

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

Docket No. UM 2032

In the matter of

PUBLIC UTILITY COMMISSION OF
OREGON,

Investigation into the Treatment of Network
Upgrade Costs for Qualifying Facilities

RESPONSE TESTIMONY OF JOHN LOWE

October 30, 2020

1 PURPA activity increased following the energy crisis in the early 2000s as well as the
2 Commission's seminal PURPA cases in Docket No. UM 1129 (establishing new PURPA
3 policies) and AR 521 and UM 1401 (establishing interconnection rules and policies).
4 These events resulted in a modest level of new projects selling power to PacifiCorp and
5 Idaho Power (as well as the closure of large co-generation and biomass projects due to
6 difficulties in those industries and harmful Commission policies). There remained only a
7 very small number of new projects selling power to PGE. Thus, PacifiCorp and Idaho
8 Power have had nearly forty years of working with and understanding the power
9 purchase and interconnection issues associated with PURPA projects, while PGE has had
10 almost none until the last few years.

11 The changes in the early 2000s resulted in a need to refocus PacifiCorp's efforts
12 on PURPA, including on the interconnection side. I was on the PPA side, but in 2004, I
13 moved over to help with interconnection. I worked with an ad hoc team to establish
14 processes and procedures for PacifiCorp's QF interconnection contracting process and
15 facilitating the design, engineering, and interconnection of small power production
16 facilities. I worked on this until I left PacifiCorp in 2006.

17 Since leaving PacifiCorp, I have worked on several QF interconnection matters,
18 including participating in AR 521, which is discussed further later on in my testimony.
19 In my role as the Executive Director of the Coalition, I have participated in every major
20 PURPA and QF-interconnection proceeding since 2008. This experience has included
21 the submission of testimony in numerous proceedings.

22 A further description of my educational background and work experience can be
23 found in Exhibit Interconnection Customer Coalition/101 in this proceeding.

1 **Q. On whose behalf are you appearing in this proceeding?**

2 **A.** I am testifying on behalf of the Coalition, Northwest and Intermountain Power Producers
3 Coalition (“NIPPC”), and the Community Renewable Energy Association (“CREA”)
4 (collectively, the “Interconnection Customer Coalition”).

5 **Q. Please describe the Interconnection Customer Coalition, its members, and its overall**
6 **interest in this proceeding.**

7 **A.** Three associations are working collaboratively in this docket as the Interconnection
8 Customer Coalition. Those associations are the Coalition, NIPPC, and CREA.

9 The membership of these three associations is diverse. The Coalition’s members
10 include irrigation districts, water districts, corporations, small utilities, and individuals.
11 The Coalition’s members own and operate at least fifty qualifying facilities (“QFs”) in
12 the six states of Oregon, Idaho, Washington, Utah, Montana, and Wyoming. I am not a
13 member of NIPPC or CREA, but my understanding is that NIPPC’s members include
14 independent power producers and developers, electricity service suppliers, transmission
15 companies, marketers, storage providers, and others, and that CREA’s members include
16 counties, irrigation districts, councils of government, project developers, for-profit
17 businesses, and non-profit organizations. There are also many companies and entities
18 that are members of two or all three of the Interconnection Customer Coalition
19 organizations.

20 Collectively, the Interconnection Customer Coalition’s broad interests in this
21 proceeding are to promote and protect the interests and rights of interconnection
22 customers that are independent power producers. These interconnection customers—QFs
23 and non-QFs—are directly and indirectly affected by the Oregon Public Utility

1 Commission's (the "Commission's") determinations in this proceeding because they are
2 subject to the interconnection and network upgrade assignment rules and principles that
3 will be the subject of this docket.

4 The Interconnection Customer Coalition's goal for this proceeding is for the
5 Commission to adopt interconnection rules and policies that promote a fair, competitive
6 electric power supply market for all market participants, including utilities and their
7 ratepayers. The Interconnection Customer Coalition recognizes that PURPA must work
8 to benefit all interested parties, including the utilities, ratepayers, and new and existing
9 QFs of various sizes.

10 **Q. Is Oregon's interconnection process working from the perspective of**
11 **interconnection customers and ratepayers?**

12 **A.** No, there are significant problems that are harming interconnection customers, which
13 ultimately harms competition and increases costs for end use and retail ratepayers. These
14 have been occurring for years; however, the Commission has declined to take action to
15 address them.

16 **Q. Is the Interconnection Customer Coalition addressing all of its interconnection**
17 **concerns at this time?**

18 **A.** No. First, the Interconnection Customer Coalition is only addressing the two issues
19 currently adopted for this proceeding. I understand that there may be a second phase to
20 discuss one or more additional issues. The issue(s) reserved for that second phase will be
21 addressed in future testimony in this proceeding if there is a second phase.

22 In addition, the Interconnection Customer Coalition has other concerns with the
23 interconnection process that are not currently part of Phase I or II of this proceeding.
24 These include, but by no means limited to, timing and process for progress payments,

1 unnecessary, unilateral, and expensive interconnection requirements, inflated and
2 unreliable estimates, excessive utility management charges, lack of specific cost details,
3 inability to provide full and proper accounting of costs, and unreasonable refusals to
4 allow customers to hire third parties to build interconnection facilities and network
5 upgrades or to perform interconnection studies.

6 These are important issues that should be addressed in a timely fashion, either in a
7 different proceeding or a second phase of this proceeding, as interconnection challenges
8 are extensive and crippling to a healthy renewable energy industry. Worse, these
9 outcomes appear deliberate, as some utilities appear to have “weaponized”
10 interconnection as a way of mitigating or eliminating competition from non-utility
11 generation. I understand that some of these issues will be addressed in the Commission’s
12 investigation into the interconnection process and interconnection policies, Docket No.
13 UM 2111.

14 The Commission, however, should be aware of these issues when resolving the
15 disputed issues in this proceeding. PGE and PacifiCorp’s interconnection policies for
16 QFs are a major, if not the most important problem facing QFs today. In this case, an
17 important factor for the Commission to consider when resolving issues is the utilities’
18 incentives to discriminate against independent power producers and their past and current
19 actions interacting with interconnection customers. In other words, a different and less
20 protective set of policies might work if the utilities did not have a financial and
21 institutional disincentive to purchase power and interconnect non-utility generators, or if
22 the Oregon utilities had a strong track record of acting fairly, reasonably, and in a non-
23 discriminatory manner. The Commission’s interconnection policies will continue to fail

1 to protect interconnection customers if the Commission continues to assume that the
2 relationship between QFs and utilities is one of companies with equal bargaining power
3 and similar incentives.

4 **Q. What is your understanding of the issues in this proceeding?**

5 **A.** The administrative law judge adopted the following issues:

- 6 1. Who should be required to pay for Network Upgrades necessary to
7 interconnect the QF to the host utility?
- 8 2. Should on-system QFs be required to interconnect to the host utility with
9 Network Resource Interconnection (NRIS) or should QFs have the option
10 to interconnect with Energy Resource Interconnection Service (ERIS) or
11 an interconnection service similar to ERIS?¹

12 In addition, if there is a second phase, that phase will address the following issue:

- 13 3. If the answer to Issue No. 1 is that users and beneficiaries of Network
14 Upgrades (which typically are primarily utility customers) should pay for
15 the Network Upgrades necessary to interconnect the QF to the host utility,
16 how should that policy be implemented? For example, should utility
17 customers, and other beneficiaries and/or users, fund the cost of the
18 Network Upgrades upfront, or should the QF provide the funding for the
19 Network Upgrade subject to reimbursement from utility customers?
20 Should the QF, utility customers, and other beneficiaries and users, if any,
21 share the costs of Network Upgrades?²

22 **Q. Please summarize your testimony.**

23 **A.** My testimony responds to the Joint Utilities' Direct Testimony and presents an on-the-
24 ground perspective on how QFs are faring in the current interconnection process. On
25 Issue No. 1, I explain how and why QFs are unable to benefit from the Commission's
26 current policy. I also explain why a change in that policy makes sense and would benefit
27 QFs, utilities, and ratepayers. The Interconnection Customer Coalition's position is that

¹ ALJ Ruling at 2, 4 (May 22, 2020).

² *Id.*

1 the Commission should assume that all system users benefit from system upgrades, and
2 that all Network interconnection costs should be paid by all users of the system. I agree
3 that, in rare instances, there may be circumstances in which a Network interconnection
4 upgrade does not provide any benefits to other transmission users, and there should be an
5 opportunity for a utility to rebut this assumption.

6 On Issue No. 2, I explain the potential benefits of allowing QFs to interconnect
7 using Energy Resource Interconnection Service (“ERIS”) rather than Network Resource
8 Interconnection Service (“NRIS”). I also explain that, despite the Joint Utilities’
9 assertions that NRIS is the only appropriate way to interconnect QFs, the Joint Utilities’
10 actual practice indicates they have used ERIS in some cases as a way to increase
11 efficiency and reduce costs.

12 My testimony does not address or respond to many of the Joint Utilities’ Direct
13 Testimony in which they characterize Commission and Federal Energy Regulatory
14 Commission (“FERC”) laws and policies. For example, I will not be responding to their
15 arguments regarding the facts or holding of FERC cases. Instead, the Interconnection
16 Customer Coalition will respond to those policy and legal arguments in briefing. I also
17 only provide a broad overview of the Interconnection Customer Coalition’s positions,
18 which will be developed in greater detail in legal briefing.

19 **II. ISSUE 1: COST ALLOCATION FOR NETWORK UPGRADES**

20 **Q. Has the Commission considered this issue prior to this proceeding?**

21 **A.** Yes, the Commission considered this issue a decade or more ago, when adopting
22 interconnection policies for both small and large QFs in Dockets No. AR 521 and UM
23 1401.

1 **Q. Did you actively participate in AR 521?**

2 **A.** Yes. AR 521 focused on small QFs. Due to my past experience working on QF
3 contracting and interconnection, Sorenson Engineering, Inc. (“Sorenson”) retained me to
4 advise and represent them in that proceeding. Sorenson is an engineer, developer, owner,
5 and operator of numerous hydro qualifying facilities. I served as an expert consultant on
6 their behalf and participated in numerous workshops that occurred in the AR 521 process.

7 **Q. What is the Commission’s most recent guidance on who is required to pay for**
8 **Network Upgrades necessary to interconnect the QF to the host utility?**

9 **A.** In Order No. 10-132, the Commission stated that “Interconnection Customers are
10 responsible for all costs associated with network upgrades unless they can establish
11 quantifiable system-wide benefits, at which point the Interconnection Customer would be
12 eligible for direct payments from the Transmission Provider in the amount of the
13 benefit.”³ The Commission also addressed this subject in the AR 521 rulemaking for
14 small generator interconnections in 2009, where it stated and explained as follows:

15 The proposed rules, however, include language that is meant to strictly limit
16 a public utility’s ability to require one small generator facility to pay for the
17 cost of system upgrades that primarily benefit the utility or other small
18 generator facilities, or that the public utility planned to make regardless of
19 the small generator interconnection. Under the proposed rules, a public
20 utility may only require a small generator facility to pay for system upgrades
21 that are ‘necessitated by the interconnection of a small generator facility’
22 and ‘required to mitigate’ any adverse system impacts ‘caused’ by the
23 interconnection.⁴
24

³ *In re Investigation into Interconnection of PURPA QFs with Nameplate Capacity Larger than 20 MW to a Pub. Util.’s Transmission or Distrib. Sys.*, Docket No. UM 1401, Order No. 10-132 at 7 (Apr. 7, 2010).

⁴ *In re Rulemaking to Adopt Rules Related to Small Generator Interconnection*, Docket No. AR 521, Order No. 09-196 at 5 (June 8, 2009).

1 **Q. What is your understanding of this policy?**

2 **A.** My understanding is based on my reading of the Commission order, my participation in
3 AR 521, and managing the Coalition's activities, including working with individual
4 members. My understanding of all the Commission's policies I discuss in this testimony
5 is similarly based on my review of the Commission's orders, my participation in the
6 PURPA and interconnection proceedings, and advising and assisting individual Coalition
7 members on contracting and interconnection issues.

8 I believe the policy was intended to require interconnection customers to pay for
9 the costs associated with network upgrades only if: 1) those network upgrades were
10 necessitated by the interconnection of that generator; 2) the upgrades do not primarily
11 benefit the utility or other small generator facilities; and 3) the public utility would not
12 have made the upgrade regardless of the small generator interconnection. In addition,
13 interconnection customers are not responsible for unreasonable, imprudent, or negligent
14 costs.

15 Thus, for example, my understanding of this policy is that if an interconnection
16 upgrade benefited the system or was of the nature that the utility would have engaged in
17 the upgrade even without the small generator, then all customers should pay for it, or at
18 least the interconnecting generator should be entitled to a proportional refund to offset the
19 costs assessed to it. By contrast, if an interconnection upgrade did not benefit the system,
20 other users of it, and was not planned to be completed, only the interconnection customer
21 should pay for it without sharing the costs. This may not always be a choice between the
22 interconnection customer paying for all or none of the network upgrades. In other words,
23 it appears that the Commission intended that the cost of network upgrades should

1 sometimes be split between the interconnection customer and the utility based on the
2 amount of the system-wide benefit.

