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January 20, 2017

VIA ELECTRONIC FILING

Public Utility Commission of Oregon
201 High Street SE, Suite 100
Salem, OR 97301-3398

Attn: Filing Center

**RE: UM 1610 Phase II—Investigation into Qualifying Facility Contracting and Pricing
Opening Testimony of PacifiCorp**

PacifiCorp d/b/a Pacific Power encloses for filing in this docket the opening testimony of Bruce W. Griswold and Richard A. Vail.

PacifiCorp respectfully requests that all communications related to this filing be addressed to:

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Sincerely,

R. Bryce Dalley
Vice President, Regulation

Docket No. UM-1610
Exhibit PAC/1700
Witness: Bruce W. Griswold

**BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON**

PACIFICORP

Opening Testimony of Bruce W. Griswold

January 2017

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1 **Q. Please state your name, business address, and present position with**
2 **PacifiCorp, d/b/a Pacific Power (PacifiCorp or Company).**

3 A. My name is Bruce W. Griswold. My business address is 825 NE Multnomah
4 Street, Suite 600, Portland, Oregon 97232. I am employed by Pacific Power in
5 Energy Supply Management (ESM)¹ as Director of Short-Term Origination and
6 Qualifying Facility (QF) Contracts.

7 **Q. Briefly describe your education and business experience.**

8 A. I have a B.S. and M.S. degree in Agricultural Engineering from Montana State
9 University and Oregon State University, respectively. I have been employed by
10 the Company for over 30 years in various positions of responsibility in retail
11 energy services, engineering, marketing and wholesale energy services. I have
12 also worked at an environmental firm as a project engineer.

13 My current responsibilities as Director of Short-term Origination and QF
14 Contracts include the negotiation and management of wholesale power supply and
15 resource acquisition through Requests for Proposals (RFP) as well as overall
16 responsibility for the Company's QF Power Purchase Agreements (PPA). I have
17 appeared as a witness on behalf of the Company in UM 1610 and in multiple
18 proceedings across PacifiCorp's six state jurisdictions.

19 **Q. Have you testified on this issue before?**

20 A. Yes. I was the Company witness on the load pocket/transmission service issue in
21 UM 1610 Phase I and Phase II.

¹ ESM is PacifiCorp's merchant function and operates as the commercial arm of the regulated utility business.

1 by reflecting the actual costs of those arrangements in an addendum to the
2 contract.

3 **Q. Are any other Company witnesses presenting testimony in this proceeding?**

4 A. Yes. Mr. Richard A. Vail, Vice President, Transmission Services at PacifiCorp
5 Transmission, addresses PacifiCorp Transmission's role in securing QF
6 transmission service as well as more general transmission service arrangements.

7 **Q. Please summarize your testimony.**

8 A. The Company's original proposal to allocate the cost of third-party, long-term,
9 firm point-to-point transmission service arrangements to QFs on an individual
10 project basis by reflecting the actual costs of those transmission arrangements in
11 an addendum to the PPA is far superior to any other proposed alternative
12 described by any party thus far and, in most circumstances, the only legal or
13 workable proposal. The Company's proposal complies with all relevant federal
14 transmission requirements, including Open Access Transmission Tariff (OATT)
15 requirements and OATT processes and business practices, and also comports with
16 standard industry practice. It is also consistent with the processes the Federal
17 Energy Regulatory Commission (FERC) has previously recognized for QF
18 transmission arrangements.

19 Furthermore, the Company's proposal maintains customer indifference
20 because PacifiCorp's customers pay the actual avoided cost for QF power under
21 this arrangement. Customers do not over- or under-compensate the QF for their
22 power, nor are customers exposed to unnecessary potential price risk due to a flaw
23 in the cost-allocation policy. Finally, the proposal is fair to QFs because a QF

1 pays nothing more than the actual cost incurred for the third-party transmission
2 service necessitated by the QF's project, passed through according to the PPA
3 addendum.

