil/11-12.

1 changing this aspect.<sup>107</sup> Thus, the treatment of the Wyoming wind resources is ripe for  
2 decision here.

3 **E. PacifiCorp’s proposed treatment of its QF queue when calculating indicative**  
4 **prices reasonably balances customer and QF interests.**

5 To improve the accuracy of non-standard avoided-cost prices, the PDDRR  
6 methodology accounts for the aggregate impact of all QFs on PacifiCorp’s system, as  
7 required by FERC’s regulations.<sup>108</sup> When a QF requests indicative pricing, the QF is added  
8 to PacifiCorp’s queue of potential QFs currently negotiating contracts.<sup>109</sup> Indicative pricing  
9 for subsequent QFs is based on all of the QFs currently in the queue. In this way, the  
10 indicative pricing accounts for all the signed and potential QFs located anywhere on  
11 PacifiCorp’s system and therefore accurately values the energy and capacity based on an up-  
12 to-date representation of PacifiCorp’s system and resource costs.

13 PacifiCorp modified its proposal so that a QF can move to the front of the queue,  
14 thereby receiving a higher avoided cost price, by signing an execution-ready contract.<sup>110</sup>  
15 This will allow QFs to obtain price certainty, and a higher avoided-cost price, but reasonably  
16 requires the QF to demonstrate its ability to move forward by completing all negotiations  
17 except for price.

18 Staff, the Coalition, and CREA recommend that the queue include only QFs with  
19 signed contracts, not QFs that have requested indicative pricing.<sup>111</sup> This recommendation,  
20 however, shifts excessive risk to customers. There is no dispute that avoided costs under the

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<sup>107</sup> See Order No. 16-174 at 23.

<sup>108</sup> 18 C.F.R. § 292.304(e)(2)(vi) (avoided costs must account for the “the individual and aggregate value of energy and capacity from qualifying facilities on the electric utility’s system”).

<sup>109</sup> PAC/100, MacNeil/10.

<sup>110</sup> PAC/300, MacNeil/45-46.

<sup>111</sup> Staff/200, Andrus/15; REC-CREA/300, Higgins/4.

1 PDDRR methodology decline as additional QF resources are added.<sup>112</sup> If indicative pricing  
2 is not based on all potential QFs, then there is a risk that two or more QFs would execute  
3 contracts that assume each of the QFs are displacing the same marginal resources in the  
4 sufficiency period or the same increment of capacity in the deficiency period—resulting in  
5 customers paying more than avoided cost.<sup>113</sup> The potential for two or more developers to  
6 sign contracts for substantial QF capacity within a short period is real—particularly when  
7 avoided-cost prices are expected to decrease.<sup>114</sup> As a result, providing prices based on signed  
8 contracts are likely to result in customers paying more than avoided costs for QF output and  
9 is likely to cause disputes.

10 The Coalition and CREA also recommend that the Commission prohibit PacifiCorp  
11 from updating its indicative avoided-cost prices for a specified time period, such as 60 to  
12 90 days.<sup>115</sup> Such a limitation, however, only exacerbates the risk to customers—particularly  
13 when the same developer is simultaneously negotiating for multiple projects, as has often  
14 occurred.<sup>116</sup>

15 The Coalition and CREA also both recommend that QFs have the option of receiving  
16 simultaneous indicative renewable and non-renewable pricing.<sup>117</sup> Because system operations  
17 and dispatch would be the same for a given project regardless of REC ownership, it does not  
18 affect avoided capacity and energy costs.<sup>118</sup> In light of this, PacifiCorp modified its proposal

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<sup>112</sup> PAC/300, MacNeil/44.

<sup>113</sup> PAC/300, MacNeil/44.

<sup>114</sup> PAC/300, MacNeil/44.

<sup>115</sup> REC-CREA/300, Higgins/10.

<sup>116</sup> See PAC/300, MacNeil/45.

<sup>117</sup> REC-CREA/200, Higgins/3.

<sup>118</sup> PAC/300, MacNeil/3

1 so that QFs do not need to choose between renewable and non-renewable pricing when  
2 requesting indicative pricing.<sup>119</sup>

3 ODOE recommends that whenever a QF withdraws from the queue, the avoided-cost  
4 prices for all remaining QFs should be updated.<sup>120</sup> Under PacifiCorp's proposal, QFs would  
5 have the right to request updated avoided-cost pricing until they sign a contract.<sup>121</sup> Once a  
6 contract is fully executed, the avoided-cost prices are established for the term of the  
7 contract.<sup>122</sup>

8 **F. PacifiCorp recommends that the Commission open a generic investigation into**  
9 **how RPS-compliance costs are accounted for in avoided-cost pricing.**