3 **Q. Do you think this policy should change?**

4 **A.** Yes, in part. The notion that ratepayers only pay for the reasonable interconnection costs
5 associated with system-wide benefits and upgrades that would have been required even
6 without the QF interconnection is a good principle, and that should be retained.

7 I note that the potential phase two issue, regarding how to implement a policy to
8 allocate Network Upgrade costs, recognizes that the answer to the question in this issue,
9 regarding who should pay, may be that both users *and beneficiaries* should pay for
10 Network Upgrades. However, my understanding is the Commission's policies were
11 designed with the goal that beneficiaries would pay for the benefits they receive,
12 including when those benefits come from Network Upgrades identified for a QF's
13 interconnection.

14 **Q. Is the scope of your recommendation limited to only network transmission**
15 **interconnections?**

16 **A.** No. The Joint Utilities claim that the scope of the proceeding is limited to only
17 transmission upgrades. This is not apparent to me from reading the issues identified for
18 this phase of the proceeding, but this is not a question in which I have personal
19 knowledge of. Therefore, I am not certain if the scope of this proceeding includes
20 distribution system level interconnections.

21 However, I wanted to note that I believe that distribution interconnections
22 generally provide system wide benefits and benefit all users. My recommendation is not

1 limited to only transmission network upgrades, if that issue is within the scope of the
2 proceeding.

3 **Q. Do all parties agree with the principle that beneficiaries of an investment should pay**
4 **some of the costs, or is that principle in dispute?**

5 A. I am not certain. I note that the Joint Utilities' Opening Testimony emphasizes the
6 importance of protecting non-interconnection customers from costs associated with
7 investments that do not benefit them. However, the Joint Utilities never state that it is
8 unfair for the *beneficiaries* of a Network Upgrade to pay the costs associated with an
9 investment that *benefits* them.⁵ As discussed later in my testimony, the Joint Utilities,
10 however, have proposed a new "but for" test that appears to require an interconnection
11 customer to pay for Network upgrades, even if they benefit all system users.

12 **Q. Assuming that the Commission's goal going forward is that users and beneficiaries**
13 **should pay for benefits that they receive, then what specific actions should the**
14 **Commission take?**

15 A. I think the primary issues presented for the Commission to resolve are: 1) whether all
16 users of the transmission system benefit from Network Upgrades; and 2) who should bear
17 the burden of demonstrating whether parties other than just the interconnecting facility
18 benefit from (or do not benefit from) a given Network Upgrade. Assuming the
19 Commission does not wish to make a final decision about who the beneficiaries are for
20 every future Network Upgrade, the ultimate question is *who* should prove that non-QF
21 transmission customers, including the utility's end-use retail customers and third-party

⁵ E.g., Joint Utilities/200, Wilding-Macfarlane-Williams/12:1-8 (Oct. 19, 2020) (discussing the Joint Utilities' concerns "if QFs are simply exempted from the requirement" of paying for Network Upgrades).

1 purchasers of transmission services, are beneficiaries (or non-beneficiaries) of Network
2 Upgrades that result from QF interconnections. My understanding of the Commission's
3 current policy is that there is a presumption that the interconnecting facility is the only
4 beneficiary and that it bears the burden of establishing otherwise for each Network
5 Upgrade it pays for. My view, and the position of the Interconnection Customer
6 Coalition, is that the presumption should be that all Network Upgrades benefit all users of
7 the system. In the rare circumstance in which there is no system-wide benefit, the
8 utilities should have to prove that ratepayers or other users are *not* beneficiaries of a
9 given Network Upgrade.

10 **Q. Under the Commission's current policy, how do QFs "establish quantifiable system-**
11 **wide benefits"?**

12 **A.** I am not aware of the Commission specifying how a QF might establish quantifiable
13 system-wide benefits. The Interconnection Customer Coalition asked the Joint Utilities
14 how a QF could demonstrate that a Network Upgrade provided quantifiable system-wide
15 benefits, but they did not provide any clarification. Each utility stated the Joint Utilities'
16 position on the Commission's policy and then paraphrased the order cited above.⁶

17 **Q. Did you expect the Joint Utilities to explain how a QF could demonstrate that a**
18 **Network Upgrade provided quantifiable system-wide benefits?**

19 **A.** We had hoped that they would answer the question, but we expected that they were
20 unlikely to do so.

⁶ PacifiCorp Response to NIPPC Data Request 12 (Exhibit Interconnection Customer Coalition/102, Lowe/5); Idaho Power Response to NIPPC Data Request 12 (Exhibit Interconnection Customer Coalition/103, Lowe/5); PGE Response to NIPPC Data Request 12 (Exhibit Interconnection Customer Coalition/104, Lowe/10).

1 **Q. Why was a question asked of the Joint Utilities when you expected them to refuse to**
2 **answer or provide any explanation regarding how a QF could demonstrate that a**
3 **Network Upgrade provided quantifiable system-wide benefits?**

4 **A.** This question was essentially testing whether the Joint Utilities ever intended to comply
5 with the policy that allows QFs to “establish quantifiable system-wide benefits” and to
6 test how practical such a policy is. After a decade, the Joint Utilities have not developed
7 any policies or internal procedures on how a QF might establish quantifiable system-wide
8 benefits because none of the utilities believe that QF interconnections can ever provide
9 system-wide benefits, and the utilities apparently never intended to ever even consider
10 whether any QF could provide a systemwide benefit.

11 In addition, we wanted to highlight the non-responsive nature of the Joint Utilities
12 on questions of this kind. The refusal to answer this question and the lack of guidance
13 from the Joint Utilities in a generic policy docket should be concerning to the
14 Commission. If they cannot—or will not—provide any guidance to us and this
15 Commission, then it seems unlikely that they willingly provide any guidance to
16 individual QF developers, especially small developers. In other words, under the current
17 policy, there is no way that an interconnection customer can know what they need to do
18 to establish that there are quantifiable system-wide benefits – absent filing a complaint
19 against the utility at the Commission having the Commission answer the question.

20 The Commission should assume that the utilities will not comply with any
21 Commission order or policies that are not extremely clear and specific. Whatever the
22 Commission’s ultimate resolution of the policy issues are in this case, they are unlikely to
23 be fairly implemented unless the Commission sufficiently constrains the utilities’
24 discretion and provides strong protections for interconnection customers.

1 **Q. Are you aware of any QF successfully establishing quantifiable system-wide**
2 **benefits?**

3 **A.** No, I am not aware of any QF in Oregon successfully establishing that a Network
4 Upgrade provides quantifiable system-wide benefits. However, I know of at least one
5 pending dispute on this issue. I find this lack of success quite concerning. Importantly, it
6 does not demonstrate that Network Upgrades do not provide benefits; it demonstrates that
7 QFs have been unable to establish that benefits exist or, at least, have been unable to
8 afford to try. Even if all Network Upgrades did not provide system-wide benefits, at least
9 *some* probably do. I am not an expert on utility system planning, but I find it hard to
10 believe that ratepayers enjoy *zero benefit* from the millions of dollars of QF investments
11 in the utility network system.

12 **Q. While the Joint Utilities essentially did not respond to the Interconnection Customer**
13 **Coalition's discovery requests, what is your understanding of their position**
14 **regarding whether or how an interconnection customer can establish quantifiable**
15 **system-wide benefits?**

16 **A.** I understand that the Joint Utilities' position is that it would be extremely rare, if not
17 practically impossible, for an interconnection customer to demonstrate quantifiable
18 system-wide benefits.

19 **Q. Do you think it is the Joint Utilities' position that these benefits do not exist?**

20 **A.** Yes, I think so. The Joint Utilities responded to discovery requests by stating that they
21 were not aware of QF interconnection customers *ever* establishing quantifiable system-
22 wide benefits.⁷ Thus, after forty years of interconnection customers paying for Network

⁷ PacifiCorp Response to NIPPC Data Request 13 (Exhibit Interconnection Customer Coalition/102, Lowe/6); Idaho Power Response to NIPPC Data Request 13 (Exhibit

1 Upgrades, the Joint Utilities' position appears to be that there have been no system-wide
2 benefits.

3 **Q. Are you aware of any other states that have adopted a policy that all users of the**
4 **transmission system should pay for Network Upgrades?**

5 **A.** Yes. I am generally aware that the Idaho Public Utilities Commission (the "Idaho
6 Commission") adopted a policy and formula in which a QF could have a portion of its
7 interconnection costs repaid in time.⁸ I am not familiar with the policy's details or
8 whether it is still used, and the Interconnection Customer Coalition will address it in
9 greater detail in legal pleadings. However, it demonstrates that at least Idaho Power
10 believed, at one point, that it was reasonable for interconnection customers to be repaid
11 some Network Upgrades, and that the Commission can adopt such a policy. In addition, I
12 understand that the Idaho Commission adopted a specific formula in terms of how much
13 and when Network Upgrades would be refunded to interconnection customers. If the
14 Commission does not adopt the Interconnection Customer Coalition's recommendation
15 that all system-wide upgrades benefit all customers, then an alternative approach would
16 be to adopt a clear and simple formula regarding cost allocation, which would reduce
17 utility discretion to not comply with any Commission policy.

⁸ Interconnection Customer Coalition/103, Lowe/6); *see also* PGE Response to NIPPC Data Request 13 (Exhibit Interconnection Customer Coalition/104, Lowe/11) (citing only one case and noting PGE opposed the QF's attempt to establish system-wide benefits). *See In re Application of Idaho Power Co. for Approval of a Firm Energy Sales Agreement for the Sale and Purchase of Electric Energy Between Idaho Power Co. and Idaho Winds LLC*, Idaho Case No. IPC-E-09-25, Order No. 32136 at 2, 5-6 (Dec. 10, 2010).

1 **Q. Has there been litigation where QFs establish system-wide benefits?**

2 **A.** I am aware of only one pending dispute in Oregon, which I understand is currently
3 suspended. The QF, Madras Solar, filed a complaint against PGE and argued that a
4 Network Upgrade—specifically, a series capacitor to upgrade a transmission line—
5 created quantifiable system-wide benefits. PGE testified otherwise. My understanding
6 from reading the portion of PGE’s testimony on this issue is that PGE’s position may be
7 that a quantifiable system-wide benefit only exists when the Network Upgrade has
8 already been identified in a PGE study, specifically the Integrated Resource Plan (“IRP”)
9 or Local Transmission Plan.⁹

10 **Q. Do you agree with PGE?**

11 **A.** No. I agree that a Network Upgrade would certainly provide system-wide benefits if the
12 interconnection customer paid for a Network Upgrade that was identified in a utility
13 study like an IRP or Local Transmission Plan. However, I disagree that this would be the
14 only time an interconnection upgrade would benefit the system.

15 **Q. Have the Joint Utilities proposed a “but for” test that would effectively prevent a**
16 **QF from ever being compensated for Network Upgrades that benefit all**
17 **transmission users?**

18 **A.** Yes. While it is not entirely clear, I will explain my understanding of the proposed “but
19 for” policy, which does not focus on benefits to the system. The Joint Utilities
20 recommend that ratepayers should not pay for *any* interconnection costs if they would
21 exceed the avoided cost rate (which includes the cost of energy, capacity, and

⁹ *Madras PVI, LLC v. PGE*, Docket No. UM 2009, PGE/600, Angell/7:10-12 (“The series capacitor would not be installed but-for Madras Solar’s interconnection request—it is not envisioned in PGE’s Integrated Resource Plan (IRP) or Local Transmission Plan.”).

1 interconnection) paid to the QF.¹⁰ The QF should already be paid the avoided cost rate
2 that is established by the Commission, so this “but for” test essentially means that a QF
3 interconnection customer would always pay for the Network Upgrades regardless of any
4 system-wide benefits.

5 I will use a simple example to illustrate why I believe the “but for” test is
6 unreasonable. Assume that a utility’s avoided cost rate is \$35 per MWh, which includes
7 the utility’s avoided energy, capacity and interconnection costs. Next assume that the QF
8 interconnection will result in \$1,000,000 of Network Upgrades. Now assume that those
9 Network Upgrades were planned in the utility’s IRP. Under the “but for” test, the
10 interconnection customer would still *not* be refunded the Network Upgrades because
11 paying the interconnection customer even \$1 more than \$35 per MWh would exceed the
12 avoided cost rate. All users of the system would benefit (even under PGE’s previously
13 articulated test in the Madras Solar case), but the interconnection customer would still
14 have to pay for all the Network Upgrades.

15 **Q. Do you think the Joint Utilities’ “but for” test would be consistent with your**
16 **understanding of the Commission’s existing policies and interconnection rules?**

17 **A.** No, I do not think so, which is another reason why the proposed test seems confusing.