4 It is also important to note that for the smaller QFs who develop their
5 projects under standard avoided cost prices with standard agreements, the whole
6 premise of PURPA is to keep it simple and straightforward for the smaller QF—
7 published prices, template agreements, etc. The Company's proposal is just that.
8 As described in more detail below, on a case-by-case basis, ESM requests OATT
9 transmission service from PacifiCorp Transmission to transmit QF power, and
10 ESM only makes additional third-party transmission arrangements if PacifiCorp
11 Transmission determines such arrangements are necessary to accommodate
12 ESM's request. Under those circumstances, ESM secures the PacifiCorp
13 Transmission-specified amount of long-term, firm point-to-point transmission for
14 the term of the PPA from the relevant third-party transmission provider at its
15 published rates, and bills the QF for the actual costs incurred on a monthly basis.
16 This approach follows existing OATT requirements and FERC policies, and
17 proposes a simple, case-by-case, direct pass through of costs to maintain customer
18 indifference consistent with the Commission's directives. Yet, the parties to this
19 docket appear to seek alternatives that are not straightforward or they demand
20 wide negotiation rights on one portion of their contract going outside the
21 boundaries of FERC-approved tariffs and processes, but hold the Company to
22 standard terms on all others.

1 **Q. Does PacifiCorp believe there are better alternatives to the Company's**
2 **proposal?**

3 A. No. While parties in this docket claim there are better alternatives to the
4 Company's proposal, the alternatives described thus far have been vague and
5 difficult to understand, and some appear to be clearly unworkable. It is critical
6 that any cost-allocation proposal meet certain minimum criteria to avoid negative
7 consequences. In an effort to facilitate the discussion of other potential
8 alternatives, I offer the following principles that any cost allocation must follow:

- 9 1. **Comply with FERC open access / federal transmission policies.** The
10 reason for this criterion is foundational: PacifiCorp cannot offer options
11 that violate federal law. And as described by Mr. Vail, the underlying
12 goal of FERC's open access policies was to ensure transmission providers
13 offer nondiscriminatory transmission service to all customers. As a result,
14 FERC directed all transmission providers to provide transmission service
15 under the rates, terms, and conditions of an OATT on file with FERC.
16 Thus, any cost allocation proposal must adhere to OATT requirements and
17 processes.
- 18 2. **Provide for firm delivery of QF power to PacifiCorp's load.** This
19 "firmness" requirement assures that ESM can comply with FERC orders
20 holding that QF power *must be delivered to load on a firm basis.*⁴ Relying

⁴ See, e.g., *Pioneer Wind Park I, LLC*, 145 FERC ¶ 61,215 at P 38 (2013) (finding a proposed curtailment provision inconsistent with PURPA because it would have curtailed the QF "as if it were a *non-firm*, secondary network service transmission customer") (emphasis added); *Entergy*, 137 FERC ¶ 61,199 at P 52 (2011) (finding that once QF energy is purchased, it is the utility's responsibility to deliver that energy to its load).

1 on *non-firm* transmission coupled with QF curtailment is not a FERC-
2 compliant option.

3 3. **Be guaranteed and remain available for the duration of the QF PPA.**

4 Any cost-allocation proposal that does not allow for the option of firm
5 delivery of QF power to PacifiCorp's customers *for the duration of the QF*
6 *PPA* is inappropriate. PacifiCorp has an obligation to deliver QF power to
7 its load on a firm basis; should transmission become unavailable mid-
8 PPA, QF generation could create a financial burden or raise other potential
9 compliance or reliability risks for PacifiCorp and its customers.

10 4. **Be designed to achieve customer indifference.** Any cost-allocation

11 proposal should allocate to the QF the actual incurred third-party
12 transmission costs for delivering QF power from a load pocket to
13 PacifiCorp's load, nothing more, and be consistent with PURPA's
14 customer indifference standard.

15 5. **Rely on existing processes and procedures and industry standards.**

16 PacifiCorp should not be required to deviate from any FERC-approved or
17 standard industry practices to create an entirely new method of providing
18 firm transmission service. Aside from being unworkable and potentially
19 illegal, any such proposals would presumably be expensive and
20 inconsistent with FERC and PURPA precedent.

21 PacifiCorp's proposal meets all of these requirements. To the extent any
22 alternatives presented in this docket also meet these minimum standards, the
23 Company is open to reviewing those alternatives as well.