10 In its July 2017 testimony, PacifiCorp proposed a new framework for calculating both  
11 standard and non-standard renewable avoided-cost prices.<sup>123</sup> PacifiCorp's proposed  
12 framework recognizes that the system dispatch costs for QFs are the same regardless of  
13 whether the QF transfers its REC to PacifiCorp.<sup>124</sup> Therefore, PacifiCorp recommends that  
14 renewable QFs receive the same energy and capacity payments as a non-renewable QFs  
15 (adjusted for equivalent capacity contributions and other operational characteristics).<sup>125</sup> In  
16 addition, if the renewable QF provides its RECs to PacifiCorp, then the QF would receive an  
17 avoided-cost price stream that is much more likely to reflect actual avoided RPS-compliance  
18 costs because of the RECs provided by QF.<sup>126</sup>

19 PacifiCorp's methodology appropriately recognizes that PacifiCorp is acquiring  
20 renewable resources because they are cost-effective, least-risk resources, not strictly to

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<sup>119</sup> PAC/400, MacNeil/10-11

<sup>120</sup> ODOE/100, Broad/7.

<sup>121</sup> PAC/300, MacNeil/41.

<sup>122</sup> PAC/300, MacNeil/42.

<sup>123</sup> See PAC/200.

<sup>124</sup> PAC/300, MacNeil/3.

<sup>125</sup> PAC/300, MacNeil/3, 8.

<sup>126</sup> PAC/300, MacNeil/3, 8.

1 comply with the Oregon RPS.<sup>127</sup> Thus, when a renewable QF transfers its RECs to  
2 PacifiCorp, the transferred RECs do not allow PacifiCorp to avoid acquiring the renewable  
3 resources themselves because those resources are not being acquired only for their RECs.  
4 PacifiCorp’s proposal better ensures that customers remain truly indifferent to QF generation  
5 and are not burdened with higher RPS-compliance costs because of a renewable-QF  
6 transactions.

7 **1. Renewable avoided costs are limited to only those costs that are actually**  
8 **avoided.**

9 When a utility purchases electricity from a QF, the price paid by the utility must be  
10 no more or less than the utility’s avoided cost—*i.e.*, the amount that the utility would  
11 otherwise have incurred to either generate the electricity itself or purchase it on the market.<sup>128</sup>  
12 In this way, the transaction with the QF is intended to ensure customers are not affected and  
13 remain indifferent to the QF transaction.<sup>129</sup>

14 In 2010, FERC clarified that a state may implement multi-tiered avoided-cost pricing  
15 based on state-imposed procurement requirements, such as state RPS requirements.<sup>130</sup> As  
16 with traditional avoided-cost pricing, the question for renewable avoided costs is also “what  
17 costs the electric utility is avoiding.”<sup>131</sup> A permissible renewable avoided-cost price must be  
18 “tied to a state requirement that the utility either build a particular resource or purchase from

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<sup>127</sup> PAC/200, Lockey/6, 8-9.

<sup>128</sup> 16 U.S.C. §§ 824a-3(b), (d); 18 C.F.R. § 292.101(b)(6); ORS 785.525(1); ORS 758.505(1).

<sup>129</sup> *Indep. Energy Producers Ass’n*, 36 F.3d at 858 (customers should remain indifferent as to whether the utility used more traditional sources of power or the newly-encouraged alternatives); *So. Cal. Ed. Co.*, 71 FERC ¶ 61,269, 62,079 (1995) (customers should remain “indifferent as to whether the utility used more traditional sources of power or the newly-encouraged alternatives.”); Order No. 05-584 at 11 and 19 (one of the fundamental objectives under PURPA is to accurately price QF power to ensure that customers remain indifferent to QF generation); Order No. 14-058 at 3 (Commission must “provide maximum economic incentives for development of QFs while insuring that the costs of such development do not adversely impact utility ratepayers who ultimately pay these costs.”).

<sup>130</sup> Order No. 11-505 at 4 (quoting FERC).

<sup>131</sup> *California Public Utilities Comm’n*, 133 FERC ¶ 61,059, ¶ 26 (2010).

1 a particular resource” to ensure that the transaction with the QF is “no more costly” and that  
2 customer remain unharmed.<sup>132</sup>

3 Based on FERC’s reasoning, in Order No. 11-505, the Commission found that  
4 Oregon’s RPS requirements provided a basis for requiring renewable avoided-cost prices  
5 from PacifiCorp and PGE: “Renewable QFs willing to sell their output and cede their RECs  
6 to the utility allow the utility to avoid building (or buying) renewable generation *to meet their*  
7 *RPS requirements . . . .* These QFs should be offered an avoided cost stream that *reflects the*  
8 *costs that utility will avoid.*”<sup>133</sup> Thus, a renewable avoided-cost price can legally compensate  
9 a QF for the avoided cost of energy and capacity, and the avoided RPS-compliance cost  
10 resulting from the fact that the QF transfers its RECs to PacifiCorp.

