

December 18, 2014

VIA ELECTRONIC FILING AND OVERNIGHT DELIVERY

Public Utility Commission of Oregon 3930 Fairview Industrial Drive SE Salem, Oregon 97302-1166

Attn: Filing Center

RE: UM 1610—Investigation into Qualifying Facility Contracting and Pricing

PacifiCorp's Capacity Contribution Closing Brief and Motion to Admit Pre-Filed

Direct Testimony and Exhibits

PacifiCorp dba Pacific Power (PacifiCorp or the Company) encloses for filing in the above-referenced docket PacifiCorp's Capacity Contribution Closing Brief and Motion to Admit the Pre-Filed Direct Testimony and Exhibits of Mr. Gregory N. Duvall on behalf of the Company.

Inquiries may be directed to Natasha Siores, Director, Regulatory Affairs & Revenue Requirement, at (503) 813-6583.

Sincerely,

R. Bryce Dalley

Vice President, Regulation

Enclosure

Cc: Service List-UM 1610

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UM 1610

In the Matter of PUBLIC UTILITY COMMISSION OF OREGON

Investigation into Qualifying Facility Contracting and Pricing.

PACIFICORP'S CAPACITY CONTRIBUTION CLOSING BRIEF

I. INTRODUCTION 1 2 The Public Utility Commission of Oregon (Commission) has been asked by 3 Commission Staff (Staff), the Oregon Department of Energy, Obsidian Renewables 4 (Obsidian), the Community Renewable Energy Association (CREA), and One Energy to 5 abandon its long-standing proxy method for calculating avoided costs. PacifiCorp dba 6 Pacific Power (PacifiCorp), Portland General Electric Company (PGE), and Idaho Power 7 Company oppose this request. This issue arose when Obsidian asked the Commission to 8 "clarify" a narrow aspect of PacifiCorp's renewable avoided cost pricing—the "Capacity 9 Adder" applicable to solar qualifying facilities (QFs)—that the Commission adopted in Phase 10 I of this proceeding. But the original request for "clarification" of the Capacity Adder 11 calculation broadened into a proposal to abandon the long-standing rate design of Oregon's 12 proxy method in favor of a novel methodology that would predetermine a capacity dollar 13 payment amount regardless of a QF's performance, and would result in rates that unlawfully 14 exceed avoided costs. 15 The Commission-approved methodology for calculating avoided costs uses a 16 volumetric rate, where the capacity dollars of the avoided resource are spread over the on-17 peak hours and added to the energy dollars to create a dollar-per-megawatt-hour (\$/MWh)

- 1 rate as described in more detail below. The Commission correctly adjusted the Capacity
- 2 Adder methodology in Phase I to account for the manner in which intermittent QFs
- 3 contribute (or do not contribute) to peak-hour capacity needs.
- 4 PacifiCorp's unrebutted evidence demonstrates that the current proxy method
- 5 overstates avoided costs during deficiency period by at least \$0.8 million per 10 megawatts
- 6 (MW) of solar QFs. As a result, PacifiCorp's customers are already overpaying \$6 million
- 7 annually for 75 MW of signed solar QF contracts—an amount that will increase by another
- 8 \$27 million annually for the 325 MW of solar QF capacity in PacifiCorp's queue. The
- 9 Commission recently recognized "that the application of our current [avoided cost]
- methodology may result in the utility and its customers offering prices in excess of actual
- avoided costs." Staff's proposal, if adopted, would exacerbate this problem and further
- disassociate QF payments from avoided costs. Such a result would conflict with the Public
- 13 Utility Regulatory Policies Act (PURPA) and harm utility customers. Therefore, PacifiCorp
- 14 respectfully asks that the Commission affirm the Capacity Adder calculations adopted in
- 15 Phase I.

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II. BACKGROUND

17 A. Valuing Capacity under the Proxy Method

- Since 2006, PacifiCorp has used the Commission-approved proxy method for
- 19 calculating avoided cost prices during the resource deficiency period.² For standard avoided
- 20 costs, the proxy is assumed to be the next deferrable major thermal resource as identified in

¹ Order No. 14-058, Docket No. UM 1610 at 7 (Feb. 24, 2014).

² The Commission adopted the standard proxy avoided cost rate methodology in Order No. 06-538, Docket No. UM 1129 (Sept. 20, 2006).