1 **HIGH LEVEL OVERVIEW OF A UTILITY’S MERCHANT AND**
2 **TRANSMISSION FUNCTIONS, AS RELEVANT TO UTILITY TRANSMISSION**
3 **OBLIGATIONS UNDER PURPA**

4 **Q. You described other parties’ proposed alternative cost allocation**
5 **mechanisms as vague and difficult to understand, and in some cases clearly**
6 **unworkable. Can you explain why?**

7 A. Yes. The alternatives described by other parties—from what PacifiCorp can
8 understand—often appear to rest on misunderstandings about certain fundamental
9 elements of the roles of a utility’s merchant function and transmission function,
10 and the rules governing the dealings between those two functions. These
11 elements are critical to a utility’s transmission obligations under PURPA, as well
12 as to understanding PacifiCorp’s third-party transmission cost allocation proposal.

13 **Q. Can you describe some of these fundamental elements?**

14 A. Yes. PURPA obligates a utility to interconnect with a QF, purchase and make
15 firm arrangements to deliver a QF’s power, and keep customers indifferent to
16 such QF purchases. Different business units within a single utility handle
17 different aspects of these PURPA obligations, and those business units must fulfill
18 their obligations within the bounds of other rules and regulations governing the
19 relevant processes.

20 **Q. Does this issue involve QF interconnections?**

21 A. No. The Commission is accustomed to QF interconnection service issues, which
22 involve the physical interconnection between the generation facility (here, a QF)
23 and PacifiCorp’s electric system. For interconnections, the QF is the

1 interconnection customer, PacifiCorp Transmission is the transmission provider
2 providing interconnection service, and the state jurisdictional⁵ interconnection
3 agreement governs the provision of interconnection service. This issue, on the
4 other hand, involves the transmission service arranged to deliver the QF power
5 away from the point of delivery at the interconnection to load. In that case, ESM
6 is the transmission customer, PacifiCorp Transmission is the transmission
7 provider providing transmission service, and the FERC jurisdictional transmission
8 service agreement governs the provision of transmission service. In both
9 processes, PacifiCorp Transmission is the transmission provider providing the
10 service in accordance with its OATT, but the counterparty to each service differs.

11 **Q. You mentioned this issue involves the transmission arrangements necessary**
12 **to deliver QF power. Does that only involve one kind of transmission**
13 **service?**

14 A. It depends. It starts with a request for network transmission service, which in
15 some cases can only be granted if a separate point-to-point transmission service
16 reservation is also made on a third party system. I will walk through how this
17 works, but first I will review the two main types of transmission service
18 applicable to the load pocket situation under the OATT.

⁵ Most QF interconnection agreements are state jurisdictional. When an electric utility is obligated under PURPA to interconnect with a QF and purchase the QF's total output, the relevant state authority has jurisdiction over the interconnection. If, however, the QF is permitted to make sales to third parties, the interconnection is FERC jurisdictional. *See, e.g., Prior Notice and Filing Requirements Under Part II of the Federal Power Act*, 62 FERC ¶ 61,128, *order on reh'g*, 64 FERC ¶ 61,139 at 61,991, *order on reh'g*, 65 FERC ¶ 61,081 (1993); *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146 at PP 813-14 (2003).

1 The first type is Network Integration Transmission Service (NITS) or
2 Network Transmission (NT), which allows ESM as the transmission customer to
3 purchase transmission service to integrate, plan, dispatch, and regulate its
4 designated network resources to serve its customers in a manner comparable to
5 that in which PacifiCorp Transmission as the transmission provider manages its
6 transmission system to serve its customers in its balancing authority area.

7 The second type is Point-to-Point Transmission Service, which is the
8 reservation and transmission of capacity and energy across a transmission
9 provider's system on either a firm or non-firm basis from the point of receipt to
10 the point of delivery.

