

1 **BEFORE THE PUBLIC UTILITY COMMISSION**
2 **OF OREGON**

3 **UM 1802**

4 In the Matter of the Investigation of
5 PacifiCorp's Non-Standard Avoided Cost
6 Pricing.

7
8 **STAFF OPENING BRIEF**

9 **I. Introduction and summary of recommendations.**

10 The Commission opened this expedited investigation to examine whether PacifiCorp's
11 avoided cost pricing for non-standard contracts under the Public Utility Regulatory Policy Act
12 (PURPA) should include a renewable price option, and if so, how that renewable price option
13 should be calculated. Staff recommends that:

- 14 1. As long as PacifiCorp is required to offer a standard renewable avoided cost price
15 stream, PacifiCorp should also offer a non-standard renewable avoided cost price
16 stream.
- 17 2. PacifiCorp's non-standard renewable prices should be calculated using the method
18 PacifiCorp employed prior to Order No. 16-337, which is to start with standard
19 avoided cost prices and adjust them for the FERC-allowed factors to take into
20 account certain characteristics of the contracting qualifying facility (QF).
- 21 3. PacifiCorp's proposal to use its Partial Displacement Differential Revenue
22 Requirement (PDDRR) should be rejected because it does not accurately calculate
23 avoided capacity costs when the contracting QF is not the same resource type as the
24 proxy resource taken from PacifiCorp's Integrated Resource Plan (IRP).
- 25 4. PacifiCorp's proposal to limit the availability of non-standard renewable prices to
26 QFs that are the same resource type as the proxy resource should be rejected.
5. The market-price floor should be retained during the sufficiency period until such
time as PacifiCorp demonstrates that a specific QF is unable to get to a market for
sale, or that it creates the situation in which PacifiCorp is forced to back down a
thermal resource.

- 1 6. Only QFs with executed contracts should be included in PacifiCorp's resource stack
when calculating a nonstandard avoided cost price.
- 2 7. The question of how to determine the start date of PacifiCorp's renewable resource
3 deficiency is outside the scope of this docket and should be addressed in another
4 proceeding.

5 **II. Answer to Question No. 1: PacifiCorp should offer a non-standard renewable**
6 **avoided cost price stream.**

7 Renewable avoided cost prices date back to a Commission order in 2011. In 2011, the
8 Commission ordered PacifiCorp and Portland General Electric (PGE) to offer renewable avoided
9 cost prices to QFs that agreed to transfer Renewable Energy Credits (RECs) to the utility during
10 the periods the utility was renewable resource deficient.¹ The Commission concluded that
11 "[b]ecause ORS 469A requires that electric utilities meet a renewable portfolio standard through
12 the acquisition of renewable energy credits (RECs) associated with qualifying renewable
13 generation resources a properly designed renewable energy avoided cost rate for renewable
14 resources would comply with PURPA."² After Order No. 11-505, PacifiCorp and PGE offered
15 both renewable and non-renewable avoided cost price streams to standard and non-standard QFs.
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17 In Docket No. UM 1610, an investigation into QF contracting and pricing, PacifiCorp
18 sought authority to use a new methodology to determine prices for non-standard contracts, the
19 Partial Displacement Differential Revenue Requirement (PDDRR) methodology. In support of
20 its request, PacifiCorp testified that the PDDRR methodology is capable of producing more
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25 ¹ *In the Matter of Public Utility Commission of Oregon Investigation into Resource Sufficiency*
26 *Pursuant to Order No. 06-538; Order No. 11-505 at 4.*

² *Id.*

1 accurate avoided cost prices than the pricing methodology the Commission had ordered for non-
2 standard contracts since 2005.³

3 The Commission approved PacifiCorp's use of the PDDRR methodology at the
4 conclusion of Phase II of Docket No. UM 1610.⁴ Because the methodology described by
5 PacifiCorp in testimony did not determine avoided cost prices for a non-thermal resource,
6 PacifiCorp's compliance filing for the UM M610 Phase II order did not include non-standard
7 renewable avoided cost prices. Staff and other stakeholders objected.⁵ The Commission ordered
8 this investigation to determine whether PacifiCorp should offer non-standard renewable avoided
9 cost prices and if so, how to calculate them.⁶

11 Staff recommends that the Commission answer the first question, whether there should be
12 a non-standard renewable avoided cost price stream, affirmatively. PacifiCorp's UM 1610
13 testimony in support of its request to use the PDDRR method includes no rationale for
14 discontinuing the requirement for renewable avoided cost prices for non-standard qualifying
15 facilities that dates back to 2011.