- the most recent acknowledged Integrated Resource Plan (IRP).³ For PacifiCorp, the next
- 2 major deferrable thermal resource is a combined cycle combustion turbine (CCCT).⁴
- 3 Including capacity costs in the standard avoided cost rates is achieved using a two-step
- 4 process. First, the capacity-related portions of the CCCT's fixed costs are converted to a
- 5 \$/MWh rate using the proxy resource's capacity factor identified in the utility's IRP.⁵
- 6 Second, the rate is applied to all on-peak hours (6 AM to 10 PM, Monday through Saturday,
- 7 excluding holidays, or 57 percent of the hours in a year).
- 8 The standard renewable avoided cost rate is calculated in a similar manner, except the
- 9 proxy resource is the next deferrable renewable resource, which is a Wyoming wind plant for
- 10 PacifiCorp. Consistent with Order No. 14-058, the standard renewable avoided cost rate
- also includes a Capacity Adder. If additional capacity is deemed to be deferred beyond the
- wind proxy resource (as is the case for solar QFs), then an incremental amount of the CCCT
- proxy is also deemed deferred. This second capacity deferral (i.e., the Capacity Adder) is
- calculated in the same manner as standard avoided cost rates—the capacity related portion of
- the CCCT's fixed costs are converted to a \$/MWh rate using the CCCT capacity factor, 9 and
- the rate is applied to all on-peak hours. 10

B. Order No. 14-058: The Commission Modified the Proxy Method

In Phase I of this docket, the Commission considered whether changes to the standard

and renewable avoided cost rate structures were warranted. Among the issues considered

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³ PAC/600, Duvall/1-2.

⁴ PAC/600, Duvall/2.

⁵ PAC/600, Duvall/2.

⁶ PAC/600, Duvall/2.

⁷ PAC/600, Duvall/3.

⁸ PAC/600, Duvall/3.

⁹ PAC/600, Duvall/3-4.

¹⁰ PAC/600, Duvall/3-4,

- 1 was whether the renewable avoided cost price should be adjusted to reflect the actual
- 2 contribution to capacity made by intermittent QF resources relative to the proxy resource.
- 3 Staff correctly recognized that, under the standard and renewable methods, avoided cost
- 4 payments and the actual capacity benefits of intermittent QFs are often mismatched. 11
- 5 Rather than lowering the eligibility cap (as proposed by PacifiCorp, PGE, and Idaho
- 6 Power), Staff addressed this mismatch by adjusting the utilities' avoided cost prices "to
- 7 account for the differences in the value of capacity produced by wind, solar, and baseload
- 8 renewable QFs." Staff proposed basing the adjustment on the capacity contribution factor
- 9 identified in a utility's acknowledged IRP. More specifically, Staff stated:
- For the Renewable Method, Staff proposes adjusting the capacity
- component implicit in the renewable on-peak price by the
- incremental capacity contribution of the specific QF resource type
- relative to the avoided renewable [proxy] resource. 13
- Staff detailed its proposed adjustment to the standard renewable method in Exhibit
- 15 Staff/103, Bless/2. No party to Phase I argued that the proposed capacity adjustment set out
- in Staff's testimony would result in a "double discount."
- 17 In Order No. 14-058, the Commission adopted Staff's proposed adjustment to the
- standard renewable method to reflect the actual varying value of capacity produced by
- different renewable generating resources. ¹⁴ The Commission correctly observed that this
- adjustment was necessary to help ensure that "utilities pay no more than avoided costs." ¹⁵

¹¹ Staff/100, Bless/16.

the Staff/100, Bless/16. In the alternative, Staff argued that the eligibility cap should be lowered if the Commission did not adopt the proposed capacity adjustment. Staff/100, Bless/37 ("If no modifications are adopted, then staff recommends a 3 MW cap for all QF types, as also proposed by PacifiCorp. Staff believes that the lower cap is necessary to minimize the impact of the mismatch between avoided cost payments and the actual avoided costs.")

¹³ Staff/100, Bless/23.

¹⁴ Order No. 14-058 at 12. Staff also proposed a similar adjustment to the standard method, but the Commission did not adopt it.

¹⁵ Order No. 14-058 at 12.

- 1 The Commission also recognized that the adjustment would result in *higher* on-peak prices
- 2 for solar and baseload renewable QFs. 16