18 The Commission has adopted regulations for small QFs that I understand require QFs to
19 pay only for those interconnection facilities and upgrades (Network Upgrade or

¹⁰ PacifiCorp Response to NIPPC Data Request 30 (Exhibit Interconnection Customer Coalition/102, Lowe/7); Idaho Power Response to NIPPC Data Request 30 (Exhibit Interconnection Customer Coalition/103, Lowe/7); PGE Response to NIPPC Data Request 30 (Exhibit Interconnection Customer Coalition/104, Lowe/12).

1 otherwise) that a QF’s interconnection “causes” to be required.¹¹ To be clear, I am not
2 opposed to the Commission’s policies ensuring that a QF does not pay for
3 interconnections costs they do not cause because it implements a cost causation
4 principle.¹² If the test for system benefits is a “but-for” test that requires a QF to
5 demonstrate that the Network Upgrade was not “required but-for its interconnection
6 request,” then the only way for a QF to meet the Joint Utilities’ test would be for a QF to
7 prove that a utility assigned the QF a Network Upgrade that was not caused by its
8 interconnection (i.e., that the utility violated the Commission’s rules). I do not think this
9 result is what the Commission intended when they adopted the policy of allowing QFs to
10 pay less if they could demonstrate quantifiable system-wide benefits.

11 My understanding is that the issues surrounding inaccurate costs estimates and
12 interconnection studies were postponed to a different docket, but this is perhaps a good
13 example of how the issue of QFs paying for system-wide benefits is inter-related with the
14 issue of utilities potentially charging QFs for costs that they should not have to bear. So
15 long as there is a lack of transparency into the utility’s assignment of interconnection
16 facilities and Network Upgrades, it will continue to be difficult for a QF to demonstrate
17 either that its interconnection does not “cause” the need for those investments or that
18 those investments provide system-wide benefits.

¹¹ See, e.g., OAR 860-082-0035(4) (“A public utility must identify any adverse system impacts on an affected system *caused by* the interconnection of a small generator facility to the public utility’s transmission or distribution system.” (emphasis added)).

¹² Cost causation is only one factor for consideration regarding who pays for the interconnection costs. As I have explained, who benefits from the interconnection upgrade is also an important criterion.

1 **Q. So, do QF Network Upgrades provide quantifiable system-wide benefits?**

2 **A.** I certainly think some QF Network Upgrades probably provide quantifiable system-wide
3 benefits, and the Commission's assumption should be that all Network Upgrades provide
4 system-wide benefits. The more relevant issue is whether beneficiaries should pay, and
5 the heart of the dispute is who should have to prove that non-QF transmission customers
6 (including a utility and its ratepayers) are beneficiaries of a given Network Upgrade.
7 Again, my view, and the position of the Interconnection Customer Coalition, is that
8 utilities, and not QFs, should have to demonstrate whether ratepayers benefit.

9 **Q. Why should utilities have to bear the burden of demonstrating whether a Network**
10 **Upgrade provides quantifiable system-wide benefits?**

11 **A.** There are several good reasons for this approach. First, it makes practical sense that the
12 burden is on the entity with more information. Utility operations are not transparent; QFs
13 have very little insight into how utility systems are doing or where the system *could*
14 benefit. Utilities, on the other hand, have full access to their system information.

15 Second, as discussed above, utilities are monopoly providers of interconnection
16 services that have discriminated against and imposed unreasonable, unfair and unjust
17 costs, and practices upon QFs.

18 Third, having the utilities make this evaluation should facilitate the creation of a
19 transparent and non-discriminatory standard. Right now, the question isn't whether a
20 given Network Upgrade provides system-wide benefits, but whether the interconnecting
21 customer has the sophistication and resources to prove that it does. Imagine two different
22 QFs each face a virtually identical Network Upgrade that provides quantifiable system-
23 wide benefits. The more sophisticated QF might be able to succeed in obtaining a refund

1 of associated costs, but the less sophisticated QF would have a far smaller likelihood of
2 success. As a result, under the current policy, interconnecting QFs may pay different
3 costs to interconnect for reasons unrelated to the *actual* costs and benefits of
4 interconnection. This approach is burdensome to all QFs, but it is particularly
5 burdensome for the smallest and least sophisticated QF developers. I hope that the
6 Commission can provide some useful guidance on this standard in this docket, whether to
7 clarify the existing policy or to guide the implementation of a new policy.

8 Fourth, it makes sense for the presumption adopted to focus on proving something
9 unusual rather than something ordinary. The Interconnection Customer Coalition's
10 position is that most Network Upgrades probably provide some benefit to the system and
11 thereby to all customers. Nonetheless, the current policy requires QFs to prove a benefit
12 exists, which suggests the presumption is that no benefit exists unless proven. I
13 understand FERC adopted the presumption that Network Upgrades provide system-wide
14 benefits, and I think that is a more reasonable presumption. That sort of presumption
15 assumes benefits exist unless proven otherwise, rather than assuming no benefits exist
16 unless proven otherwise. Again, this proceeding does not ask the Commission to decide
17 whether any given Network Upgrade *actually* provides a benefit; it is just a presumption
18 that a certain type of investment into the utility system likely provides some benefit to
19 ratepayers.

20 Finally, I note the Joint Utilities argue that QFs should be paid no more than the
21 utility's avoided cost. Because the utilities are already responsible for calculating
22 avoided cost payments, I think it makes sense that the utilities also be responsible for
23 determining when a QF's interconnection helps a utility to avoid costs. Ultimately, I

1 think QF interconnections, and specifically the Network Upgrades associated with those
2 interconnections, probably enable the utilities to avoid making at least some system
3 investments. Any avoided utility investment is a benefit that ratepayers should pay for.

4 **Q. What policy do you think the Commission should adopt regarding the cost**
5 **allocation of QF Network Upgrades?**

6 **A.** To sum up, the Commission should retain the principle that beneficiaries pay for benefits,
7 adopt a presumption that QF Network Upgrades provide system-wide benefits equivalent
8 to the utility-identified costs for those Network Upgrades, and allow utilities to rebut that
9 presumption by demonstrating that a specific QF Network Upgrade does not provide
10 system-wide benefits at all or in part.

11 **Q. Do you have any other comments on this issue?**

12 **A.** Yes, I would like to discuss the Joint Utilities' testimony on QF siting decisions. The
13 Joint Utilities' testimony that changing the cost allocation of QF-related Network
14 Upgrades would cause more QFs to "seek[] to site and develop projects in areas that
15 require significant Network Upgrades" is not representative of on-the-ground
16 development efforts. In my experience, QFs do their best to identify a good site for
17 development, but they have limited insights into interconnection costs until they get
18 utility study reports. (To be clear, I am not addressing the issues involving the
19 questionable accuracy of those utility cost estimates in this testimony.) As a result, the
20 critical decision QFs face today about Network Upgrades is not 'do I site in that area?'
21 but 'where is a good place to site in an area?' and 'do I withdraw from the process now
22 that I see this exorbitant cost estimate?' I think it is probably fair to say that fewer QFs
23 that face significant Network Upgrades would forfeit their development plans if their

1 responsibility for the costs was more representative of any system-wide benefits that
2 exist. I do not see that as a harm for QFs or ratepayers.

3 To the extent that QF siting decisions drive interconnection costs, those costs are
4 due to a lack of information *from utilities*, not due to QFs' ill-informed decisions. An
5 important way to incentivize economically efficient QF development would be to
6 improve the utility system's transparency, so QFs actually *can* make informed siting
7 decisions. Regardless of whether QFs or ratepayers pay for Network Upgrades,
8 ultimately, this is a cost reduction measure that would make sense for everyone.

9 **III. ISSUE 2: QFS SHOULD HAVE THE OPTION TO BE STUDIED USING ERIS**

10 **Q. What is the Commission's current policy on what interconnection service(s) on-**
11 **system QFs may use?**

12 **A.** To the best of my knowledge, the Commission has not adopted a policy on this issue for
13 small QFs. The Commission did approve the Qualifying Facility – Large Generator
14 Interconnection Procedures (“QF-LGIP”), which I understand reference the use of NRIS
15 for large QFs. However, my understanding is that the utilities have all adopted a practice
16 for all QFs of only using NRIS and not offering ERIS. I am unaware of the Commission
17 mandating that all QFs receive NRIS.

18 **Q. Why do the Joint Utilities assert that NRIS is the only appropriate option for QFs?**

19 **A.** My understanding of the Joint Utilities' Direct Testimony is that the Joint Utilities think:
20 1) there may be “deliverability” issues associated with QF power; 2) under NRIS,
21 deliverability issues are studied in the interconnection process, while under ERIS,
22 deliverability issues are studied in the transmission process; 3) currently, QFs pay for

1 interconnection costs, but ratepayers pay for QF transmission costs; and 4) QFs, not
2 ratepayers, should be responsible for costs associated with QF deliverability issues.

3 I will let the Interconnection Customer Coalition respond in legal briefing to the
4 Joint Utilities' characterization of NRIS and ERIS and whether either type of service
5 results in "deliverability."

6 **Q. Do the utilities only study QFs using NRIS then?**

7 **A.** It is unclear. The Interconnection Customer Coalition asked each of the utilities to
8 indicate whether they interconnected each state jurisdictional QF interconnection as an
9 energy or network resource (i.e., under ERIS or NRIS). Only Idaho Power presented
10 information that, if accurate, seems to have consistently and uniformly required all QFs
11 to interconnect using NRIS.¹³ Both PGE and PacifiCorp's records are unclear. So, the
12 policy they are promoting may be contradicted by actual practice.

13 PacifiCorp's response indicated it interconnected all QFs in its queue from
14 interconnection customer Q1 to Q564 as energy resources and then began interconnecting
15 all QFs as network resources, except for Q586.¹⁴ PacifiCorp responded to a Data
16 Request for Staff and indicated that it switched in February 2016.¹⁵ February 2016 was
17 years later than the Commission's decisions in Dockets No. AR 521 or UM 1401, and I
18 am not certain why PacifiCorp changed its practice. However, if PacifiCorp's answer is

13 Idaho Power Response to NIPPC Data Request 1 (Exhibit Interconnection Customer
Coalition/103, Lowe/1-4).

14 PacifiCorp Response to NIPPC Data Request 1 (Exhibit Interconnection Customer
Coalition/102, Lowe/1-4).

15 PacifiCorp Response to OPUC Data Request 6 (Exhibit Interconnection Customer
Coalition/105, Lowe/1).

1 correct, then PacifiCorp has interconnected at least some interconnection customers as
2 energy resources.

3 Similarly, the data provided by PGE shows that PGE has not designated any QFs
4 as network resources since at least April 2018, despite executing PPAs with about 80 QFs
5 since then.¹⁶ As explained below, PGE currently takes power from some QFs that are not
6 network customers.

7 **Q. Do you think the Commission should allow QFs to be studied under ERIS?**

8 **A.** Yes, I think allowing QFs to be studied under ERIS could enable them to have better
9 visibility into viable cost-saving alternatives to Network Upgrades. The Joint Utilities
10 frame NRIS as an important “prerequisite to allowing a generator to qualify for firm
11 network transmission service,” but there may be alternative options to firm Network
12 Transmission Service that better serve QFs, utilities, and ratepayers.¹⁷

13 I can think of two potential alternatives to Firm Network Transmission Service,
14 and there are probably others. I am not testifying that these alternatives should be used in
15 any specific circumstance, nor am I testifying that these are the only circumstances in
16 which ERIS might be appropriate. My testimony instead is merely responding to the
17 question ‘should QFs have the option to interconnect with Energy Resource
18 Interconnection Service (ERIS) or an interconnection service similar to ERIS?’ My
19 answer is that, as a matter of policy, QFs should have this option because interconnecting

¹⁶ PGE Response to NIPPC Data Request 2 (Exhibit Interconnection Customer Coalition/104, Lowe/9).

¹⁷ Joint Utilities/100, Vail-Bremer-Foster-Larson-Ellsworth/17:10-11 (Oct. 19, 2020).

1 as an ERIS might be reasonable and because it may lower cost for all impacted
2 stakeholders.

3 One, the QF generation could be delivered using Point-to-Point Transmission
4 (“PTP Transmission”). My understanding is that NRIS is not a prerequisite for PTP
5 Transmission, and the use of PTP Transmission may make sense in at least some
6 circumstances. From reviewing PGE’s data responses, I understand that PGE has
7 interconnected at least some off-system QFs this way, because, according to PGE, “doing
8 so allows PGE to accept these QFs’ output while also making unused transmission
9 available for energy transfers in the Western Energy Imbalance Market.”¹⁸ This is a clear
10 example of PTP Transmission enabling a more efficient use of the electricity system. If
11 PGE can purchase power from QFs when they are not a network resource, then it might
12 be reasonable to make this an option available to on-system QFs as well.