17 In 2011, the Commission required PacifiCorp and PGE to offer renewable avoided cost
18 prices, both standard and non-standard, because purchases from RPS-eligible QFs willing to cede
19 RECs to the utility would allow the utility to avoid costs to comply with the RPS.⁷ The
20 Commission reasoned that it was appropriate to have an avoided cost price stream based on the
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23 ³ Docket No. UM 1610 (Phase II) PAC/800 at 16-17.

24 ⁴ *In the Matter of Public Utility Commission of Oregon Investigation into Qualifying Facility*
Contracting and Pricing, Order No. 16-174, pp. 22-23.

25 ⁵ See Order No. 16-417 (ordering parties to submit comments).

26 ⁶ Order No. 16-429 (opening investigation).

⁷ Order No. 11-505.

1 pool of resources that the utilities could acquire to meet the RPS, which is a smaller pool than the
2 pool of resources that otherwise would be used to determine avoided cost prices.⁸

3 PacifiCorp has not provided a rationale for reversing the Commission's 2011 policy
4 decision to require a renewable avoided cost price stream. Oregon's RPS continues to exist and
5 in fact has doubled since 2011. No party in this case, not even PacifiCorp, argues that the
6 Commission should eliminate the avoided cost price stream for QFs entering into non-standard
7 contracts. Accordingly, Staff recommends that the Commission order PacifiCorp to offer a non-
8 standard renewable avoided cost price stream.
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10 **III. Answer to Question No. 2: The Commission should require PacifiCorp to return to**
11 **the method required prior to Order No. 16-174 to calculate non-standard renewable**
12 **avoided cost prices.**

13 **A. The method previously used by PacifiCorp to calculate non-standard prices**
14 **is superior to its PDDRR methodology.**

15 The second question underlying this docket is what methodology should PacifiCorp use
16 to calculate a non-standard renewable avoided cost price stream. Staff recommends that the
17 Commission require PacifiCorp to return to the method for determining non-standard avoided
18 cost prices that PacifiCorp used prior to obtaining approval of its PDDRR method in Order No.
19 16-337.⁹ The Commission required the utilities to use this method, which Staff will refer to as
20 the "Adjusted Standard Price Method," after its investigation into guidelines for non-standard
21 contracts concluded in 2007 (hereinafter referred to as the "Guidelines").¹⁰
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⁸ *Id.*

25 ⁹ Staff/200, Andrus/9.

26 ¹⁰ *In the Matter of Public Utility Commission of Oregon Staff's Investigation Relating to Electric
Utility Purchases from Qualifying Facilities, Order No. 07-360.*

1 In the Adjusted Standard Price Method, the starting point for determining prices for a
2 non-standard contract is the currently effective standard price.¹¹ The Guidelines prescribe how
3 the standard prices may be adjusted to take into account specific factors enumerated in the
4 Federal Energy Regulatory Commission rules implementing PURPA and specifically approved
5 by the OPUC.¹² And, Order No. 07-360 requires that the utility must provide the QF a
6 description of the methodology of each adjustment and how it was made.¹³

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8 The following Guidelines set forth the permissible adjustments to the standard avoided
9 cost prices for non-standard prices:

- 10 8. The utility should not make adjustments to standard avoided cost rates
11 other than those approved by the Oregon Commission and consistent with
12 these guidelines.
- 13 9. The utility should make adjustments to avoided costs for reliability on an
14 expected forward-looking basis. The utility should design QF rates to
15 provide an incentive for the QF to achieve the contracted level and timing
16 of energy deliveries.
- 17 10. The utility should make adjustments to avoided costs for dispatchability
18 on a probabilistic, forward-looking basis.
- 19 11. If avoided cost rates for a QF are calculated at the time of the obligation
20 and the utility's avoided resource is a fossil fuel plant, the utility should
21 adjust avoided cost rates for the resource deficiency period to take into
22 account avoided fossil fuel price risk.
- 23 12. Avoided cost rates for wind QFs should be adjusted for integration cost
24 estimates based on studies conducted for the utility's system, unless the
25 QF contracts for integration services with a third party.
 - 26 a. The utility should use the most recent integration cost data available,
consistent with its evaluation of competitively bid and self-build wind
resources.

25 ¹¹ Order No. 07-360 at Appendix A, p. 3 (Guideline 8).

26 ¹² See 16 C.F.R. §293.304(e).

¹³ Order No. 07-360, p. xx.

1 b. The portion of integration costs attributable to reserves costs should be
2 based on the difference in such costs between the wind QF and the
utility proxy plant.

3 c. The utility should base first-year integration costs on the actual
4 level of wind resources in the control area, plus the proposed QF.
5 Integration costs for years two through five of the contract should
6 be based on the expected level of wind resources in the control
7 area each year, including the new resources the utility expects to
add. Integration costs should be fixed at the year-five level,
adjusted for inflation, for the remainder of the life of the wind
projects in the control area.

8 d. The utilities are prohibited from using a long-range planning target for
9 wind resources as the basis for integration costs. However, if a utility is
10 subject to near-term targets under a mandatory Renewable Portfolio
Standard, the utility may base its integration costs on the level of
11 renewable resources it must acquire over the next 10 years.

12 e. In determining integration costs, the utility should make reasonable
13 estimates regarding the portion of renewable resources to be acquired that
will be intermittent resources.

14 13. The utility should adjust avoided cost rates for QF line losses relative to the utility
15 proxy plant based on a proximity-based approach.

16 14. The utility should evaluate whether there are potential savings due to transmission
17 and distribution system upgrades that can be avoided or deferred as a result of the
QF's location relative to the utility proxy plant and adjust avoided cost rates
18 accordingly.

19 15. The utility should not adjust avoided cost rates for any distribution or
20 transmission system upgrades needed to accept QF power. Such costs should be
separately charged as part of the interconnection process.

21 16. A utility should not adjust avoided cost rates based on its determination of the
22 additional cost it might incur for any debt imputation by a credit rating agency.¹⁴

23 PGE currently uses the Adjusted Standard Price Method and Staff believes

24 PacifiCorp should return to it. Staff supported PacifiCorp's proposal to use its PDDRR

25 method in Docket No. UM 1610, believing the PDDRR method would be a more precise

26 ¹⁴ Order No. 07-360 at App. A, pp. 3-5

1 way account for the characteristics of the contracting QF when calculating avoided cost
2 prices. As described in the section below, this has not proved to be the case.

3 The Adjusted Standard Price Method is designed to allow the characteristics of
4 contracting QFs to be taken into account when determining what costs a utility will avoid
5 with a purchase from the QF. And, unlike the PDDRR, it is sufficiently flexible that it
6 can be used to calculate avoided cost prices for renewable QFs that are not the same
7 resource type as the avoidable proxy resource in PacifiCorp's Integrated Resource Plan
8 (IRP). Furthermore, the Adjusted Standard Price Method provides more predictability to
9 QFs regarding prices than they can expect under the PDDRR method. Finally, the
10 Adjusted Standard Price Method is understandable and because the utility must explain
11 the methodology for each adjustment to the standard price, it is transparent.
12

13 **B. PacifiCorp's PDDRR methodology is not suited for calculating avoided cost**
14 **prices.**

15 Staff recommends that the Commission reject PacifiCorp's proposal to use its
16 PDDRR methodology to calculate the non-standard renewable avoided cost price
17 stream. PacifiCorp's testimony makes clear that the PDDRR methodology is not
18 suited for calculating avoided cost prices consistently with previously implemented
19 Commission policies.
20