C. Motions for Clarification

- 4 On April 24, 2014, Obsidian filed a Motion for Clarification, which asked the
- 5 Commission to clarify the manner in which the Capacity Adder applicable to solar QF
- 6 resources is calculated in accordance with Staff/102-103. Although no party raised this
- 7 objection during Phase I, Obsidian alleged that the Capacity Adder calculations approved in
- 8 Order 14-058 results in a "double discount." On the same day, OneEnergy and CREA filed
- 9 a Motion for Clarification and Application for Reconsideration, which sought
- 10 (1) "clarification" of how capacity payments for Renewable Solar QF Resources are
- calculated, and (2) reconsideration of issues relating to third-party transmission costs. While
- the Obsidian and OneEnergy/CREA motions were couched in terms of "clarification," they
- 13 effectively sought reconsideration of straightforward capacity payment calculations that were
- 14 adopted in Order No. 14-058.
- On June 10, 2014, the ALJ ruled that the "parties should address the methodology
- applicable to renewable solar QF resources, raised by Obsidian's motion...in the
- investigations currently taking place for Pacific Power's and Idaho Power's compliance
- 18 filings in this docket." Rather than further delaying PacifiCorp's avoided cost update,
- 19 Staff, PacifiCorp, and a number of other parties stipulated that the solar capacity contribution
- 20 issue would be addressed on an expedited basis as part of Phase II of this docket.

¹⁶ Order No. 14-058 at 15.

 ¹⁷ See Obsidian Renewable LLC's Motion for Clarification at 2 (Apr. 24, 2014) ("Obsidian is seeking clarification of how the Capacity Adder devised by Staff will be applied to Renewable Solar QF Resources.")
 ¹⁸ ALJ Ruling at 2 (June 10, 2014). On April 10, 2014, PacifiCorp filed updated avoided costs and power purchase agreements in compliance with Order No. 14-058. See Advice No. 14-007 (Apr. 10, 2014).

III. **ARGUMENT**

2 3	A. The Commission Should Affirm the Capacity Adder Calculations Adopted in Phase I
4	The methodology adopted in Phase I for calculating capacity costs should be
5	affirmed. During Phase I, Staff and the Commission correctly recognized that capacity
6	payments to intermittent QFs under standard and renewable avoided cost price streams can
7	overvalue the actual contribution to capacity such resources make during peak hours. 19 The
8	Commission corrected this error by adjusting the capacity payment to reflect the actual
9	capacity contribution of various resources.
10	Under the long-standing proxy method, capacity costs are included in avoided cost
11	rates using a two-step construct. First, the capacity-related portion of the proxy resource's
12	fixed costs is converted to a volumetric \$/MWh rate using the proxy resource's capacity
13	factor identified in the applicable IRP. That rate is then applied to all on-peak hours. Under
14	the methodology adopted in Order No. 14-058, the proxy resource's capacity costs (i.e., the
15	volumetric \$/MWh rate) are multiplied by the QF's capacity contribution, and the resulting
16	rate is applied to on-peak hours.
17	Hypothetically speaking, if a solar QF provided the same amount of capacity in all
18	hours that the proxy resource provides, it would receive the full value of capacity. But that is
19	not the case. Solar QFs do not provide on-peak capacity in every hour of the on-peak period
20	for the simple reason that the sun is not shining during all on-peak hours. ²⁰ The capacity

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contribution adjustment adopted in Order No. 14-058 properly accounts for the "availability

¹⁹ Staff/100, Bless/16; Order No. 14-058 at 12, 15.
20 See Staff/300, Andrus/8-9 ("[It] is impossible for a solar QF to generate during" "peak hours when the sun is not shining").

of capacity or energy from a qualifying facility during the system daily and seasonal peak

2 periods" consistent with FERC's and the Commission's regulations.²¹

3 The Commission-approved methodology does not result in a "double discount" as 4 Obsidian, Staff, and others argue. Obsidian and Staff do not object to the "first discount," 5 which is the adjustment that accounts for an intermittent QF's capacity contribution relative to the proxy resource.²² Instead, they object to applying the adjusted volumetric rate to on-6 7 peak hours, referring to this step as a "second discount." But this purported "second 8 discount" is not a discount from avoided costs. Utilities are only capacity deficient during 9 on-peak hours, so additional capacity is only avoided during on-peak hours. The current 10 methodology correctly reflects the actual capacity contribution of intermittent OFs only to 11 on-peak hours (i.e., those hours when reliability events are most likely)—an approach that is

Furthermore, the Commission-approved methodology correctly uses the proxy resource's capacity factor (rather than the QF's capacity factor, as CREA and OneEnergy have argued) to determine capacity payments. Avoided costs must reflect that "actual deferral or avoidance of that resource." Using a QF's capacity factor, rather than the proxy resource's capacity factor, would result in avoided costs that are disassociated from a utility's actual incremental costs of avoided capacity.

consistent with PURPA and the Commission's long-standing avoided cost methodology.

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²¹ 18 C.F.R. § 292.304(e)(2); OAR 860-029-0040(5)(b).

²² See, e.g., Obsidian's Motion for Clarification at 2 ("Obsidian supports the Commission's modification of the renewable avoided cost price calculation to reflect a QF's capacity contribution to a utility's portfolio."); Obsidian/200, Brown/3 ("Obsidian was clear in its motion for clarification that it was not challenging the conclusion to pay a different capacity rate to different resource types.")