13 Two, the QF might be willing to voluntarily curtail its power to avoid the need for
14 interconnection costs. The Joint Utilities assert that FERC-jurisdictional generators may
15 be economically curtailable but that this “operational and financial flexibility does not
16 exist for QF power.”¹⁹ I am not taking a position on the legality of curtailing QF power.
17 From a policy perspective, I think some QFs would be happy to avoid Network Upgrade
18 costs by negotiating a voluntary curtailment arrangement. As a matter of public policy
19 and use of scarce resources, it makes sense to allow QFs the option to curtail their power
20 rather than pay for Network Upgrades, especially if the burden of paying for those

¹⁸ PGE Response to NIPPC Data Request 1 (Exhibit Interconnection Customer Coalition/104, Lowe/1, 5).

¹⁹ Joint Utilities/100, Vail-Bremer-Foster-Larson-Ellsworth/33:9-10 (Oct. 19, 2020).

1 Network Upgrades would otherwise result in the QF electing not to construct their
2 facility.

3 **IV. CONCLUSION**

4 **Q. Does this conclude your testimony?**

5 **A. Yes.**

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

Docket No. UM 2032

In the matter of

PUBLIC UTILITY COMMISSION OF
OREGON,

Investigation into the Treatment of Network
Upgrade Costs for Qualifying Facilities

**EXHIBIT INTERCONNECTION CUSTOMER COALITION/101
QUALIFICATIONS OF JOHN LOWE**

October 30, 2020

Overview

Director, Renewable Energy Coalition

Relevant Work Experience

2007-Present: Renewable Energy Coalition

Represent the Coalition and individual members in five regional states; power purchase agreement and interconnection consulting.

1975-2006: PacifiCorp, left as Manager of Qualifying Facility contracts, Portland, OR

Lead roles in company implementation of Public Utility Regulatory Policies Act, including, but not limited to power purchase agreements and interconnection contracting, staff supervision and management, and high level coordination of company's distribution interconnections for qualifying facilities.

1975: Graduate Oregon State, BS

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

Docket No. UM 2032

In the matter of

**PUBLIC UTILITY COMMISSION OF
OREGON,**

Investigation into the Treatment of Network
Upgrade Costs for Qualifying Facilities

**EXHIBIT INTERCONNECTION CUSTOMER COALITION/102
PACIFICORP RESPONSES TO NIPPC DATA REQUESTS**

October 30, 2020

NIPPC Data Request 1

Identify each QF project PacifiCorp has entered into a contract with and identify if PacifiCorp has designated it a network resource.

Response to NIPPC Data Request 1

Please refer to Attachment NIPPC 1 which: (1) lists in column A all qualifying facility (QF) projects with which PacifiCorp has executed or renewed a power purchase agreement (PPA) since January 1, 2010; and (2) indicates in column B whether each QF PPA has designated network resource (DNR) status. Where the executed PPA has a future commercial operation date (COD) and, therefore, a future DNR status date, Attachment NIPPC 1 lists the project in column A and notes the DNR will become effective in the future in column B. Attachment NIPPC 1 does not include QF projects with which PacifiCorp executed a PPA, but the PPA has since been terminated.

OR - UM 2032
NIPPC 1

Attachment NIPPC 1

Qualifying Facility (QF) Name	Designated as a Network Resource (DNR)
(a)	(b)
Adams Solar Center, LLC	Yes
Alta Energy (now Cottonwood Hydro)	Yes
Bear Creek Solar Center, LLC	Yes
Bell Mountain Hydro LLC (Ted Sorenson)	Yes
Beryl Solar	Yes
Biomass One, L.P.	Yes
Bly Solar Center, LLC	Yes
Bogus Creek	Yes
Buckhorn	Yes
Bureau of Land Management - Rawlins Office	Yes
BYU Idaho	Yes
C Drop	Yes
Cargill, Q3 (Kettle Butte Dairy)	Yes
Cedar Valley	Yes
Central Oregon Irrigation District	Yes
Central Oregon Irrigation District - Juniper Ridge	Yes
Chiloquin Solar	Yes
Chopin Wind, LLC	Yes
City of Buffalo	Yes
City of Portland, Portland Hydro Bureau	Yes
Commercial Energy Management	Yes
Cypress Creek - Merrill Solar	Yes
Deschutes Valley Hydro District	Yes
Dorena Hydro	Yes
Douglas Country Forest Products	Yes
Draper Irrigation Company	Yes
Dry Creek	Yes
eBay - Solar	Yes
EBD Hydro (Apple)	Yes
Elbe Solar Center, LLC	Yes
Enterprise Solar LLC	Yes
Escalante Solar I LLC	Yes
Escalante Solar II LLC	Yes
Escalante Solar III LLC	Yes
ExxonMobil Production Company	Yes
Farm Power Misty Meadow	Yes
Farmers Irrigation	Yes
Fiddler's Canyon 1	Yes
Fiddler's Canyon 2	Yes
Fiddler's Canyon 3	Yes
Four Corners Windfarm LLC	Yes
Four Mile Canyon Windfarm LLC	Yes
General Chemical (Now Tata Chemicals)	Yes
Granite Mountain East	Yes
Granite Mountain West	Yes
Granite Peak	Yes

OR - UM 2032
NIPPC 1

Attachment NIPPC 1

Greenville	Yes
Hill Air Force Base	Yes
Iron Springs Solar	Yes
J Bar 9 Ranch	Yes
Kennecott Refinery	Yes
Kennecott Smelter	Yes
Klamath Falls Solar 1 (Ewanua Solar LLC)	Yes
Klamath Falls Solar 2 (Ewanua Solar 2 LLC)	Yes
Laho #1	Yes
Lake Siskiyou (Box Canyon)	Yes
Latigo Wind	Yes
Loyd Fery	Yes
Luckey, Paul	Yes
Magnesium Corporation of America (MagCorp)	Yes
Meadow Creek Project Company - Five Pine	Yes
Meadow Creek Project Company - North Point	Yes
Milford 2	Yes
Milford Flat	Yes
Monroe Hydro (Apple)	Yes
Mountain Energy	Yes
Norwest Energy 2 LLC (Neff)	Yes
Norwest Energy 4 LLC (Bonanza)	Yes
Norwest Energy 7 LLC (Eagle Point)	Yes
Norwest Energy 9 LLC (Cypress Creek Renewables, Pendleton Project)	Yes
Obsidian Renewables LLC - Black Cap Solar II	Yes
OR Solar 2 (Agate Bay Solar)	Yes, future effective date
OR Solar 3 (Turkey Hill Solar)	Yes
OR Solar 5 (Merrill)	Yes
OR Solar 6 (Lakeview)	Yes
OR Solar 8 (Dairy)	Yes
Orchard Wind Farm 1, LLC	Yes, future effective date
Orchard Wind Farm 2, LLC	Yes, future effective date
Orchard Wind Farm 3, LLC	Yes, future effective date
Orchard Wind Farm 4, LLC	Yes, future effective date
Oregon Environmental Industries (Oregon Environmental Biogas)	Yes
Oregon Institute of Technology	Yes
Oregon State University	Yes
Oregon Trail Windfarm LLC	Yes
OSLH - Collier Solar	Yes
Pacific Canyon Windfarm LLC	Yes
Pavant Solar	Yes
Pavant Solar II LLC	Yes
Pioneer Wind Park I LLC	Yes
Power County Wind Park North	Yes
Power County Wind Park South	Yes
Quichapa 1	Yes
Quichapa 2	Yes
Quichapa 3	Yes
RES Ag- Oak Lea	Yes
Roseburg Forest Products - Dillard	Yes

OR - UM 2032
 NIPPC 1

Attachment NIPPC 1

Roseburg Forest Products - Weed	Yes
Roseburg LFG	Yes
Sage Solar I	Yes
Sage Solar II	Yes
Sage Solar III	Yes
Sand Ranch Windfarm LLC	Yes
Simplot Phosphates, LLC	Yes
Slate Creek	Yes
South Millford	Yes
Sprague Hydro (North Fork Sprague)	Yes
St. Anthony	Yes
Stahlbush Island Farms	Yes
Sweetwater Solar, LLC	Yes
Tesoro Refining and Marketing Company	Yes
Thayn Ranch Hydro	Yes
Three Peaks Power	Yes
Three Sisters Irrigation District (Watson Hydro) (200 kW)	Yes
Three Sisters Irrigation District (Watson Hydro) (700 kW)	Yes
Threemile Canyon Wind I LLC	Yes
TMF Biofuels	Yes
Tooele Army Depot (Wind 1 / Wind 2)	Yes
Tumbleweed Solar, LLC (Saturn Power Corporation)	Yes
Utah Red Hills Renewable Park	Yes
Woodline Solar LLC	Yes
Yakima Tieton (Cowiche)	Yes
Yakima Tieton (Orchards)	Yes

NIPPC Data Request 12

Please refer to Joint Utilities/100, Vail-Bremer-Foster-Larson-Ellsworth/8-9. Please explain how a QF could demonstrate that its network upgrade resulted in quantifiable system-wide benefits.

Response to NIPPC Data Request 12

PacifiCorp understands the Public Utility Commission of Oregon's (OPUC) large qualifying facility (QF) interconnection policy to establish a test consistent with Public Utility Regulatory Policies Act's (PURPA) avoided-cost mandate; specifically, that the overall costs of the purchase of QF power to retail customers should not exceed the costs that would be incurred but-for the utility's purchase of that QF power (see Joint Utilities/200, Wilding-Macfarlane-Williams/11.) The OPUC explained in Order No. 10-132 that a QF may try to demonstrate quantifiable system benefits that render the Network Upgrades caused by its interconnection sufficiently beneficial to retail customers that the QF may be entitled to a refund in some amount.

NIPPC Data Request 13

Please refer to Joint Utilities/100, Vail-Bremer-Foster-Larson-Ellsworth/8-9. Please identify all instances in which a QF interconnection customer attempted to demonstrate that its network upgrade resulted in quantified system-wide benefits. Please identify the specific upgrade, the amount at issue, and the ultimate resolution.

Response to NIPPC Data Request 13

Please refer to the Company's response to NIPPC Data Request 12. PacifiCorp is not aware of any qualifying facility (QF) that has attempted to demonstrate that the Network Upgrades associated with its interconnection provide quantifiable system benefits to retail customers.

NIPPC Data Request 30

Please refer to Joint Utilities/200, Wilding-Macfarlane-Williams/11, please explain how a QF would demonstrate that there were system upgrades that would have been incurred by the utility and its customers “but-for” the QF’s interconnection request.

Response to NIPPC Data Request 30

PacifiCorp assumes that the Northwest and Intermountain Power Producers Coalition (NIPPC) is referring in this data request to testimony stating that “PURPA prohibits customers from paying for Network Upgrades that would make the overall cost of QF power exceed avoided cost”, and thus “any state regulatory definition of ‘system-wide benefits’ that provides for QF reimbursement must ensure that the overall cost of QF power does not exceed avoided cost, even with that reimbursement”.

This passage refers to the Joint Utilities’ view that the “limitation of the avoided cost rate” prevents the Public Utility Commission of Oregon (OPUC) from allocating costs to the utility and its customers—that is, the total cost of energy, capacity, and interconnection costs—that would make the overall cost of qualifying facility (QF) power exceed that which the utility would have incurred but-for the QF. To the extent a QF can demonstrate that the total cost of QF power, including interconnection costs, are no more than the avoided cost, PacifiCorp believes the QF is free to demonstrate this in any way it chooses.

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

Docket No. UM 2032

In the matter of

PUBLIC UTILITY COMMISSION OF
OREGON,

Investigation into the Treatment of Network
Upgrade Costs for Qualifying Facilities

**EXHIBIT INTERCONNECTION CUSTOMER COALITION/103
IDAHO POWER RESPONSES TO NIPPC DATA REQUESTS**

October 30, 2020

NIPPC'S INFORMATION REQUEST NO. 1:

Identify each QF project Idaho Power has entered into a contract with and identify if Idaho Power has designated it a network resource.

IDAHO POWER COMPANY'S RESPONSE TO NIPPC'S INFORMATION REQUEST NO. 1:

Please see the attached Excel spreadsheet for the requested information for all currently active QF projects.