21 First, PacifiCorp's PDDRR method does not calculate avoided capacity costs
22 based on the fixed prices of the avoided resource. The Commission has previously
23 determined that sufficiency period prices are based on avoided energy costs and
24 deficiency-period prices are based on avoided energy and avoided capacity costs.
25 Historically, the Commission has based avoided capacity costs on the fixed costs of
26 the next avoidable resource in the utility's IRP. PacifiCorp's PDDRR methodology

1 does not have functionality to incorporate the avoided fixed costs of a resource into
2 the price.

3 Second, according to PacifiCorp, its PDDRR model is not able to produce
4 accurate avoided cost prices for QFs that are of a different resource type than the
5 deferred proxy resource taken from PacifiCorp's IRP. It appears from PacifiCorp's
6 testimony that the accuracy of its PDDRR modeling is impinged by very basic
7 differences between the operating characteristics of various intermittent resources.
8

9 PacifiCorp's witness testified as follows:

10 **Q. Why is it appropriate to limit deferral of renewable resources to**
11 **the same type (i.e. solar for solar, wind for wind)?**

12 **A.** Renewable resources have significant differences in their operational
13 characteristics, and widely varying impacts on the Company's system.
14 For instance, solar generation is more prevalent in the summer with
15 diurnal and seasonable characteristics based on the position of the sun
16 and the potential for cloud cover. On the other hand, wind output is
17 more prevalent in the winter and while not as predictable as the rising
18 of the sun, it is strongly correlated to the output of other wind
19 resources in the vicinity. Despite some geographic differences,
20 renewable resources of the same type are thus much more similar to
21 each other than they are to renewables of other types. Maintaining
22 capacity equivalence between resources with widely disparate capacity
23 contributions could introduce unintended consequences and
24 unreasonable results. With this in mind, the Company believes it is
25 appropriate to limit the deferral of renewable resource capacity to QFs
26 of the same type.¹⁵

21 PacifiCorp's testimony boils down to the following points:

- 22 • Different renewable resource types have significant differences in
23 operational characteristics and widely varying impacts on the
24 Company's system.

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26 ¹⁵ PAC/100, MacNeil/5-6.

- 1 ○ Solar generation is more prevalent in the summer and the
2 generation depends on the position of the sun and existence
3 potential for cloud cover.
- 4 ○ Wind generation is not as predictable as the sun rising, but is
5 strongly correlated to output of nearby wind resources.
- 6 • Putting aside differences based on location, renewable of the same
7 type are “much more similar to each other than they are to
8 renewables of other types.”
- 9 • Maintaining capacity equivalence between resources with widely
10 disparate capacity contributions could introduce unintended
11 consequences and unreasonable results.

12 If the PDDRR method is not capable of overcoming the difficulties presented
13 in modeling differing operating characteristics of QF such as those described above, it
14 is not an effective tool for determining avoided costs and should be abandoned.¹⁶ A
15 methodology with such limited functionality is not an improvement on the Standard
16 Price Adjustment Method.¹⁷

17 In any event, PacifiCorp’s proposal to limit avoided cost prices for like
18 resources is inconsistent with FERC’s opinions regarding implementation of PURPA.
19 In its 1995 opinion in *SoCal Edison*, FERC stated that, regardless of how the state
20 determines avoided cost, it must in its process reflect prices available from “all
21 sources *able to sell to the utility* whose avoided cost is being determined.”¹⁸ In 2010,
22 FERC clarified that the pool of resources that are “able to sell to the utility” may be
23 limited by state mandate, i.e., a renewable portfolio standard. Meaning, if a state
24 requires a utility to procure a certain percentage of energy from generators with

25 ¹⁶ Staff/200, Andrus/9, lines 5-7.

26 ¹⁷ Staff/200, Andrus/9, lines 10-17.

¹⁸ Order No. 11-505, p. 4, citing *SoCal Edison*, 70 FERC 61,215, 61,677.

