

BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON

REPLY TESTIMONY OF DAVID W. BROWN

ON BEHALF OF

OBSIDIAN RENEWABLES, LLC

ON SOLAR CAPACITY

AUGUST 7, 2015

1 **Q. PLEASE STATE YOUR NAME, AND CURRENT EMPLOYMENT POSITION**
2 **OR TITLE.**

3 A. My name is David W. Brown. I am the Owner of Obsidian Renewables LLC
4 (“Obsidian”). My testimony is based on my personal knowledge gained through my
5 experience as a developer of solar and other generating facilities. I have degrees and
6 considerable experience in finance and law and I have considerable professional
7 experience with taxes and structuring complex transactions. I am active in the Oregon
8 legislature on energy matters and I have testified before this Commission on renewable
9 energy matters in this and other proceedings.

10 **Q. WHAT IS THE PURPOSE OF YOUR REPLY TESTIMONY?**

11 A. In the testimony I have previously filed in this docket, I explained why the original staff
12 proposal for calculating capacity payments as adopted by the Commission in Order 14-
13 058 results in a computational error for renewable solar QF projects. Staff agreed and
14 has subsequently modified its own proposal to eliminate this error. The Commission
15 should resolve this issue by approving Staff’s revised proposal. I have also discussed
16 why the Effective Load Carrying Capability (“ELCC”) method is the appropriate and
17 industry-standard method for calculating the amount of capacity that a solar project
18 contributes to a utility’s system. Although the utilities are already performing this
19 analysis in their IRPs, they refuse to accept it as a basis for capacity payments for solar
20 QF projects. The Commission should order that solar capacity payment rate should be
21 calculated using the ELCC valuations taken from the utilities’ most recent IRPs.

22 The purpose of this testimony is to reply to certain, specific assertions in the
23 response testimony filed in this docket on July 24, 2015 by Idaho Power Company and
24 PacifiCorp concerning the capacity payment for solar QF projects.

- 1 • First, I note that what is at issue here is a motion for clarification—and not a
2 motion for reconsideration as stated by Idaho Power.
- 3 • Second, I point out that the utilities’ position that Staff *intended* to apply a double
4 discount to capacity payments for solar QF projects has been repeatedly rejected
5 by Staff itself.
- 6 • Third, I correct the utilities’ false assertion that Staff and Obsidian argue for a
7 “fixed” capacity payment for solar QF projects. The utilities’ “response” to this
8 position attacks only their own straw-man argument.
- 9 • Fourth, I explain why Staff’s revised proposal does not overcompensate
10 renewable solar QFs for capacity as compared to the “proxy” resource.
- 11 • Finally, I explain why PacifiCorp’s continued insistence on using a capacity
12 contribution amount of 13.6% for solar projects is erroneous, inconsistent and
13 must be rejected in Oregon as it has been in other states.

14 **Q. DOES PACIFICORP OR IDAHO POWER RAISE ANY NEW POINTS OR**
15 **ISSUES IN THEIR RESPONSE TESTIMONY THAT HAVE NOT ALREADY**
16 **BEEN RAISED?**

17 **A.** No. As far as I can tell, the response testimony filed by PacifiCorp and Idaho Power
18 essentially repeats the testimony previously provided on this issue. As Idaho Power says
19 in its testimony, “after the extensive testimony and discussions surrounding this particular
20 topic . . . the parties seem to have fallen into two camps, and are entrenched.” Idaho
21 Power/1000; Youngblood/3. The two camps are essentially this: (1) Staff has analyzed
22 its own initial proposal and has determined that it requires clarification in order to work
23 properly for all resource types; and (2) The purchasing utilities would prefer not to clarify
24 Staff’s initial proposal—notwithstanding Staff’s own recommendation to do so—because
25 the initial proposal results in a lower capacity payment for solar QF projects.
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1 **Q. AS AN INITIAL MATTER, DID OBSIDIAN SEEK “CLARIFICATION” OR**
2 **“RECONSIDERATION” OF THE DOUBLE DISCOUNT ISSUE IN PHASE I OF**
3 **UM 1610?**

4 **A.** In its response testimony, Idaho Power congratulates itself on ferreting out “language
5 differences” that are “subtle and nuanced.” Idaho Power/1000; Youngblood/3.
6 Nevertheless, Idaho Power incorrectly states that this issue is being addressed in response
7 to “the Commission’s ruling allowing *reconsideration* of the capacity contribution
8 calculation adopted by the Commission.” Idaho Power/1000; Youngblood/2 (Emphasis
9 added). Although perhaps subtle and nuanced, there is a very real distinction between
10 reconsideration and clarification. Specifically, “reconsideration” implies that the
11 Commission should *change* its previous decision because it made an error of fact or law.
12 “Clarification,” on the other hand, suggests that Commission further explain its prior
13 decision so that the parties have additional guidance going forward.