Project Name	Resource Type	Physical State	Energy Sales Agreement Jurisdictional State	Nameplate Capacity (MW)	Idaho Power Network Resource
American Falls Solar II, LLC	Solar	ID	ID	20.00	Yes
American Falls Solar, LLC	Solar	ID	ID	20.00	Yes
Arena Drop	Hydro	ID	ID	0.45	Yes
Baker City Hydro	Hydro	OR	OR	0.24	Yes
Baker Solar Center	Solar	OR	OR	15.00	Yes
Bannock County Landfill	Biomass	ID	ID	3.20	Yes
Barber Dam	Hydro	ID	ID	3.70	Yes
Bennett Creek Wind Farm	Wind	ID	ID	21.00	Yes
Benson Creek Windfarm	Wind	OR	OR	10.00	Yes
Bettencourt Dry Creek Biofactory	Biomass	ID	ID	2.25	Yes
Big Sky West Dairy Digester (DF-AP #1, LLC)	Biomass	ID	ID	1.50	Yes
Birch Creek	Hydro	ID	ID	0.07	Yes
Black Canyon #3	Hydro	ID	ID	0.13	Yes
Black Canyon Bliss Hydro	Hydro	ID	ID	0.03	Yes
Blind Canyon	Hydro	ID	ID	1.63	Yes
Box Canyon	Hydro	ID	ID	0.30	Yes
Briggs Creek	Hydro	ID	ID	0.60	Yes
Brush Solar	Solar	OR	OR	2.75	Yes
Burley Butte Wind Park	Wind	ID	ID	21.30	Yes
Bypass	Hydro	ID	ID	9.96	Yes
Camp Reed Wind Park	Wind	ID	ID	22.50	Yes
Canyon Springs	Hydro	ID	ID	0.11	Yes
Cassia Wind Farm LLC	Wind	ID	ID	10.50	Yes
Cedar Draw	Hydro	ID	ID	1.55	Yes
Clear Springs Trout	Hydro	ID	ID	0.56	Yes
Cold Springs Windfarm	Wind	ID	ID	23.00	Yes
Coleman Hydro	Hydro	ID	ID	0.80	Yes
Crystal Springs	Hydro	ID	ID	2.44	Yes
Curry Cattle Company	Hydro	ID	ID	0.25	Yes
Desert Meadow Windfarm	Wind	ID	ID	23.00	Yes
Dietrich Drop	Hydro	ID	ID	4.50	Yes
Durbin Creek Windfarm	Wind	OR	OR	10.00	Yes
Durkee Solar	Solar	OR	OR	3.00	Yes
Eightmile Hydro Project	Hydro	ID	ID	0.36	Yes
Elk Creek	Hydro	ID	ID	2.00	Yes
Fall River	Hydro	ID	ID	9.10	Yes
Fargo Drop Hydroelectric	Hydro	ID	ID	1.27	Yes
Faulkner Ranch	Hydro	ID	ID	0.87	Yes
Fighting Creek Landfill Gas to Energy Station	Biomass	ID	OR	3.06	Yes
Fisheries Dev.	Hydro	ID	ID	0.26	Yes
Fossil Gulch Wind	Wind	ID	ID	10.50	Yes
Geo-Bon #2	Hydro	ID	ID	0.93	Yes
Golden Valley Wind Park	Wind	ID	ID	12.00	Yes
Grand View PV Solar Two	Solar	ID	ID	80.00	Yes
Grove Solar Center, LLC	Solar	OR	OR	6.00	Yes
Hailey CSPP	Hydro	ID	ID	0.04	Yes
Hammett Hill Windfarm	Wind	ID	ID	23.00	Yes
Hazelton A	Hydro	ID	ID	8.10	Yes
Hazelton B	Hydro	ID	ID	7.60	Yes
Head of U Canal Project	Hydro	ID	ID	1.28	Yes
Hidden Hollow Landfill Gas	Biomass	ID	ID	3.20	Yes
High Mesa Wind Project	Wind	ID	ID	40.00	Yes
Horseshoe Bend Hydro	Hydro	ID	ID	9.50	Yes
Horseshoe Bend Wind	Wind	MT	ID	9.00	Yes
Hot Springs Wind Farm	Wind	ID	ID	21.00	Yes
Hyline Solar Center, LLC	Solar	OR	OR	9.00	Yes
ID Solar 1	Solar	ID	ID	40.00	Yes
Jett Creek Windfarm	Wind	OR	OR	10.00	Yes

Project Name	Resource Type	Physical State	Energy Sales Agreement Jurisdictional State	Nameplate Capacity (MW)	Idaho Power Network Resource
Jim Knight	Hydro	ID	ID	0.34	Yes
Koyle Small Hydro	Hydro	ID	ID	1.25	Yes
Lateral #10	Hydro	ID	ID	2.06	Yes
LeMoyne Hydro	Hydro	ID	ID	0.08	Yes
Lime Wind Energy	Wind	OR	OR	3.00	Yes
Little Wood River Ranch II	Hydro	ID	ID	1.25	Yes
Little Wood Rvr Res	Hydro	ID	ID	2.85	Yes
Littlewood / Arkoosh	Hydro	ID	ID	0.87	Yes
Low Line Canal	Hydro	ID	ID	8.20	Yes
Low Line Midway Hydro	Hydro	ID	ID	2.50	Yes
Lowline #2	Hydro	ID	ID	2.79	Yes
Magic Reservoir	Hydro	ID	ID	9.07	Yes
Mainline Windfarm	Wind	ID	ID	23.00	Yes
Malad River	Hydro	ID	ID	1.17	Yes
Marco Ranches	Hydro	ID	ID	1.20	Yes
MCG Hydro	Hydro	ID	ID	2.10	Yes
Mile 28	Hydro	ID	ID	1.50	Yes
Milner Dam Wind	Wind	ID	ID	19.92	Yes
Mitchell Butte	Hydro	OR	OR	2.09	Yes
Mora Drop Small Hydroelectric Facility	Hydro	ID	ID	1.85	Yes
Morgan Solar	Solar	OR	OR	3.00	Yes
Mt. Home Solar 1, LLC	Solar	ID	ID	20.00	Yes
Mud Creek S and S	Hydro	ID	ID	0.52	Yes
Mud Creek/White	Hydro	ID	ID	0.21	Yes
Murphy Flat Power, LLC	Solar	ID	ID	20.00	Yes
North Gooding Main Hydro	Hydro	ID	ID	1.30	Yes
Ontario Solar Center	Solar	OR	OR	3.00	Yes
Open Range Solar Center, LLC	Solar	OR	OR	10.00	Yes
Orchard Ranch Solar, LLC	Solar	ID	ID	20.00	Yes
Oregon Trail Wind Park	Wind	ID	ID	13.50	Yes
Owyhee Dam Csp	Hydro	OR	OR	5.00	Yes
Payne's Ferry Wind Park	Wind	ID	ID	21.00	Yes
Pico Energy, LLC	CoGen	ID	ID	2.13	Yes
Pigeon Cove	Hydro	ID	ID	1.75	Yes
Pilgrim Stage Station Wind Park	Wind	ID	ID	10.50	Yes
Pocatello Waste	Biomass	ID	ID	0.46	Yes
Pristine Springs #1	Hydro	ID	ID	0.13	Yes
Pristine Springs #3	Hydro	ID	ID	0.20	Yes
Prospector Windfarm	Wind	OR	OR	10.00	Yes
Railroad Solar Center, LLC	Solar	OR	OR	4.50	Yes
Reynolds Irrigation	Hydro	ID	ID	0.26	Yes
Rock Creek #1	Hydro	ID	ID	2.17	Yes
Rock Creek #2	Hydro	ID	ID	1.90	Yes
Rock Creek Dairy	Biomass	ID	ID	4.00	Yes
Rockland Wind Farm	Wind	ID	ID	80.00	Yes
Ryegrass Windfarm	Wind	ID	ID	23.00	Yes
Sagebrush	Hydro	ID	ID	0.43	Yes
Sahko Hydro	Hydro	ID	ID	0.50	Yes
Salmon Falls Wind	Wind	ID	ID	22.00	Yes
Sawtooth Wind Project	Wind	ID	ID	22.00	Yes
Schaffner	Hydro	ID	ID	0.53	Yes
Shingle Creek	Hydro	ID	ID	0.22	Yes
Shoshone #2	Hydro	ID	ID	0.58	Yes
Shoshone CSPP	Hydro	ID	ID	0.36	Yes
Simcoe Solar, LLC	Solar	ID	ID	20.00	Yes
Simplot - Pocatello	CoGen	ID	ID	15.90	Yes
SISW LFGE	Biomass	ID	ID	5.00	Yes
Snake River Pottery	Hydro	ID	ID	0.09	Yes

Project Name	Resource Type	Physical State	Energy Sales Agreement Jurisdictional State	Nameplate Capacity (MW)	Idaho Power Network Resource
Snedigar	Hydro	ID	ID	0.50	Yes
Tamarack CSPP	Biomass	ID	ID	6.25	Yes
Tasco - Nampa	Thermal	ID	ID	2.00	Yes
Tasco - Twin Falls	Thermal	ID	ID	3.00	Yes
Thousand Springs Wind Park	Wind	ID	ID	12.00	Yes
Thunderegg Solar Center, LLC	Solar	OR	OR	10.00	Yes
Tiber Dam	Hydro	MT	ID	7.50	Yes
Trout-Co	Hydro	ID	ID	0.24	Yes
Tuana Gulch Wind Park	Wind	ID	ID	10.50	Yes
Tuana Springs Expansion	Wind	ID	ID	35.70	Yes
Tunnel #1	Hydro	OR	OR	7.00	Yes
Two Ponds Windfarm	Wind	ID	ID	23.00	Yes
Vale Air Solar Center, LLC	Solar	OR	OR	10.00	Yes
Vale I Solar	Solar	OR	OR	3.00	Yes
White Water Ranch	Hydro	ID	ID	0.16	Yes
Willow Spring Windfarm	Wind	OR	OR	10.00	Yes
Wilson Lake Hydro	Hydro	ID	ID	8.40	Yes
Yahoo Creek Wind Park	Wind	ID	ID	21.00	Yes

NIPPC'S INFORMATION REQUEST NO. 12:

Please refer to Joint Utilities/100, Vail-Bremer-Foster-Larson-Ellsworth/8-9. Please explain how a QF could demonstrate that its network upgrade resulted in quantifiable system-wide benefits.

IDAHO POWER COMPANY'S RESPONSE TO NIPPC'S INFORMATION REQUEST NO. 12:

Idaho Power understands the Commission's large QF interconnection policy to establish a test consistent with PURPA's avoided-cost mandate; specifically, that the overall costs of the purchase of QF power to retail customers should not exceed the costs that would be incurred but-for the utility's purchase of that QF power (see Joint Utilities/200, Wilding-Macfarlane-Williams/11). The Commission explained in Order No. 10-132 that a QF may try to demonstrate quantifiable system-wide benefits that render the Network Upgrades caused by its interconnection sufficiently beneficial to retail customers that the QF may be entitled to a refund in some amount.

NIPPC'S INFORMATION REQUEST NO. 13:

Please refer to Joint Utilities/100, Vail-Bremer-Foster-Larson-Ellsworth/8-9. Please identify all instances in which a QF interconnection customer attempted to demonstrate that its network upgrade resulted in quantified system-wide benefits. Please identify the specific upgrade, the amount at issue, and the ultimate resolution.

IDAHO POWER COMPANY'S RESPONSE TO NIPPC'S INFORMATION REQUEST NO. 13:

Please see Idaho Power's response to DR 12. Idaho Power is not aware of any QF that has attempted to demonstrate that the Network Upgrades associated with its interconnection provide quantifiable system benefits to retail customers.

NIPPC'S INFORMATION REQUEST NO. 30:

Please refer to Joint Utilities/200, Wilding-Macfarlane-Williams/11, please explain how a QF would demonstrate that there were system upgrades that would have been incurred by the utility and its customers “but-for” the QF’s interconnection request.

IDAHO POWER COMPANY'S RESPONSE TO NIPPC'S INFORMATION REQUEST NO. 30:

Idaho Power assumes that NIPPC is referring in this data request to testimony stating that “PURPA prohibits customers from paying for Network Upgrades that would make the overall cost of QF power exceed avoided cost,” and thus, “any state regulatory definition of ‘system-wide benefits’ that provides for QF reimbursement must ensure that the overall cost of QF power does not exceed avoided cost, even with that reimbursement.”

This passage refers to the Joint Utilities’ view that the “limitation of the avoided cost rate” prevents the Commission from allocating costs to the utility and its customers—that is, the total cost of energy, capacity, and interconnection costs—that would make the overall cost of QF power exceed that which the utility would have incurred but-for the QF. To the extent a QF can demonstrate that the total cost of QF power, including interconnection costs, are no more than the avoided cost, Idaho Power believes the QF is free to demonstrate this in any way it chooses.

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

Docket No. UM 2032

In the matter of

**PUBLIC UTILITY COMMISSION OF
OREGON,**

Investigation into the Treatment of Network
Upgrade Costs for Qualifying Facilities

**EXHIBIT INTERCONNECTION CUSTOMER COALITION/104
PGE RESPONSES TO NIPPC DATA REQUESTS**

October 30, 2020

September 18, 2020

TO: Irion Sanger
Northwest and Intermountain Power Producers Coalition (“NIPPC”)

FROM: Robert Macfarlane
Manager, Pricing and Tariffs

**PORTLAND GENERAL ELECTRIC
UM 2032
PGE Response to NIPPC Data Request No. 001
Dated September 1, 2020**

Request:

Identify each QF project PGE has entered into a contract with and identify if PGE has designated it a network resource.