1 certain characteristics, the avoided cost prices offered to a QF with those
2 characteristics may be based a pool of available resources that is limited to resources
3 with those characteristics.¹⁹

4 As noted above, the renewable avoided cost prices are based on the pool of
5 resources that PacifiCorp may acquire to meet Oregon's RPS. Although the RPS in
6 Oregon requires that utilities serve customers with using a certain percentage of
7 electricity from specified renewable resource types, the standard is not resource type
8 specific. Instead, "ORS Chapter 469A requires that electric utilities meet a renewable
9 portfolio standard through the acquisition of renewable energy credits (RECs)
10 associated with qualifying renewable generation resources[.]”²⁰

12 A MWh of renewable solar provides the same RPS value as a MWh of
13 renewable wind. Accordingly, the Commission has no legal basis to calculate
14 avoided cost prices for QFs using a pool of available resources limited to the same
15 resource type as the contracting QF.

17 **C. The Commission should maintain the market-price floor for**
18 **sufficiency period prices.**

19 In its order resolving issues in Phase II of Docket No. UM 1610, the
20 Commission set a floor for non-standard avoided cost prices at the wholesale power
21 price forecast that is used to set sufficiency period avoided cost prices in standard QF
22 contracts.²¹ The Commission agreed with Staff and other parties that the market-
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¹⁹ *California Public Utilities Commission*, 133 FERC 61,059, pp. 13-14 (Order Granting
25 Clarification and Dismissing Rehearing) (2010).

26 ²⁰ Order No. 11-505, p. 4.

²¹ Order No. 16-174, p. 23.

1 price floor ensures that QFs are compensated for both energy and capacity.²² The
2 Commission's decision to impose the market-price floor on non-standard prices is
3 consistent with the Commission' long-held policy that QFs should be compensated
4 for avoided capacity during deficiency and sufficiency periods.²³

5 In an order clarifying its 2016 decision regarding the market-price floor for
6 sufficiency-period prices, the Commission acknowledged that "certain transmission
7 constraints could exist that prevent otherwise economic market sales of low cost
8 energy," but noted that "PacifiCorp previously indicated that such transmission
9 constraints do not exist in Oregon."²⁴ Rather than adopting PacifiCorp's request to
10 eliminate the market-price floor to address the potential that transmission constraints
11 could have on ability to resell electricity, the Commission "encourage[d] utilities to
12 notify us when such conditions actually exist in Oregon."²⁵

14 PacifiCorp has not provided persuasive evidence to show the type of
15 transmission constraint referred to in Order No. 16-317 exists or otherwise shown
16 why the Commission's decision to impose a market-price floor on sufficiency-period
17 prices should be reversed. Notably PacifiCorp's market-price forecast should take
18 into account market dynamics such as market depth and price volatility.
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23 ²² Order No. 16-174, p. 23.

24 ²³ See Order No. 05-584, p. 27 ("We conclude that the basis for differentiation [between resource
25 deficiency- and sufficiency-period prices] should not be whether capacity is valued *at all*, but
how it is valued.") (Emphasis in original.)

26 ²⁴ Order No. 16-337, p. 6.

²⁵ Order No. 16-337, p. 6.

1 And, as Staff testified, PacifiCorp's modeling results of market dynamics are
2 irrelevant unless applied to an individual project.²⁶ The operating assumption is that
3 power that can reach a market can be sold at that market. The price paid for that
4 power is not known, which is why the Commission relies on PacifiCorp's market
5 forecast estimate. The relative volume of power that may be sold at the market in
6 question may be estimated based on historical data for a specific path, time, etc., but
7 such analysis is only probative in the context of any individual QF, with its unique
8 dynamics.²⁷
9

10 **D. Only QFs with executed contracts should be included in**
11 **PacifiCorp's resource stack for purposes of calculating avoided**
12 **cost prices.**