14 On April 24, 2014, Obsidian timely filed for *clarification* of that portion of Order
15 14-058 that applies to capacity payments to renewable solar QF projects. Obsidian did
16 not ask the Commission to change its decision that there is a need to adjust for capacity
17 contribution of each resource type. Rather, Obsidian sought additional guidance from the
18 Commission on the math used to implement the methodology for calculating such
19 capacity adjustments for solar QF projects. This is an important distinction. Unlike
20 Idaho Power in UM 1725 and PacifiCorp in UM 1734, Obsidian is not trying to *change*
21 the Commission’s decision in Order 14-058; Obsidian is trying to ensure that the
22 Commission’s decision is implemented as intended.

23 **Q. DID THE COMMISSION STAFF AND ALJ AGREE THAT THE APPLICATION**
24 **OF THE CAPACITY PAYMENT METHODOLOGY TO RENEWABLE SOLAR**
25 **QF PROJECTS REQUIRES CLARIFICATION?**

26 **A.** Yes. On May 9, 2014, Staff filed a response to Obsidian’s motion for clarification in
which it agreed that the proposed methodology for calculating capacity payments for

1 renewable solar QF projects should be clarified. “Staff agrees with Obsidian . . . that
2 there appears to be a second and unintended discounting of the avoided capacity value in
3 the design of the volumetric avoided cost prices.” On June 10, 2014, the administrative
4 law judge (“ALJ”) issued a Ruling on Obsidian’s motion for clarification. The ALJ’s
5 Ruling states that Obsidian’s “request for *clarification* of Staff’s methodology for
6 adjusting rates to reflect a solar QF’s capacity contribution is granted.” (Emphasis
7 added).

8 **Q. DOES THE RESPONSE TESTIMONY OF PACIFICORP AND IDAHO POWER
9 SUPPORT THE CONCLUSION THAT THERE IS NO DOUBLE DISCOUNT OF
10 THE RENEWABLE SOLAR QF CAPACITY PAYMENT?**

10 **A.** No. The response testimony of Idaho Power and PacifiCorp no longer even contests the
11 fact that the original Staff proposal would result in a double discount of capacity
12 payments made to renewable solar QF projects. Instead, the purchasing utilities suggest
13 there *should* be a double discount—and that the compensation paid to renewable solar QF
14 projects for capacity *should* be disproportionately low. PAC/1100, Dickman/7; Idaho
15 Power/1000; Youngblood/5. In response to Staff’s position that the double discount was
16 unintentional, PacifiCorp states that “this is not an unintended consequence, but is a
17 representation of the costs actually avoided by the Company.” PAC/1100, Dickman/7.
18 Their position is that the double discount in the original Staff proposal was intentional
19 and appropriate, rather than unintentional and in need of clarification.

20 **Q. STAFF HAS STATED ON MULTIPLE OCCASSIONS NOW THAT ITS
21 ORIGINAL PROPOSAL RESULTED IN AN UNINTENDED DOUBLE
22 DISCOUNT. HOW DO THE PURCHASING UTILITIES RECONCILE THEIR
23 POSITION WITH STAFF’S ASSESSMENT OF ITS OWN TESTIMONY?**

23 **A.** The purchasing utilities assert that the Staff is now wrong about being wrong. In other
24 words, the purchasing utilities assert that they know better than Staff what Staff intended
25 in its original proposal. PAC/1100; Dickman/7. In its response testimony, Idaho Power
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1 goes so far as to accuse Staff of “mischaracterizing” its own position with respect to solar
2 capacity payments. Idaho Power/1000; Youngblood/3. This is, of course, nonsense.
3 Neither PacifiCorp nor Idaho Power can dictate to Staff or to the Commission what
4 Staff’s position is on this or any other matter.

5 Ever since Obsidian filed its Motion for Clarification over a year ago, Staff has
6 consistently and clearly explained that its original proposal includes a double discount
7 that was not intended and that should be clarified. In its response testimony, for example,
8 Staff explained that “Staff and other parties believe that the methodology Staff presented
9 as exhibit to Staff’s original testimony in Phase I of Docket UM 1610 (Staff/102-103), is
10 flawed and does not do what the Commission intended.” Staff/600; Andrus/8.