Response:

Please see Attachment 001A.

Based on conversations with counsel for NIPPC, PGE understands that this Data Request seeks to understand why PGE has designated some QFs as network resources and not others. PGE understands that QF output must be delivered using firm transmission because QFs cannot be curtailed except in system emergencies. All of PGE’s QFs that have achieved commercial operation are being delivered via firm transmission service. While PGE has designated most QFs as network resources for delivery, it has elected to deliver some QFs’ output using firm point-to-point transmission service. Firm network transmission service (which is used to deliver the output of QFs designated as network resources) and firm point-to-point transmission service have the same priority code for curtailment purposes. PGE has elected to use firm point-to-point transmission for off-system QFs delivering to PGE via the PACW-PGE interface because doing so allows PGE to accept these QFs’ output while also making unused transmission available for energy transfers in the Western Energy Imbalance Market, which occur via the PACW-PGE interface.

Existing and Proposed PURPA Qualified Facilities (QFs)
by Shawn Davis / Bruce True
03/22/2016

UM 2032
PGE to NIPPC DR Attach 001A

Project	Technology	Capacity (MW)	PPA Execution	Date Terminated	Has the Project Been Designated as a Network Resource
PaTu Wind	Wind	9	4/29/2010	NA	Yes
Starbuck Properties	Solar	0.025	11/2/2010	NA	Yes
Country Village Estates	Solar	0.04	9/23/2011	12/31/2015	No
JC Biomethane	Biogas	1.6	12/9/2011	4/24/2020	Yes
Coffin Butte	Biogas	5.66	7/2/2012	NA	Yes
Northern Wasco PUD	Hydro	5.85	9/29/2012	9/30/2015	No
FGO	Biogas	0.37	10/25/2012	5/16/2018	No
Conduit 3	Hydro	0.172	12/17/2012	6/27/2018	No
City of Grehsam Waste Water	Hydro	0.17	1/11/2013	12/31/2015	No
Tualatin Valley Water District	Hydro	0.112	4/1/2013	NA	Yes
Domaine Drouhin	Solar	0.094	4/5/2013	NA	Yes
Fremont Solar	Solar	8	9/11/2013	5/22/2019	No
Port of Tillamook	Biogas	1.2	9/20/2013	5/16/2018	No
Bear Creek Butte	Wind	10	11/22/2013	2/17/2016	No
West Butte	Wind	10	11/22/2013	2/17/2016	No
Minikahda Hydropower Co.	Hydro	0.2	2/14/2014	NA	Yes
Von Family Limited Partnership	Hydro	0.2	2/14/2014	NA	Yes
Steel Bridge Solar	Solar	2.5	2/19/2014	NA	Yes
Fossil Lake	Solar	10	4/29/2015	1/2/2020	No
Lakeview	Solar	10	7/15/2015	NA	No
NorWest Energy 14	Solar	2.2	7/28/2015	NA	Yes
SP Solar 1	Solar	2.2	7/28/2015	NA	Yes
SP Solar 5	Solar	2.2	7/28/2015	NA	Yes
SP Solar 8	Solar	2.2	7/28/2015	NA	Yes
SP Solar 7	Solar	2.2	7/28/2015	NA	Yes
SP Solar 6	Solar	2.2	7/28/2015	NA	Yes
NorWest Energy 16	Solar	2.2	7/28/2015	4/25/2016	No
SP Solar 4	Solar	2.2	7/28/2015	4/25/2016	No
SP Solar 2	Solar	2.2	7/28/2015	1/2/2020	No
St. Helen's Organic Recycling	Biogas	2.4	11/10/2015	2/11/2019	No
Willamina Solar	Solar	0.5	11/13/2015	1/26/2018	No
Sheep Solar	Solar	2.2	1/25/2016	NA	Yes
Silverton Solar	Solar	2.2	1/25/2016	NA	Yes
OE Solar 3	Solar	10	1/25/2016	NA	Yes
Butler Solar	Solar	4	1/25/2016	NA	No
Boring Solar	Solar	2.2	1/25/2016	NA	Yes
Starvation Solar	Solar	10	1/25/2016	NA	Yes
Drift Creek	Solar	2.2	1/25/2016	NA	Yes
Glenn Creek	Solar	2.2	1/25/2016	9/26/2016	No
OE Solar 2	Solar	5	1/25/2016	1/26/2018	No
OE Solar 1	Solar	10	1/25/2016	10/30/2018	No
Morrow Solar	Solar	10	1/25/2016	10/30/2018	No
Dayton Solar I	Solar	10	1/25/2016	1/29/2020	No
Tygh Valley Solar	Solar	10	1/25/2016	1/29/2020	No
Wasco Solar 1	Solar	10	1/25/2016	1/29/2020	No
OE Solar 4	Solar	10	3/7/2016	6/27/2018	No
Fort Rock Solar II	Solar	10	4/27/2016	NA	No
Fort Rock Solar I	Solar	10	4/27/2016	NA	Yes
Ballston Solar	Solar	2.2	5/2/2016	NA	Yes
Suntex Solar	Solar	10	5/16/2016	NA	Yes
Amity Solar	Solar	4	5/20/2016	NA	No
Stringtown Solar	Solar	4	5/20/2016	NA	No
Starlight Solar	Solar	4	5/20/2016	NA	No
Firwood Solar	Solar	10	5/20/2016	NA	Yes
Duus Solar	Solar	10	5/20/2016	NA	Yes
Fishback Solar	Solar	3	5/20/2016	8/31/2016	No
Bridgeport Solar	Solar	7	5/20/2016	10/29/2019	No
O'neil Creek Solar	Solar	2.2	6/10/2016	NA	Yes
St Louis Solar	Solar	2.2	6/10/2016	NA	Yes
Rafael Solar	Solar	2.2	6/21/2016	NA	Yes
OM Power 1	Geothermal	10	6/21/2016	NA	No
Willamina Mill Solar	Solar	2.2	6/21/2016	NA	No
Palmer Solar	Solar	2.2	6/21/2016	NA	No
Energy Partners I	Biomass	10	6/21/2016	7/12/2019	No
Energy Partners II	Biomass	10	6/21/2016	7/12/2019	No
Case Creek Solar	Solar	2.2	6/22/2016	NA	Yes
Alfalfa Solar	Solar	10	6/26/2016	NA	No

Existing and Proposed PURPA Qualified Facilities (QFs)
by Shawn Davis / Bruce True
03/22/2016

UM 2032
PGE to NIPPC DR Attach 001A

Project	Technology	Capacity (MW)	PPA Execution	Date Terminated	Has the Project Been Designated as a Network Resource
Fort Rock Solar IV	Solar	10	6/26/2016	NA	Yes
Harney Solar I	Solar	10	6/27/2016	NA	No
Riley Solar	Solar	10	6/27/2016	NA	Yes
South Burns Solar I	Solar	10	7/20/2016	NA	No
West Hines Solar I	Solar	10	7/20/2016	NA	Yes
Alkali	Solar	10	8/26/2016	NA	Yes
Rock Garden	Solar	10	8/26/2016	NA	Yes
OE Solar 5	Solar	10	11/4/2016	6/19/2019	No
Day Hill Solar	Solar	2.2	11/10/2016	NA	No
Labish Solar	Solar	2.2	12/1/2016	NA	Yes
Brightwood Solar	Solar	10	3/1/2017	NA	No
Airport Solar	Solar	47.25	4/3/2017	NA	No
Kale Patch Solar	Solar	2.2	5/10/2017	NA	Yes
Evergreen BioPower	Biomass	10	5/31/2017	NA	Yes
Thomas Creek Solar	Solar	2.2	5/31/2017	NA	Yes
Yamhill Creek Solar	Solar	2.2	5/31/2017	12/26/2019	No
Stark Solar (Solar Star Oregon)	Solar	10	6/2/2017	NA	No
OE Solar 6	Solar	10	6/15/2017	6/19/2019	No
Brush Creek Solar	Solar	2.2	6/23/2017	NA	Yes
Daisy Solar 1	Solar	10	8/22/2017	10/30/2018	No
Tickle Creek Solar	Solar	1.85	8/23/2017	NA	Yes
BioGreen	Biomass	28	8/25/2017	9/17/2018	No
Volcano Solar	Solar	0.75	10/18/2017	NA	Yes
SSD Marion 3	Solar	2	10/20/2017	NA	No
SSD Clackamas 4	Solar	2	10/20/2017	NA	No
SSD Clackamas 2	Solar	2	10/20/2017	5/8/2018	No
Liberal Solar	Solar	10	12/27/2017	NA	No
Delaney Solar	Solar	2.5	12/27/2017	NA	No
Eagle Creek Solar	Solar	5	12/27/2017	NA	No
Eola Solar	Solar	2.2	1/29/2018	NA	No
Rock Creek Solar	Solar	2.2	2/7/2018	NA	No
PG - West Sheridan	Solar	3	4/18/2018	NA	No
DF - West Eagle Creek	Solar	2.79	4/19/2018	NA	Yes
AM - West Silverton	Solar	2.97	4/19/2018	NA	No
DC - Donald	Solar	2.16	4/19/2018	NA	No
SB - South Wilamina	Solar	2.97	4/19/2018	NA	No
DB - Bull Run	Solar	2.565	4/19/2018	NA	No
KT - Molalla	Solar	2.97	4/19/2018	NA	Yes
Dryland Solar	Solar	2.5	4/19/2018	NA	No
Bristol Solar	Solar	3	4/19/2018	NA	No
Fairview Solar	Solar	3	4/19/2018	NA	No
Milford Solar	Solar	2.97	4/19/2018	NA	No
Black Forest Solar	Solar	1.26	4/19/2018	12/9/2019	No
DD - Molalla	Solar	3	4/19/2018	12/9/2019	No
Sulusolar6	Solar	3	4/19/2018	12/9/2019	No
Ashfield Solar	Solar	3	4/19/2018	12/9/2019	No
Cosper Creek Solar	Solar	2.5	4/19/2018	6/8/2020	No
Dunn Rd Solar	Solar	1.85	4/19/2018	6/22/2020	No
SSD Clackamas 1	Solar	4	5/8/2018	NA	No
SSD Marion 5	Solar	2	5/8/2018	NA	No
SSD Clackamas 7	Solar	2	5/8/2018	NA	No
SSD Marion 6	Solar	2	5/8/2018	NA	No
Greenpark Solar	Solar	1.26	5/8/2018	NA	No
Gun Club Solar	Solar	2.5	5/8/2018	NA	No
Kensington Solar	Solar	0.99	5/8/2018	12/9/2019	No
Kerry Solar	Solar	2.97	5/8/2018	12/9/2019	No
SSD Marion 1	Solar	2	5/25/2018	NA	No
Brush College Solar	Solar	2	5/25/2018	NA	No
Mountain Meadow Solar	Solar	2.5	5/25/2018	NA	No
River Valley Solar	Solar	2	5/25/2018	NA	No
Raven Loop	Solar	2	5/25/2018	NA	No
Fruitland Creek	Solar	1.75	5/25/2018	6/1/2020	No
Sandy River Solar	Solar	1.85	5/25/2018	6/1/2020	No
Mt Hope Solar	Solar	2.5	5/25/2018	6/22/2020	No
Ridgeway Solar	Solar	2.5	6/4/2018	NA	No
Townsend Solar	Solar	2.25	6/4/2018	NA	No
Ashcroft Solar	Solar	2.25	6/4/2018	NA	No

Existing and Proposed PURPA Qualified Facilities (QFs)
by Shawn Davis / Bruce True
03/22/2016