13 PacifiCorp proposes that all QFs that have asked for indicative pricing should
14 be included in PacifiCorp's resource stack when calculating non-standard avoided
15 cost prices for a QF. Staff believes this is untenable and artificially lowers the
16 indicative prices for QFs. In absence of another adequate milestone to signal when a
17 QF seeking a contract should be included in PacifiCorp's resource stack for the
18 purpose of determining avoided cost prices for any particular QF, Staff recommends
19 that the Commission specify that only QFs that have executed contracts with
20 PacifiCorp be included.
21

22 **E. The Commission should reject PacifiCorp's proposal to modify the**
23 **Commission's determination in Order No. 11-505 as to when a**
24 **renewable QF is eligible for a renewable avoided cost price**
25 **stream.**

26 ²⁶ Staff/200, Andrus/12-13.

27 ²⁷ Staff/200, Andrus/13.

1 PacifiCorp argues that renewable QFs should not be eligible for renewable
2 avoided cost prices when PacifiCorp's IRP indicates that next renewable resource that
3 PacifiCorp intends to acquire is not specifically for RPS compliance. Staff urges the
4 Commission to reject PacifiCorp's proposal.

5 The policy issue presented in PacifiCorp's request is outside the limited scope
6 of this docket. The Commission recently stated that it intends to address "[t]he
7 avoided cost implications where a utility is pursuing near-term capacity investments
8 that are not driven by reliability, renewable portfolio standard (RPS), or load service
9 needs."²⁸ To the extent the Commission adopts a modification to its implementation
10 of PURPA such as that suggested by PacifiCorp it should do so after all stakeholders
11 have opportunity to comment.
12

13 In any event, PacifiCorp's proposal is inconsistent with Staff's
14 recommendation to use the Adjusted Standard Price Method to calculate PacifiCorp's
15 non-standard renewable avoided cost prices. Under Staff's proposed method,
16 PacifiCorp must use the standard avoided renewable avoided cost prices as the
17 starting point for the non-standard prices, making adjustments for certain operating
18 characteristics allowed under FERC rules and Commission order. The standard
19 renewable avoided cost prices are available to all RPS compliant renewable QFs that
20 are willing to cede RECs to the utility starting with the year of the next planned
21 renewable resource acquisition in PacifiCorp's IRP. And, adjusting the prices to take
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26 ²⁸ *In the Matter of PacifiCorp, dba, Pacific Power Investigation into Schedule 37 – Avoided Cost Purchases from Qualifying Facilities of 10,000 kW or less, Order No. 17-239, p. 3.*

1 into account a different renewable deficiency period is not one of the permissible
2 adjustments.

3 **E. The Commission should reject PacifiCorp's proposal to modify the**
4 **Commission's determination in Order No. 11-505 as to when a**
5 **renewable QF is eligible for a renewable avoided cost price**
6 **stream.**

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8 avoided cost prices when PacifiCorp's IRP indicates that next renewable resource that
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14 that are not driven by reliability, renewable portfolio standard (RPS), or load service
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18 In any event, PacifiCorp's proposal is inconsistent with Staff's
19 recommendation to use the Adjusted Standard Price Method to calculate PacifiCorp's
20 non-standard renewable avoided cost prices. Under Staff's proposed method,
21 PacifiCorp must use the standard avoided renewable avoided cost prices as the
22 starting point for the non-standard prices, making adjustments for certain operating
23 characteristics allowed under FERC rules and Commission order. The standard
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26 ²⁹ *In the Matter of PacifiCorp, dba, Pacific Power Investigation into Schedule 37 – Avoided Cost Purchases from Qualifying Facilities of 10,000 kW or less, Order No. 17-239, p. 3.*

1 renewable avoided cost prices are available to all RPS compliant renewable QFs that
2 are willing to cede RECs to the utility starting with the year of the next planned
3 renewable resource acquisition in PacifiCorp's IRP. And, adjusting the prices to take
4 into account a different renewable deficiency period is not one of the permissible
5 adjustments.

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8 **III. Conclusion.**

9 Staff recommends that the Commission adopt the recommendations set forth
10 on pages one and two of this brief.

11 DATED this 18th day of September 2017.

12 Respectfully submitted,

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16

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