11 **2. Renewable avoided-cost prices should be calculated using PacifiCorp’s**  
12 **RPS-compliance costs, not renewable resource costs.**

13 **a. The current renewable-resource sufficiency/deficiency framework**  
14 **incorrectly assumes renewable resources are acquired only for RPS**  
15 **compliance.**

16 The Commission has traditionally differentiated avoided-cost prices based on whether  
17 PacifiCorp is considered resource sufficient or resource deficient.<sup>134</sup> During the deficiency  
18 period, capacity provided by a QF allows PacifiCorp to defer or avoid a future resource  
19 acquisition, so avoided-cost prices include a capacity payment. When PacifiCorp has  
20 sufficient resources to serve load, however, a QF does not allow PacifiCorp to avoid capacity  
21 costs and the avoided-cost price does not include a separate capacity payment.

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<sup>132</sup> *California Public Utilities Comm’n*, 134 FERC ¶ 61, 044, ¶ 32 (2011).

<sup>133</sup> Order No. 11-505 at 9 (emphasis added).

<sup>134</sup> Order No. 05-584 at 26 (“In a period of resource deficiency, the historical calculation of avoided costs has included both the variable and fixed costs of a planned resource in order to reflect the actual deferral or avoidance of that resource. In a period of resource sufficiency, however, the historical calculation of avoided costs has included only the variable costs of operating an existing resource, reflecting the inability of a resource sufficient utility to defer or avoid a resource when QF generation is committed.”).

1 In Order No. 11-505, the Commission applied the same sufficiency/deficiency  
2 framework to renewable avoided-cost pricing—PacifiCorp is considered renewable-resource  
3 sufficient until the next acquisition of a renewable resource identified in an IRP preferred  
4 portfolio.<sup>135</sup> This framework assumes that renewable resources will always be procured to  
5 meet RPS-compliance requirements (*i.e.*, that the need for RECs drives the decision to  
6 acquire the renewable resource). Staff explicitly makes this argument: “Thermal resources  
7 planned for in the IRP are intended to serve load, but renewable resources planned for in the  
8 IRP are intended to meet the utility’s obligation under the RPS.”<sup>136</sup> Based on this  
9 assumption, the avoidance of a renewable resource represents the avoided cost of RPS  
10 compliance. This assumption was reasonable when the Commission issued Order No. 11-  
11 505 because renewable resources were generally not considered to be cost-effective  
12 resources.<sup>137</sup> But the assumption is no longer true today.

13 PacifiCorp’s renewable-resource acquisitions have not been driven by RPS  
14 compliance, and this is not expected to change.<sup>138</sup> Therefore, the presence of a renewable  
15 resource in PacifiCorp’s preferred portfolio does not indicate that PacifiCorp has an  
16 incremental RPS-compliance cost that will be avoided by a transaction with an RPS-eligible  
17 QF.<sup>139</sup> Even if a QF provides its RECs to PacifiCorp, that fact alone will not demonstrate  
18 that PacifiCorp will defer or avoid the acquisition of a renewable resource because the  
19 renewable resource is not being acquired strictly to provide RECs.<sup>140</sup> Thus, under the current  
20 framework, the renewable avoided-cost price is not based on an avoided RPS-compliance

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<sup>135</sup> Order No. 11-505 at 6.

<sup>136</sup> Staff/100, Andrus/10.

<sup>137</sup> PAC/200, Lockey/6.

<sup>138</sup> PAC/300, MacNeil/9.

<sup>139</sup> PAC/300, MacNeil/9.

<sup>140</sup> PAC/300, MacNeil/9.

1 obligation, even though that is the Commission’s only legal basis for establishing an  
2 alternative avoided-cost price.

3 **b. PacifiCorp’s proposal calculates the renewable avoided-cost price**  
4 **based on the avoided RPS-compliance costs, as required by PURPA.**

5 To remedy the deficiency in the current renewable avoided-cost framework,  
6 PacifiCorp proposes an RPS price stream that reflects the benefit of an RPS-eligible  
7 renewable QF to PacifiCorp based on the extent that the QF allows PacifiCorp to avoid  
8 projected RPS-compliance costs.<sup>141</sup>

9 Oregon RPS compliance is based on retirement of RECs. But REC ownership has no  
10 impact on PacifiCorp’s treatment of QF output when calculating avoided energy and capacity  
11 costs because system operations and dispatch are the same for a QF regardless of REC  
12 ownership.<sup>142</sup> Thus, under PacifiCorp’s proposal, the energy and capacity components of the  
13 renewable avoided-cost price stream would be calculated using the same methodology as  
14 non-renewable avoided-cost prices, including use of the same methodology for establishing  
15 resource sufficiency/deficiency periods.<sup>143</sup> The only difference will be that the renewable  
16 avoided-cost price will also include the value associated with the avoided RPS-compliance  
17 costs.<sup>144</sup> Thus, the RPS avoided-cost pricing stream will reflect the non-RPS avoided-cost  
18 price stream plus avoided Oregon RPS-compliance costs.