UM 2032
PGE to NIPPC DR Attach 001A

Project	Technology	Capacity (MW)	PPA Execution	Date Terminated	Has the Project Been Designated as a Network Resource
Cow Creek Solar	Solar	1.75	6/4/2018	NA	No
Zena Solar	Solar	2.5	6/4/2018	NA	No
Waconda Solar	Solar	2.25	6/4/2018	NA	No
Marquam Creek Solar	Solar	2	6/4/2018	9/19/2018	No
Walker Creek Solar	Solar	2.5	6/4/2018	10/3/2018	No
Kaiser Creek Solar	Solar	2	6/4/2018	6/18/2020	No
Williams Acres Solar	Solar	2.5	6/4/2018	6/22/2020	No
Covanta Marion	Biomass	13.1	6/19/2018	NA	No
Parrott Creek Solar	Solar	2	6/28/2018	NA	No
Sulusolar9	Solar	2.97	8/31/2018	5/22/2019	No
Gatwick Solar	Solar	2.97	8/31/2018	6/25/2019	No
Auburn Solar	Solar	1.26	8/31/2018	6/25/2019	No
Carnes Creek Solar	Solar	2.5	8/31/2018	6/8/2020	No
Tower Road Solar	Solar	55	9/4/2018	10/30/2018	No
Manchester Solar	Solar	1.8	9/26/2018	6/29/2020	No
Clayfield Solar	Solar	2.565	11/7/2018	7/1/2020	No
Radio Solar	Solar	2.5	11/29/2018	NA	No
Buckner Creek Solar	Solar	2.5	11/29/2018	NA	No
Gonzaga Solar	Solar	2.16	11/29/2018	6/25/2019	No
Carlow Solar	Solar	2.565	11/29/2018	6/25/2019	No
Sesqui-C Solar	Solar	2.5	11/29/2018	6/8/2020	No
Marquam Creek Solar	Solar	2	2/9/2019	NA	No
Walker Creek Solar	Solar	2.5	2/9/2019	NA	No
Falls Creek Hydro	Hydro	4.1	2/19/2019	NA	No
Connley Solar	Solar	10	5/21/2019	NA	No
Reed Solar	Solar	2.2	5/21/2019	NA	No
Waterford Solar	Solar	2.565	8/27/2019	NA	No
Belvedere Solar	Solar	2.97	9/9/2019	NA	No
Pika Solar	Solar	2.2	9/17/2019	NA	No
Minke Solar	Solar	2.2	9/17/2019	NA	No
Big Horn	Solar	2.2	9/17/2019	NA	No
Dover Solar	Solar	1.98	10/2/2019	6/29/2020	No
Cork Solar	Solar	1.26	1/17/2020	NA	No
Cusack Solar	Solar	2.565	1/17/2020	NA	No
Stilorgan Solar	Solar	1.53	1/17/2020	NA	No
Auburn Solar	Solar	1.26	1/17/2020	6/8/2020	No
Coolmine Solar	Solar	1.98	4/15/2020	NA	No
Dublin Solar	Solar	2.97	4/15/2020	NA	No
Hogan Solar	Solar	2.565	4/27/2020	NA	No
Jefferson Solar LLC	Solar	53	8/21/2020	NA	No

October 23, 2020

TO: Irion Sanger
Northwest and Intermountain Power Producers Coalition (“NIPPC”)

FROM: Robert Macfarlane
Manager, Pricing and Tariffs

**PORTLAND GENERAL ELECTRIC
UM 2032
PGE Response to NIPPC Data Request No. 001
Dated September 1, 2020**

Request:

Identify each QF project PGE has entered into a contract with and identify if PGE has designated it a network resource.

Supplemental Response:

PGE supplements its response with Supplemental Attachment 001A. This attachment includes six additional projects with PPAs that were executed in 2020, that were inadvertently omitted from the previous version.

Response:

Please see Attachment 001A.

Based on conversations with counsel for NIPPC, PGE understands that this Data Request seeks to understand why PGE has designated some QFs as network resources and not others. PGE understands that QF output must be delivered using firm transmission because QFs cannot be curtailed except in system emergencies. All of PGE’s QFs that have achieved commercial operation are being delivered via firm transmission service. While PGE has designated most QFs as network resources for delivery, it has elected to deliver some QFs’ output using firm point-to-point transmission service. Firm network transmission service (which is used to deliver the output of QFs designated as network resources) and firm point-to-point transmission service have the same priority code for curtailment purposes. PGE has elected to use firm point-to-point transmission for off-system QFs delivering to PGE via the PACW-PGE interface because doing so allows PGE to accept these QFs’ output while also making unused transmission available for energy transfers in the Western Energy Imbalance Market, which occur via the PACW-PGE interface.

Existing and Proposed PURPA Qualified Facilities (QFs)
by Shawn Davis / Bruce True
03/22/2016

Project	Technology	Capacity (MW)	PPA Execution	Date Terminated	Has the Project Been Designated as a Network Resource
PaTu Wind	Wind	9	4/29/2010	NA	Yes
Starbuck Properties	Solar	0.025	11/2/2010	NA	Yes
Country Village Estates	Solar	0.04	9/23/2011	12/31/2015	No
JC Biomethane	Biogas	1.6	12/9/2011	4/24/2020	Yes
Coffin Butte	Biogas	5.66	7/2/2012	NA	Yes
Northern Wasco PUD	Hydro	5.85	9/29/2012	9/30/2015	No
FGO	Biogas	0.37	10/25/2012	5/16/2018	No
Conduit 3	Hydro	0.172	12/17/2012	6/27/2018	No
City of Grehsam Waste Water	Hydro	0.17	1/11/2013	12/31/2015	No
Tualatin Valley Water District	Hydro	0.112	4/1/2013	NA	Yes
Domaine Drouhin	Solar	0.094	4/5/2013	NA	Yes
Fremont Solar	Solar	8	9/11/2013	5/22/2019	No
Port of Tillamook	Biogas	1.2	9/20/2013	5/16/2018	No
Bear Creek Butte	Wind	10	11/22/2013	2/17/2016	No
West Butte	Wind	10	11/22/2013	2/17/2016	No
Minikahda Hydropower Co.	Hydro	0.2	2/14/2014	NA	Yes
Von Family Limited Partnership	Hydro	0.2	2/14/2014	NA	Yes
Steel Bridge Solar	Solar	2.5	2/19/2014	NA	Yes
Fossil Lake	Solar	10	4/29/2015	1/2/2020	No
Lakeview	Solar	10	7/15/2015	NA	No
NorWest Energy 14	Solar	2.2	7/28/2015	NA	Yes
SP Solar 1	Solar	2.2	7/28/2015	NA	Yes
SP Solar 5	Solar	2.2	7/28/2015	NA	Yes
SP Solar 8	Solar	2.2	7/28/2015	NA	Yes
SP Solar 7	Solar	2.2	7/28/2015	NA	Yes
SP Solar 6	Solar	2.2	7/28/2015	NA	Yes
NorWest Energy 16	Solar	2.2	7/28/2015	4/25/2016	No
SP Solar 4	Solar	2.2	7/28/2015	4/25/2016	No
SP Solar 2	Solar	2.2	7/28/2015	1/2/2020	No
St. Helen's Organic Recycling	Biogas	2.4	11/10/2015	2/11/2019	No
Willamina Solar	Solar	0.5	11/13/2015	1/26/2018	No
Sheep Solar	Solar	2.2	1/25/2016	NA	Yes
Silverton Solar	Solar	2.2	1/25/2016	NA	Yes
OE Solar 3	Solar	10	1/25/2016	NA	Yes
Butler Solar	Solar	4	1/25/2016	NA	No
Boring Solar	Solar	2.2	1/25/2016	NA	Yes
Starvation Solar	Solar	10	1/25/2016	NA	Yes
Drift Creek	Solar	2.2	1/25/2016	NA	Yes
Glenn Creek	Solar	2.2	1/25/2016	9/26/2016	No
OE Solar 2	Solar	5	1/25/2016	1/26/2018	No
OE Solar 1	Solar	10	1/25/2016	10/30/2018	No
Morrow Solar	Solar	10	1/25/2016	10/30/2018	No
Dayton Solar I	Solar	10	1/25/2016	1/29/2020	No
Tygh Valley Solar	Solar	10	1/25/2016	1/29/2020	No
Wasco Solar 1	Solar	10	1/25/2016	1/29/2020	No
OE Solar 4	Solar	10	3/7/2016	6/27/2018	No
Fort Rock Solar II	Solar	10	4/27/2016	NA	No
Fort Rock Solar I	Solar	10	4/27/2016	NA	Yes
Ballston Solar	Solar	2.2	5/2/2016	NA	Yes
Suntex Solar	Solar	10	5/16/2016	NA	Yes
Amity Solar	Solar	4	5/20/2016	NA	No
Stringtown Solar	Solar	4	5/20/2016	NA	No
Starlight Solar	Solar	4	5/20/2016	NA	No
Firwood Solar	Solar	10	5/20/2016	NA	Yes
Duus Solar	Solar	10	5/20/2016	NA	Yes
Fishback Solar	Solar	3	5/20/2016	8/31/2016	No
Bridgeport Solar	Solar	7	5/20/2016	10/29/2019	No
O'neil Creek Solar	Solar	2.2	6/10/2016	NA	Yes
St Louis Solar	Solar	2.2	6/10/2016	NA	Yes
Rafael Solar	Solar	2.2	6/21/2016	NA	Yes
OM Power 1	Geothermal	10	6/21/2016	NA	No
Willamina Mill Solar	Solar	2.2	6/21/2016	NA	No
Palmer Solar	Solar	2.2	6/21/2016	NA	No
Energy Partners I	Biomass	10	6/21/2016	7/12/2019	No
Energy Partners II	Biomass	10	6/21/2016	7/12/2019	No
Case Creek Solar	Solar	2.2	6/22/2016	NA	Yes
Alfalfa Solar	Solar	10	6/26/2016	NA	No
Fort Rock Solar IV	Solar	10	6/26/2016	NA	Yes
Harney Solar I	Solar	10	6/27/2016	NA	No
Riley Solar	Solar	10	6/27/2016	NA	Yes
South Burns Solar I	Solar	10	7/20/2016	NA	No
West Hines Solar I	Solar	10	7/20/2016	NA	Yes
Alkali	Solar	10	8/26/2016	NA	Yes
Rock Garden	Solar	10	8/26/2016	NA	Yes
OE Solar 5	Solar	10	11/4/2016	6/19/2019	No
Day Hill Solar	Solar	2.2	11/10/2016	NA	No
Labish Solar	Solar	2.2	12/1/2016	NA	Yes

Existing and Proposed PURPA Qualified Facilities (QFs)
by Shawn Davis / Bruce True
03/22/2016

Project	Technology	Capacity (MW)	PPA Execution	Date Terminated	Has the Project Been Designated as a Network Resource
Brightwood Solar	Solar	10	3/1/2017	NA	No
Airport Solar	Solar	47.25	4/3/2017	NA	No
Kale Patch Solar	Solar	2.2	5/10/2017	NA	Yes
Evergreen BioPower	Biomass	10	5/31/2017	NA	Yes
Thomas Creek Solar	Solar	2.2	5/31/2017	NA	Yes
Yamhill Creek Solar	Solar	2.2	5/31/2017	12/26/2019	No
Stark Solar (Solar Star Oregon)	Solar	10	6/2/2017	NA	No
OE Solar 6	Solar	10	6/15/2017	6/19/2019	No
Brush Creek Solar	Solar	2.2	6/23/2017	NA	Yes
Daisy Solar 1	Solar	10	8/22/2017	10/30/2018	No
Tickle Creek Solar	Solar	1.85	8/23/2017	NA	Yes
BioGreen	Biomass	28	8/25/2017	9/17/2018	No
Volcano Solar	Solar	0.75	10/18/2017	NA	Yes
SSD Marion 3	Solar	2	10/20/2017	NA	No
SSD Clackamas 4	Solar	2	10/20/2017	NA	No
SSD Clackamas 2	Solar	2	10/20/2017	5/8/2018	No
Liberal Solar	Solar	10	12/21/2017	NA	No
Delaney Solar	Solar	2.5	12/27/2017	NA	No
Eagle Creek Solar	Solar	5	12/27/2017	NA	No
Eola Solar	Solar	2.2	1/29/2018	NA	No
Rock Creek Solar	Solar	2.2	2/7/2018	NA	No
PG - West Sheridan	Solar	3	4/18/2018	NA	No
DF - West Eagle Creek	Solar	2.79	4/19/2018	NA	Yes
AM - West Silverton	Solar	2.97	4/19/2018	NA	No
DC - Donald	Solar	2.16	4/19/2018	NA	No
SB - South Wilamina	Solar	2.97	4/19/2018	NA	No
DB - Bull Run	Solar	2.565	4/19/2018	NA	No
KT - Molalla	Solar	2.97	4/19/2018	NA	Yes
Dryland Solar	Solar	2.5	4/19/2018	NA	No
Bristol Solar	Solar	3	4/19/2018	NA	No
Fairview Solar	Solar	3	4/19/2018	NA	No
Milford Solar	Solar	2.97	4/19/2018	NA	No
Black Forest Solar	Solar	1.26	4/19/2018	12/9/2019	No
DD - Molalla	Solar	3	4/19/2018	12/9/2019	No
SulusSolar6	Solar	3	4/19/2018	12/9/2019	No
Ashfield Solar	Solar	3	4/19/2018	12/9/2019	No
Cosper Creek Solar	Solar	2.5	4/19/2018	6/8/2020	No
Dunn Rd Solar	Solar	1.85	4/19/2018	6/22/2020	No
SSD Clackamas 1	Solar	4	5/8/2018	NA	No
SSD Marion 5	Solar	2	5/8/2018	NA	No
SSD Clackamas 7	Solar	2	5/8/2018	NA	No
SSD Marion 6	Solar	2	5/8/2018	NA	No
Greenpark Solar	Solar	1.26	5/8/2018	NA	No
Gun Club Solar	Solar	2.5	5/8/2018	NA	No
Kensington Solar	Solar	0.99	5/8/2018	12/9/2019	No
Kerry Solar	Solar	2.97	5/8/2018	12/9/2019	No
SSD Marion 1	Solar	2	5/25/2018	NA	No
Brush College Solar	Solar	2	5/25/2018	NA	No
Mountain Meadow Solar	Solar	2.5	5/25/2018	NA	No
River Valley Solar	Solar	2	5/25/2018	NA	No
Raven Loop	Solar	2	5/25/2018	NA	No
Fruitland Creek	Solar	1.75	5/25/2018	6/1/2020	No
Sandy River Solar	Solar	1.85	5/25/2018	6/1/2020	No
Mt Hope Solar	Solar	2.5	5/25/2018	6/22/2020	No
Ridgeway Solar	Solar	2.5	6/4/2018	NA	No
Townsend Solar	Solar	2.25	6/4/2018	NA	No
Ashcroft Solar	Solar	2.25	6/4/2018	NA	No
Cow Creek Solar	Solar	1.75	6/4/2018	NA	No
Zena Solar	Solar	2.5	6/4/2018	NA	No
Waconda Solar	Solar	2.25	6/4/2018	NA	No
Marquam Creek Solar	Solar	2	6/4/2018	9/19/2018	No
Walker Creek Solar	Solar	2.5	6/4/2018	10/3/2018	No
Kaiser Creek Solar	Solar	2	6/4/2018	6/18/2020	No
Williams Acres Solar	Solar	2.5	6/4/2018	6/22/2020	No
Covanta Marion	Biomass	13.1	6/19/2018	NA	No
Parrott Creek Solar	Solar	2	6/28/2018	NA	No
SulusSolar9	Solar	2.97	8/31/2018	5/22/2019	No
Gatwick Solar	Solar	2.97	8/31/2018	6/25/2019	No
Auburn Solar	Solar	1.26	8/31/2018	6/25/2019	No
Carnes Creek Solar	Solar	2.5	8/31/2018	6/8/2020	No
Tower Road Solar	Solar	55	9/4/2018	10/30/2018	No
Manchester Solar	Solar	1.8	9/26/2018	6/29/2020	No
Clayfield Solar	Solar	2.565	11/7/2018	7/1/2020	No
Radio Solar	Solar	2.5	11/29/2018	NA	No
Buckner Creek Solar	Solar	2.5	11/29/2018	NA	No
Gonzaga Solar	Solar	2.16	11/29/2018	6/25/2019	No
Carlow Solar	Solar	2.565	11/29/2018	6/25/2019	No