11 **Q. DOES STAFF OR OBSIDIAN ADVOCATE FOR A CAPACITY PAYMENT PAID**
12 **AS A FIXED DOLLAR AMOUNT RATHER THAN ON A PER MWH BASIS?**

13 **A.** No. Both PacifiCorp and Idaho Power attack the notion that the capacity payment should
14 be a fixed dollar amount. Idaho Power/1000; Youngblood/4-5; PAC/1100; Dickman/7.
15 PacifiCorp says “the Parties’ positions boil down to a proposal that the solar capacity
16 adder should be determined as a fixed dollar amount . . .” PAC/1100; Dickman/7.
17 According to Idaho Power, Obsidian argues “that a renewable solar QF resource should
18 be entitled to the reduced Capacity Adder for all peak hours, including the hours it did
19 not generate.” Idaho Power/1000; Youngblood/5. Both PacifiCorp and Idaho Power then
20 devote several pages of their response testimony to show why a solar QF project should
21 never be paid for capacity when it is not generating. Such a result, says Idaho Power,
22 would be “absurd and contrary to the FERC definition of avoided cost.” Idaho
23 Power/1000; Youngblood/5.

24 It is almost as if the utilities did not bother to read the testimony to which they are
25 responding. I have previously testified that Obsidian supports Staff’s modified proposal
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1 and does not advocate for a fixed capacity payment. “The recommendation in my
2 opening testimony was quite clear that the properly calculated capacity payment should
3 be paid as an adder to the on-peak energy rate consistent with Staff’s revised proposal.”
4 Obsidian/300; Brown/6. There is no acknowledgement of this position the utilities’
5 response testimony.

6 Likewise, Staff could hardly be more clear in stating that its modified proposal
7 does *not* advocate for a fixed capacity payment. Staff/600; Andrus/11-12. Under Staff’s
8 revised proposal, the solar QF project only receives a capacity payment when it is
9 actually operating:

10 [I]f a QF operates consistently with the assumption regarding operating
11 hours used to calculate the resource type’s contribution to peak, the QF
12 should be able to receive payments commensurate with the resource type’s
13 contribution to peak. *If the QF operates only half as much as is assumed
for the QF resource type, the QF could receive only half these payments.*

14 Furthermore, Staff finds the utilities’ arguments to the contrary
15 puzzling, particularly because the utilities’ mistake has been addressed in
16 previous testimony.

Staff/600; Andrus/11-12 (Emphasis added).

17 **Q. WHERE DO YOU THINK THE UTILITIES CAME UP WITH THIS NOTION**
18 **THAT CLARIFYING THE CAPACITY PAYMENT APPLICABLE TO SOLAR**
QFS REQUIRES PAYING THEM A FIXED DOLLAR AMOUNT?

19 **A.** In my opinion, this is merely a straw-man argument that the purchasing utilities devised
20 based on a misunderstanding of Obsidian’s April 24, 2014 Motion for Clarification. In
21 the Motion, Obsidian explained that *if* there is to be a discounted capacity payment rate,
22 then such rate *would* have to be paid at nameplate capacity in all on-peak hours rather
23 than the hours of delivered energy. The purpose of this argument was not in support of a
24 fixed payment amount, however, but rather to show why it is erroneous to start from a
25 discounted capacity payment rate. The point is that because the capacity payment will be
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1 paid as an adder to the energy payment, then the capacity rate must be calculated based
2 on the full capacity value of the resource. I understand that this is what Staff's revised
3 proposal is designed to accomplish.

4 **Q. DOES STAFF'S REVISED PROPOSAL FOR CAPACITY PAYMENTS**
5 **OVERCOMPENSATE RENEWABLE SOLAR QFS?**

6 **A.** No. PacifiCorp and Idaho Power argue that the intent of Order 14-058 was to *reduce* the
7 capacity payment made to QF projects as compared to the capacity value of the "proxy."
8 Idaho Power/1000; Youngblood/4-5; PAC/1100; Dickman/7-8. Their position is that any
9 capacity payment above the "proxy" would, therefore, would result in an overpayment.

10 In making this argument, however, PacifiCorp and Idaho Power equivocate on the
11 term "proxy." They fail (or refuse) to recognize the distinction between the *standard*
12 proxy, which has a very high capacity contribution, and the *renewable* proxy, which has a
13 very low capacity contribution. In their testimony, PacifiCorp and Idaho Power both use
14 the generic term "proxy" or "avoided resource" interchangeably without properly
15 distinguishing between the standard proxy and the renewable proxy. For example,
16 PacifiCorp testifies that "the fact that a solar QF is available for fewer hours than the
17 avoided resource compels a lower payment." PAC/1100; Dickman/8. This statement is
18 true only if the "avoided resource" is the standard proxy. This statement is abjectly false,
19 however, if the "avoided resource" is the renewable resource.