19 For example, PacifiCorp’s 2017 IRP’s preferred portfolio includes the acquisition of  
20 an RPS-eligible renewable resource in 2021 and forecasts that PacifiCorp’s first RPS-

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<sup>141</sup> PAC/300, MacNeil/7.

<sup>142</sup> PAC/300, MacNeil/3.

<sup>143</sup> PAC/300, MacNeil/7.

<sup>144</sup> PAC/300, MacNeil/7; *See* REC/100, Lowe/4 (recognizing the renewable avoided-cost price “reflects the fact that renewable QFs help utilities meet more than just their load requirements, and also help utilities comply with their state [RPS] requirement.”).

1 compliance shortfall will not occur until 2035.<sup>145</sup> Under the current framework, PacifiCorp  
2 would be deemed to have an incremental RPS-compliance obligation in 2021. In reality,  
3 however, RECs provided by renewable QF today will allow PacifiCorp to avoid an  
4 incremental RPS-compliance obligation in 2035 because PacifiCorp has no incremental RPS-  
5 compliance costs in 2021.<sup>146</sup> PacifiCorp’s proposal would appropriately compensate the  
6 renewable QF for the avoided incremental RPS-compliance cost in 2035. The current  
7 framework, on the other hand, would require PacifiCorp to pay the QF for an incremental  
8 RPS-compliance cost that does not exist.

9 PacifiCorp’s proposed framework is consistent with FERC’s orders and the rationale  
10 underlying the Commission’s adoption of renewable avoided-cost prices. FERC made clear  
11 that an avoided-cost price can include costs associated with a state RPS obligation—but only  
12 to the extent the QF allows the utility to defer the RPS-compliance costs.<sup>147</sup> Similarly, when  
13 the Commission approved renewable avoided-cost pricing in Order No. 11-505, the only  
14 difference between renewable and non-renewable avoided-cost prices is the inclusion of  
15 avoided RPS-compliance costs in the renewable price.<sup>148</sup> Under PacifiCorp’s proposal, a QF  
16 that allows PacifiCorp to defer or avoid an RPS-compliance obligation receives an avoided-  
17 cost payment that includes the value of the avoided RPS-compliance obligation—no more  
18 and no less.

#### 19 IV. CONCLUSION

20 When balancing the interests of customers and QF developers, PacifiCorp has three  
21 recommendations. First, PacifiCorp requests that the Commission approve the PDDRR

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<sup>145</sup> PAC/300, MacNeil/7, 9.

<sup>146</sup> PAC/300, MacNeil/9.

<sup>147</sup> *California Public Utilities Comm’n*, 133 F.E.R.C. ¶ 26; *California Public Utilities Comm’n*, 134 F.E.R.C. ¶ 32.

<sup>148</sup> Order No. 11-505 at 9 (renewable QFs paid for RPS costs that are avoided).

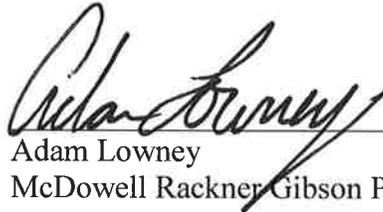
1 methodology for calculating renewable avoided-cost prices, including: (1) the deferral of  
2 like-for-like renewable resources; (2) the elimination of the market-price floor for non-  
3 standard avoided-cost prices; and (3) the calculation of avoided-cost prices based on all the  
4 QFs that have previously requested indicative pricing and are timely proceeding with  
5 negotiations.

6 Second, PacifiCorp also asks that the Commission find that the 2021 Wyoming wind  
7 resources included in the 2017 IRP preferred portfolio are not deferrable for purposes of  
8 avoided-cost pricing because of their unique factual circumstances.

9 Finally, PacifiCorp requests that the Commission open a generic investigation to  
10 change the framework for determining avoided cost prices for RPS-eligible QFs.

Respectfully submitted this 18<sup>th</sup> day of September, 2017.

By:



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Adam Lowney  
McDowell Rackner Gibson PC

Dustin T. Till  
Senior Counsel  
PacifiCorp d/b/a/ Pacific Power  
Attorneys for PacifiCorp