11 **Q. Can you walk through how both of those transmission service types might**
12 **come into play when a QF sites in a load pocket?**

13 A. Yes. As noted above, PacifiCorp's merchant function, PacifiCorp ESM—*not the*
14 *QF*—is the transmission customer responsible for delivering that energy to load.
15 In particular, ESM (the transmission customer in this context) contracts with
16 PacifiCorp Transmission (the transmission provider) to make all QF service
17 arrangements. Thus, all of FERC's open access rules governing the provision of
18 transmission service apply to this transaction. As most relevant here, ESM must
19 request transmission from PacifiCorp Transmission in accordance with the terms
20 and conditions of PacifiCorp's OATT, and FERC's Standards of Conduct (SOC)
21 limit the types of information that can be shared between those two entities.

1 **Q. How does ESM make a request for transmission service from PacifiCorp**
2 **Transmission in order to deliver QF power?**

3 A. Generally speaking, in order to make these arrangements, ESM requests
4 designation of a QF's PPA as a Network Resource (NR) (also referred to as
5 "DNR" status) under its Network Integration Transmission Service Agreement
6 (NITSA) with PacifiCorp Transmission.

7 **Q. What happens after ESM submits a DNR request?**

8 A. As described in more detail by Mr. Vail, PacifiCorp Transmission must study the
9 DNR request using the OATT-mandated study processes, and then give ESM
10 information about, among other things, whether there is sufficient capacity
11 available to accommodate the DNR request. This determination depends on a
12 host of very dynamic factors that can affect expected transmission conditions in
13 the particular area of the system where the new network resource is sited and
14 during the particular timeframe of the request.

15 **Q. Does this PacifiCorp Transmission study involve an assessment of whether**
16 **third-party transmission arrangements are needed?**

17 A. Yes. Again, as is discussed in more detail in Mr. Vail's testimony and below,
18 sometimes PacifiCorp Transmission determines that it can only reliably
19 accommodate ESM's DNR request if ESM makes a third-party transmission
20 arrangement to transmit any QF power in excess of local load out of the load
21 pocket and to a different area of PacifiCorp's system.

1 **Q. Can ESM make that determination itself or otherwise help with the**
2 **PacifiCorp Transmission study?**

3 A. No. The majority of the information PacifiCorp Transmission uses to perform its
4 assessment of transmission conditions is non-public transmission information.
5 This means the information is only available to the transmission provider and, per
6 the strict requirements of the SOC, cannot be shared with any transmission
7 customer, including ESM. Thus, ESM does not know, or have access to, the
8 information necessary to making definite determinations about whether and how
9 ESM's request to designate a QF as a network resource can be accommodated
10 until PacifiCorp Transmission performs the OATT-required studies.

11 **Q. Are these requirements part of PURPA?**

12 A. No. Securing a transmission arrangement with a FERC-jurisdictional
13 transmission provider is a highly regulated process governed by strict federal
14 rules, even before any PURPA requirements are factored in—federal rules that
15 must be followed when a utility's merchant function is securing transmission
16 arrangements for QF power delivery, as they are with all transmission customer
17 service requests. In other words, PURPA requires a utility's merchant function to
18 make firm transmission arrangements to deliver QF power to load. The OATT
19 and FERC's policies govern how those arrangements are requested, studied, and
20 ultimately secured.

1 **BACKGROUND ON THIRD-PARTY TRANSMISSION COST ALLOCATION**

2 **Q. Please provide some history regarding the Commission’s previous rulings on**
3 **the third-party transmission issue.**

4 A. As described in more detail below, PacifiCorp originally raised the issue of
5 allocating third-party transmission costs to QFs associated with moving QF
6 energy out of a load pocket to load under a very specific and rather narrow
7 context in docket UE 235.⁶ The core foundation for that context was the FERC-
8 jurisdictional OATT that governs both ESM’s requests for transmission (whether
9 moving QF or non-QF power) and PacifiCorp Transmission’s processing of any
10 transmission service request (again, whether moving QF or non-QF power).
11 Indeed, PacifiCorp explained in that docket that its proposal took advantage of the
12 existing OATT requirements, rather than creating new processes or requiring new
13 rulemakings, to obtain firm transmission service to move QF power.⁷ The issue
14 was ultimately moved into Phase I of Docket UM 1610.