20 For renewable QF projects, the proxy is a wind project. Being a daytime
21 resource, solar provides most of its capacity during high load hours (except Sundays and
22 holidays), while the proxy wind generation can occur anytime during the high and low
23 load hours. Thus, a solar QF project in Oregon—if there were any—would contribute
24 incrementally more capacity (only counted for high load hours) than the proxy wind
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1 project. Accordingly, the solar capacity payment must be an *add*er to the renewable
2 proxy, as compared to a deduction from the standard proxy.

3 **Q. IS THIS CAPACITY ADDER AN ‘ENTITLEMENT’ FOR RENEWABLE SOLAR**
4 **QF PROJECTS?**

5 **A.** Absolutely not. As discussed above, Idaho Power mistakenly attributes to Obsidian and
6 Staff the position that solar QF’s should be compensated for capacity even when they are
7 not generating. Idaho Power then takes this mistake a step further and attributes to other
8 parties a false “sense of entitlement.” Idaho Power says that “there are specific examples
9 of the language used in testimony that leads me to believe there is a sense of entitlement.”
10 Idaho Power/1000; Youngblood/7. Idaho Power further states that “this sense of
11 entitlement to a ‘pool of dollars’ regardless of whether a QF actually provides capacity or
12 when a QF generates is prevalent within the testimonies of the Staff/Intervenors today,
13 and has helped entrench the views of each side.” Idaho Power/1000; Youngblood/7.

14 Idaho Power’s lecture against some perceived “sense of entitlement” is not only
15 built upon a false premise, it is fundamentally misguided. As explained above, both Staff
16 and Obsidian have already expressly disavowed the notion that there should be a fixed
17 capacity payment. Second, all QFs *are* entitled to be fairly compensated for both the
18 energy *and the capacity* that they contribute to the purchasing utilities’ system. The
19 Federal Energy Regulatory Commission has been very clear in stating that PURPA
20 *requires* utilities purchasing energy from QF projects to also compensate such QF
21 projects for the value of the capacity that they contribute. This is not a welfare
22 entitlement program for solar QF projects, this is a mandate of federal law that recognizes
23 a benefit provided by QF projects to the utility and its ratepayers.

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1 **Q. DO YOU AGREE WITH USING PACIFICORP'S CAPACITY CONTRIBUTION**
2 **VALUE FROM ITS 2013 IRP?**

3 **A.** No. In its response testimony, PacifiCorp states that the capacity contribution of a solar
4 QF project is 13.6%. "The issue before the Commission is whether, *after adjusting the*
5 *capacity contribution from 100 percent to 13.6 percent*, a solar QF should get paid for
6 capacity based on a target dollar amount, or if it should get paid only for the hours it
7 generates during on-peak hours." PAC/1100; Dickman/9 (Emphasis added). Putting
8 aside the fact that this is certainly *not* the issue before the Commission (as explained
9 above), I strongly disagree with using PacifiCorp's 13.6% number as the basis for
10 determining the capacity payment amount for renewable solar QF projects. 13.6% is the
11 product of a flawed methodology that has already been rejected and replaced in other
12 jurisdictions.

13 The appropriate methodology for calculating a resource's capacity contribution is
14 the ELCC method. The ELCC method has been accepted as the preferred means of
15 determining the capacity value of solar resources by electric industry leaders including
16 the National Renewable Energy Laboratory and the North American Electric Reliability
17 Corporation. The Utah PSC has stated that "PacifiCorp's Exceedance Method is not an
18 industry standard approach." The Utah PSC directed PacifiCorp to calculate the capacity
19 contribution of solar resources using either the ELCC method or an approximation of that
20 method.

21 PacifiCorp's new 2015 wind and capacity contribution study is based on the
22 ELCC methodology. PacifiCorp determined that the capacity value for a single axis
23 tracking solar facility in Oregon is actually 36.7% rather than 13.6%. PacifiCorp already
24 uses this corrected capacity value in other jurisdictions such as Utah and Wyoming. On
25 November 7, 2014, PacifiCorp (dba Rocky Mountain Power) filed for an adjustment of
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1 its Schedule 37 avoided costs rates applicable to QF projects in Wyoming. PacifiCorp's
2 witness Greg Duvall—the same witnesses who has testified on behalf of PacifiCorp in
3 this proceeding—proposed using the solar capacity contribution value of 37.9% from its
4 2015 IRP. This Commission should also use PacifiCorp's updated capacity contribution
5 numbers from its 2015 IRP.

6 **Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?**

7 **A.** Yes.

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