²³ Order No. 05-584 at 26. See also OAR 860-029-0010(a) ("Avoided costs" means the electric utility's incremental costs of...capacity...but for the purchase from the [QF], the electric utility would generate itself or purchase from another source."

B. Staff's New Proposal Would Violate PURPA by Overvaluing the Capacity Contribution of Intermittent QFs

3 Under PURPA, "full avoided costs [are] the maximum rate [the Commission] may

- 4 prescribe."²⁴ When it adopted PURPA, Congress imposed this incremental ceiling on QF
- 5 rates to ensure ratepayer indifference.²⁵ Avoided cost rates must be just and reasonable to
- 6 utility customers and must reflect the incremental cost of electric energy and capacity that the
- 7 utility would have otherwise incurred.²⁶

8 Staff has proposed to abandon the Commission-approved rate design and proposes a

- 9 novel methodology for valuing capacity that will result in prices that exceed PacifiCorp's
- avoided costs.²⁷ The proposed methodology is inconsistent with PURPA, is not in the public
- interest, and should be rejected by the Commission. Furthermore, Staff's proposal goes far
- beyond the relief Obsidian initially requested in its Motion for Clarification. Obsidian
- initially sought to clarify a narrow aspect of the standard renewable prices stream—the
- 14 Capacity Adder applicable to solar QFs. That initial request, however, has expanded into a
- 15 complete reworking of the manner in which the capacity contributions of intermittent QFs
- 16 are valued.

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²⁴ Am. Paper Inst., Inc. v. Am. Elec. Power Serv. Corp., 461 U.S. 402, 413 (1983).

²⁵ FERC, Notice of Proposed Rulemaking, Administrative Determination of Avoided Costs, Rates for Sale of Power to Qualifying Facilities, and Interconnection Facilities, Docket No. RM88-6-00; IV F.E.R.C. Statutes and Regulations (CCH) ¶ 32,457 (1988). See also Order No. 05-584 at 30 (May 13, 2005) ("Pursuant to section 210(b) of PURPA, the rate paid to QFs cannot exceed the incremental cost to the utility of alternative electric energy. Consequently, in setting avoided cost rates, only costs which would actually be incurred by a utility in lieu of purchasing QF power may be compensated for by rates that are based on avoided costs. The authority of states to prescribe rates for sales by QFs that exceed avoided costs is clear: states are preempted from doing so by section 210(b) of PURPA.").

by section 210(b) of PURPA.").

26 ORS 758.505(1) and .515(2)(b); OAR 860-029-0040(1)(b). See also Order No. 14-058 at 22 n.38 ("FERC defines avoided costs as 'the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source.' 18 C.F.R. § 292.101(b)(6).").

²⁷ Staff adopted a proposal first advanced by Obsidian in its motion for clarification.

Under Staff's proposal, a fixed annual capacity payment would first be determined on a \$/MW basis.²⁸ Staff characterizes this step as "analogous to determining an annual revenue requirement for a capacity resource."²⁹ Staff then advances two alternatives for spreading the predetermined annual capacity payment over the course of a year.³⁰

Implicit in Staff's proposal is its erroneous assumption that intermittent QFs avoid the full value of the proxy resource's capacity contribution. Staff states that "it is impossible for a solar QF to generate during [peak hours when the sun is not shining]. Therefore, payment for capacity based on a volumetric rate which assumes availability during most or all peak hours is inappropriate when applied to a resource that is incapable of generating in the number of hours on which the volumetric rate is based." But the simple fact is that nondispatchable QF resources like solar do not provide stand-ready capacity and only provide value when energy is delivered. Avoided cost rates must account for the "availability of capacity ... from a [QF] during the system daily and seasonal peak loads." Disregarding the availability of a QF's actual contribution to capacity during peak hours conflicts with this standard.

Staff's proposal also unlawfully inflates avoided costs. After calculating the annual capacity payment, Staff proposes two methods for spreading those costs. Under one method, the CCCT capacity dollars would be converted to a \$/MWh rate using a solar QF's capacity factor, rather than the proxy resource's capacity factor. This methodology would result in prices that exceed avoided costs by reducing the number of hours over which capacity costs

²⁸ Staff/300, Andrus/9.

²⁹ Staff/300, Andrus/9.

³⁰ Staff/300, Andrus/9.

³¹ Staff/300, Andrus 8-9.

³² OAR 860-029-0040(1)(b) and (5)(b); 18 C.F.R. § 292.304(e)(2).