15 **Q. What is the context in which the issue of allocating third-party transmission**
16 **costs to QFs arises?**

17 A. The very specific and rather narrow context in which the issue of allocating third-
18 party transmission costs arises under the following circumstances:

- 19 1. A QF sites its project in a PacifiCorp load pocket. A load pocket is an
20 area within PacifiCorp’s non-contiguous transmission system where there
21 is insufficient local load to absorb additional generation because it would

⁶ *Pacific Power’s Schedule 37—Avoided Cost Purchases from Qualifying Facilities*, Docket No. UE 235, PacifiCorp’s Memorandum of Law in Support of Advice No. 11-011 at 2 (June 27, 2011).

⁷ *Id.* at 8-9.

1 cause the total generation amount to exceed the total load served by
2 PacifiCorp. Load pockets are typically located in more isolated areas of
3 PacifiCorp's non-contiguous transmission system that are partially, or
4 even entirely, reliant on third-party transmission. Thus, in that situation,
5 the generation in excess of local load must be transmitted over third-party
6 systems to other areas of PacifiCorp's system to preserve reliability and
7 prevent an over-generation situation.

8 2. ESM is the purchaser of the QF power. It is the transmission service
9 customer that is required to make firm transmission service arrangements
10 to move the QF power from the point of delivery to load. As described
11 above, ESM makes these firm arrangements by submitting a request with
12 PacifiCorp Transmission to designate the QF as a network resource in
13 accordance with the requirements of the PacifiCorp Transmission FERC-
14 jurisdictional OATT, and under the standard practices recognized by
15 FERC.

16 3. As is discussed in more detail in Mr. Vail's testimony, PacifiCorp
17 Transmission, in turn, studies ESM's transmission service request in
18 accordance with the OATT. Sometimes PacifiCorp Transmission
19 determines that it can only reliably accommodate ESM's request if the QF
20 power in excess of local load is transmitted out of the load pocket on firm,
21 third-party transmission.

22 4. It is under these specific circumstances—when ESM is told by a
23 transmission provider that it can only approve ESM's DNR request if

1 ESM makes firm transmission arrangements on a third-party system—that
2 ESM requests transmission on the appropriate third-party system, in the
3 amount determined necessary by PacifiCorp Transmission.

4 The issue in the current docket stems from the conditions and
5 contingencies noted above. Within that context, the Commission has ruled that it
6 is consistent with PURPA’s avoided cost principles to assign *to QFs* any third-
7 party transmission costs incurred by a utility for the purpose of moving QF output
8 from the point of delivery to its load. Such costs are not otherwise included in the
9 calculation of avoided costs, and allocation of these costs to QFs maintains
10 customer indifference.

11 While the Commission deferred the question of how to calculate and
12 assign those third-party transmission costs to a QF, it did *not* suggest that parties
13 should disregard the history of this issue in this proceeding. Most importantly,
14 the Commission did not suggest that the parties to this docket should ignore or
15 forget the specific and narrow context within which the cost-allocation issue was
16 raised when determining the appropriate calculation and assignment of
17 transmission costs.

18 Consequently, PacifiCorp would ask the Commission to limit the scope of
19 its considerations in this docket to the issue actually moved forward from
20 previous dockets: Assuming the four contingencies identified above, what is the
21 appropriate way to calculate and allocate to a QF any third-party transmission
22 costs associated with moving the QF’s output in excess of local load from a load
23 pocket to another load area on PacifiCorp’s system?

1 **QF TRANSMISSION ARRANGEMENTS**

2 **Q. Please identify key components of a third-party transmission arrangement to**
3 **move QF power from one load pocket to another load area on PacifiCorp’s**
4 **system.**

5 A. As noted above, contracting for transmission arrangements with a FERC-
6 jurisdictional transmission provider is highly regulated and governed by federal
7 rules. All of FERC’s rules governing the provision of transmission service apply
8 to an arrangement to move generator power from one part of a transmission
9 system to another, whether the generator is a QF or non-QF. There is no “QF
10 exception.” In securing this transmission service, ESM must act in accordance
11 with the terms and conditions of the transmission provider’s OATT, the same as
12 any other party seeking transmission service from a FERC-jurisdictional
13 transmission provider.