Existing and Proposed PURPA Qualified Facilities (QFs)
by Shawn Davis / Bruce True
03/22/2016

Project	Technology	Capacity (MW)	PPA Execution	Date Terminated	Has the Project Been Designated as a Network Resource
Sesqui-C Solar	Solar	2.5	11/29/2018	6/8/2020	No
Marquam Creek Solar	Solar	2	2/9/2019	NA	No
Walker Creek Solar	Solar	2.5	2/9/2019	NA	No
Falls Creek Hydro	Hydro	4.1	2/19/2019	NA	No
Connley Solar	Solar	10	5/21/2019	NA	No
Reed Solar	Solar	2.2	5/21/2019	NA	No
Waterford Solar	Solar	2.565	8/27/2019	NA	No
Belvedere Solar	Solar	2.97	9/9/2019	NA	No
Pika Solar	Solar	2.2	9/17/2019	NA	No
Minke Solar	Solar	2.2	9/17/2019	NA	No
Big Horn	Solar	2.2	9/17/2019	NA	No
Dover Solar	Solar	1.98	10/2/2019	6/29/2020	No
Cork Solar	Solar	1.26	1/17/2020	NA	No
Cusack Solar	Solar	2.565	1/17/2020	NA	No
Stilorgan Solar	Solar	1.53	1/17/2020	NA	No
Auburn Solar	Solar	1.26	1/17/2020	6/8/2020	No
MFID	Hydro	2.8	4/2/2020	NA	No
Coolmine Solar	Solar	1.98	4/15/2020	NA	No
Dublin Solar	Solar	2.97	4/15/2020	NA	No
Hogan Solar	Solar	2.565	4/27/2020	NA	No
Blue Marmot V	Solar	10	6/23/2020	NA	No
Blue Marmot VI	Solar	10	6/23/2020	NA	No
Blue Marmot VII	Solar	10	6/23/2020	NA	No
Blue Marmot VIII	Solar	10	6/23/2020	NA	No
Blue Marmot IX	Solar	10	6/23/2020	NA	No
Jefferson Solar LLC	Solar	53	8/21/2020	NA	No

September 18, 2020

TO: Irion Sanger
Northwest and Intermountain Power Producers Coalition (“NIPPC”)

FROM: Robert Macfarlane
Manager, Pricing and Tariffs

**PORTLAND GENERAL ELECTRIC
UM 2032
PGE Response to NIPPC Data Request No. 002
Dated September 1, 2020**

Request:

Please indicate whether PGE interconnected each state jurisdictional qualifying facility interconnection as an energy or network resource.

Response:

To the best of PGE’s knowledge, PGE did not interconnect any QFs between the time that FERC’s Order 2003, which adopted the concepts of NRIS and ERIS, took effect and the time that the Commission adopted NRIS as its policy. Since NRIS became the Commission’s policy for QFs, PGE has interconnected all QFs using NRIS.

September 18, 2020

TO: Irion Sanger
Northwest and Intermountain Power Producers Coalition (“NIPPC”)

FROM: Robert Macfarlane
Manager, Pricing and Tariffs

**PORTLAND GENERAL ELECTRIC
UM 2032
PGE Response to NIPPC Data Request No. 012
Dated September 1, 2020**

Request:

Please refer to Joint Utilities/100, Vail-Bremer-Foster-Larson-Ellsworth/8-9. Please explain how a QF could demonstrate that its network upgrade resulted in quantifiable system-wide benefits.

Response:

PGE understands the Commission’s large QF interconnection policy to establish a test consistent with PURPA’s avoided-cost mandate; specifically, that the overall costs of the purchase of QF power to retail customers should not exceed the costs that would be incurred but-for the utility’s purchase of that QF power. *See* Joint Utilities/200, Wilding-Macfarlane-Williams/11. The Commission explained in Order No. 10-132 that a QF may try to demonstrate quantifiable system-wide benefits that render the Network Upgrades caused by its interconnection sufficiently beneficial to customers that the QF may be entitled to a refund in some amount.

September 18, 2020

TO: Irion Sanger
Northwest and Intermountain Power Producers Coalition (“NIPPC”)

FROM: Robert Macfarlane
Manager, Pricing and Tariffs

**PORTLAND GENERAL ELECTRIC
UM 2032
PGE Response to NIPPC Data Request No. 013
Dated September 1, 2020**

Request:

Please refer to Joint Utilities/100, Vail-Bremer-Foster-Larson-Ellsworth/8-9. Please identify all instances in which a QF interconnection customer attempted to demonstrate that its network upgrade resulted in quantified system-wide benefits. Please identify the specific upgrade, the amount at issue, and the ultimate resolution.

Response:

Please see Docket UM 2009 in which Madras Solar argued that the series capacitor identified as a Network Upgrade created quantifiable, system-wide benefits. PGE filed testimony to the contrary. The docket is currently suspended.

September 18, 2020

TO: Irion Sanger
Northwest and Intermountain Power Producers Coalition (“NIPPC”)

FROM: Robert Macfarlane
Manager, Pricing and Tariffs

**PORTLAND GENERAL ELECTRIC
UM 2032
PGE Response to NIPPC Data Request No. 030
Dated September 1, 2020**

Request:

Please refer to Joint Utilities/200, Wilding-Macfarlane-Williams/11, please explain how a QF would demonstrate that there were system upgrades that would have been incurred by the utility and its customers “but-for” the QF’s interconnection request.

Response:

PGE assumes that NIPPC is referring in this data request to testimony stating that “PURPA prohibits customers from paying for Network Upgrades that would make the overall cost of QF power exceed avoided cost,” and thus, “any state regulatory definition of ‘system-wide benefits’ that provides for QF reimbursement must ensure that the overall cost of QF power does not exceed avoided cost, even with that reimbursement.”

This passage refers to the Joint Utilities’ view that the “limitation of the avoided cost rate” prevents the Commission from allocating costs to the utility and its customers—that is, the total cost of energy, capacity, and interconnection costs—that would make the overall cost of QF power exceed that which the utility would have incurred but-for the QF. To the extent a QF can demonstrate that the total cost of QF power, including interconnection costs, are no more than the avoided cost, PGE believes the QF is free to demonstrate this in any way it chooses.

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

Docket No. UM 2032

In the matter of

PUBLIC UTILITY COMMISSION OF
OREGON,

Investigation into the Treatment of Network
Upgrade Costs for Qualifying Facilities

**EXHIBIT INTERCONNECTION CUSTOMER COALITION/105
PACIFICORP RESPONSE TO OPUC DATA REQUEST 6**

October 30, 2020

UM 2032 / PacifiCorp
 October 2, 2020
 OPUC Information Request 6

OPUC Information Request 6

Network Resource Interconnection Service Requirement

Please indicate the date on which the Company began requiring Oregon QFs to interconnect using Network Resource Interconnection Service.

- (a) Please provide any announcements, business practices, or other supporting documentation.

Response to OPUC Information Request 6

PacifiCorp began consistently requiring qualifying facilities (QF) in all of its states to secure network resource (NR) interconnection service starting on February 1, 2016.

More specifically, PacifiCorp did not consistently require qualifying facilities (QF) to secure NR interconnection service across its system, including in Oregon, until after two things occurred: (1) PacifiCorp's transmission system became more constrained, which meant the interconnection and transmission of additional generation was triggering significant deliverability issues more often than it ever had historically;¹ and (2) on December 16, 2013, the Federal Energy Regulatory Commission (FERC) issued its decision in *Pioneer Wind Park I, LLC*, 145 FERC ¶ 61,215 (2013) rejecting PacifiCorp's proposal address deliverability issues present at the QF's chosen generator site through power purchase agreement curtailment provisions.

In response to *Pioneer Wind*, PacifiCorp: (1) sought FERC assistance to implement a tool that would assist PacifiCorp in addressing deliverability issues affecting QF power purchase agreements (PPAs) that had already been executed; and (2) refined its QF contracting practices to prospectively identify deliverability issues far earlier in the process, i.e., to not wait until *after* execution of the QF PPA and submission of the transmission service request to evaluate deliverability issues for the very first time, as FERC's order in *Pioneer Wind* rejected the notion of addressing those issues through QF curtailment. More specifically, PacifiCorp took the following three steps:

To address then-existing QF arrangements:

1. PacifiCorp sought FERC's assistance to first and foremost address situations where a QF PPA had already been executed, and deliverability issues at the QF's chosen site would trigger the construction FERC-jurisdictional, transmission-service network upgrades to be rolled into PacifiCorp's transmission rate base and paid for by all system users in accordance with FERC's pricing policies but in violation of the

¹ Absent constraints, energy resource (ER) interconnection service and NR interconnection service require the same network upgrades, i.e., securing NR interconnection service would not increase the network upgrades necessary to grant the requested interconnection.

UM 2032 / PacifiCorp
October 2, 2020
OPUC Information Request 6

Public Utility Regulatory Policies Act of 1978 (PURPA) customer indifference requirements. Specifically, on December 24, 2014, PacifiCorp filed a request for FERC approval of a PURPA-related exception to the long-standing Open Access Transmission Tariff's (OATT) requirement that PacifiCorp's transmission function construct network upgrades to grant transmission service requests in constrained areas where: (a) a QF has caused or contributed to the deliverability issue triggering the network upgrade; and (b) the affected network transmission customer, PacifiCorp's merchant function, agrees to operate its designated network resources within its existing transmission rights and transmission system limits, i.e., the network transmission customer would not be granted incremental transmission rights to account for the addition of the new resource. This FERC-approved tool does not work in all circumstances, however, and provides no clear substitute for requiring a QF to obtain NR interconnection service as a policy matter. Copies of PacifiCorp's December 24, 2014 filing and FERC's May 21, 2015 order approving PacifiCorp's filing are attached as Attachment OPUC 6-1.

To address then-prospective QF arrangements:

1. PacifiCorp's transmission function made a concerted effort to ensure it was consistently requiring all QFs seeking to interconnect with its transmission system to secure NR interconnection service. To ensure transparency, on November 24, 2015, PacifiCorp posted a business practice to Open Access Same-Time Information System (OASIS) explaining this process for public comment, and it became effective in February 1, 2016. Please refer to Attachment OPUC 6-2.
2. PacifiCorp's merchant function made a concerted effort to ensure it was consistently requesting a copy of the interconnection study for all QFs seeking to negotiate a QF power purchase agreement to ensure alignment between: (a) the QF's proposed PPA commercial operation date (COD); and (b) the interconnection study's estimated COD reflecting the timeline for constructing any network upgrades required to provide the QF interconnection service.

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.