- are spread.³³ If adopted, this methodology would generate prices that are higher than the 1
- Commission has determined equal avoided costs. 2
- Staff's proposal is also flawed because it can result in avoided cost payments to an 3
- 4 intermittent QF that could potentially equal or exceed payments to a baseload QF. For
- 5 example, if the incremental capacity contribution for solar is 25 percent and the assumed
- 6 capacity factor for solar is any less than 25 percent, the on-peak price for a solar QF would
- exceed the on-peak price for a baseload QF.³⁴ Once again, such a result would squarely 7
- conflict with PURPA by not accurately reflecting the "availability of...capacity from a [OF] 8
- during...peak periods."35 9
- Capacity Contribution Values from an Acknowledged IRP Should Be Used in 10 **Avoided Cost Calculations** 11
- 12 Obsidian argues that PacifiCorp should use updated capacity contribution values for
- 13 avoided cost calculations, rather than those values set out in PacifiCorp's latest
- 14 acknowledged IRP. As an initial matter, Obsidian's proposal is outside the scope of this
- 15 proceeding. In Phase I, the Commission ordered PacifiCorp to use the capacity contribution
- 16 from its acknowledged IRP for avoided cost rates. No party sought clarification or
- 17 reconsideration of the Commission's conclusion.
- 18 The updated capacity values referenced by Obsidian were developed in support of
- 19 PacifiCorp's 2015 IRP, which will be filed with the Commission in March 2015. The
- 20 updated capacity values will have downstream impacts in the IRP, such as the timing of
- PacifiCorp's next major thermal resource acquisition.³⁶ Cherry-picking the updated capacity 21

³³ PAC/700, Duvail/5.
³⁴ PGE/500, MacFarlane/3.

³⁵ OAR 860-029-0040(5)(b); 18 C.F.R. § 292.304(e)(2).

³⁶ PAC/600, Duvall/9.

- 1 contribution values without considering the other downstream impacts in the IRP is
- 2 inappropriate and would result in unlawful rates that exceed avoided costs.

avoided cost rates have been incorrectly calculated over the past decade.

D. The Capacity Contribution Component of Avoided Costs Should Be Addressed In Connection With Other Aspects of Rate Design

During Phase I of this proceeding, the Commission addressed all aspects of avoided cost rate design, including adjustments to the capacity calculations. Staff, at the behest of certain QFs, is now seeking to fundamentally alter the methodology the Commission conclusively adopted in Order No. 14-058. Implicit in Staff's proposal is an assumption that

The record demonstrates that PacifiCorp's currently approved avoided cost rates suffer from flaws that harm consumers and could be interpreted as resulting in unlawful rates. Mr. Gregory N. Duvall's unrebutted testimony identifies, for example, a significant issue associated with the mismatch of energy quantities between solar QFs and the avoided renewable proxy resource that results in rates that could be interpreted as unlawfully exceeding avoided costs. Indeed, Mr. Duvall's testimony reveals that the current proxy method overstates avoided costs during the deficiency period by at least \$0.8 million for each 10 MW of solar QFs. As a result, PacifiCorp's customers will annually overpay approximately \$6 million for the 75 megawatts of signed solar QF contracts and another \$27 million annually for the approximately 325 MW of solar QFs in the queue. This

The proxy method also overstates avoided costs because it assumes the avoided energy costs in the off-peak period during the deficiency period are equal to the fuel costs of

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evidence is unrebutted.

³⁷ PAC/600, Duvall/9.

³⁸ PAC/600, Duvall/10,

- the proxy CCCT. But in reality, CCCT fuel costs are not necessarily the lowest cost option
- 2 in off-peak periods; therefore, avoided costs are overstated.
- Revisions to avoided cost rate design, particularly revisions as significant as Staff's,
- 4 should not be considered in isolation. Instead, changes to rate design should be considered in
- 5 a holistic manner, as was the case in Phase I. This would allow all parties, including
- 6 PacifiCorp and other impacted utilities, to design rates that do not overstate avoided costs,
- 7 and that protect customers.

8 IV. CONCLUSION

- 9 For the reasons set forth above, PacifiCorp respectfully asks the Commission to reject
- 10 Staff's proposal and affirm the Capacity Adder methodologies adopted in Phase I.
- 11 Respectfully submitted this 18th day of December, 2014.

By:

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CERTIFICATE OF SERVICE

I certify that I served a true and correct copy of PacifiCorp's Capacity Contribution Closing Brief and Motion to Admit Pre-Filed Direct Testimony and Exhibits on the parties listed below via electronic mail and/or US mail in compliance with OAR 860-001-0180.

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Dated this 18th day of December, 2014.

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