14 **Q. Must ESM obtain *firm* transmission arrangements for the delivery of QF**
15 **power?**

16 A. Yes. ESM must secure long-term, firm transmission to deliver QF power during
17 the full term of the PPA to reliably serve its load.⁸ ESM believes it must purchase
18 firm transmission arrangements in order to remain compliant with FERC PURPA
19 precedent.⁹ Requiring ESM to provide QFs with non-firm transmission
20 arrangement alternatives is in direct conflict with the FERC precedent identified
21 in *Pioneer Wind Park I, LLC*,¹⁰ where FERC stated that a violation of PURPA

⁸ PacifiCorp Prehearing Brief at 52-55.

⁹ See, e.g., PAC/1600, Griswold/4.

¹⁰ 145 FERC ¶ 61,215 (2013) (“*Pioneer*”).

1 would occur if the QF was treated as if it were a *non-firm*, secondary network
2 service transmission customer that could be curtailed ahead of other network
3 resources.¹¹

4 **Q. Is there a standard practice for making these firm transmission**
5 **arrangements to deliver QF power?**

6 A. Yes. As discussed above, ESM (not the QF) is the transmission customer making
7 the firm transmission arrangements to deliver the QF power. Further, as
8 PacifiCorp has explained to FERC, ESM has historically made these firm
9 transmission arrangements by requesting the designation of QF PPAs as network
10 resources using the OATT process, also described above.¹² Thus, ESM must
11 request transmission from PacifiCorp Transmission in accordance with the terms
12 and conditions outlined in its OATT and all of FERC's open access rules
13 governing the provision of transmission service apply.

14 **Q. Must ESM obtain firm transmission arrangements for the delivery of QF**
15 **power with a *minimum term*?**

16 A. Yes. In light of FERC's "rollover rights" policy, PacifiCorp believes a five-year
17 minimum term is critical to meeting its mandatory purchase obligation and
18 maintaining the integrity of the QF contracting process. In order to secure
19 transmission for the entire term of the PPA, FERC policies require that a
20 transmission customer make an initial minimum five-year commitment in order to
21 obtain renewal rights (or "rollover rights") to that transmission capacity after the

¹¹ *Id.* at P 38.

¹² *See, e.g., PacifiCorp*, 151 FERC ¶ 61,170 at P 3 (2015).

1 initial service agreement expires.¹³ Without this commitment, ESM's
2 transmission rights could be displaced during the term of a QF's PPA if another
3 transmission customer requests a higher priority service and there is insufficient
4 transmission capacity to accommodate both transmission customers.¹⁴ Thus,
5 ESM's policy is to purchase long-term, firm transmission (if it is available) in
6 order to ensure that firm third-party transmission service will remain available
7 over the term of the QF's PPA.¹⁵

8 **Q. Why doesn't ESM simply obtain non-firm transmission arrangements for a**
9 **QF and curtail the QF if transmission is unavailable?**

10 A. PacifiCorp has serious concerns regarding any suggestions that it be required to
11 use curtailment as an alternative to purchasing long-term, firm transmission
12 service because, as PacifiCorp has stated previously, that option appears to be
13 illegal.¹⁶ Unlike non-QFs, which a utility typically has the flexibility to decide
14 whether to dispatch based on a variety of factors, including economic
15 considerations, FERC prohibits the curtailment of QF resources except under two
16 very narrow circumstances: (1) system emergencies, and (2) extreme light load
17 conditions where ESM has, in fact, backed its own resources down to minimum
18 levels.¹⁷ The second option applies only to QFs selling power on an "as
19 available" basis, as opposed to under a fixed-price PPA.¹⁸ Practically speaking,

¹³ PacifiCorp Prehearing Brief at 53.

¹⁴ PAC/1000, Griswold/24-25; PAC/1300, Griswold/17.

¹⁵ PAC/1300, Griswold/20-21.

¹⁶ See PacifiCorp Prehearing Brief at 54; PAC/1600, Griswold/7-8.

¹⁷ See, e.g., 18 C.F.R. § 292.307(b); 18 C.F.R. § 292.304(f).

¹⁸ See, e.g., *Idaho Wind Partners I, LLC*, 140 FERC ¶ 61,219 (2012) (explaining that, if a QF is selling under a long-term contract, FERC presumes that light-loading situations have already been factored into the long-term avoided cost, and curtailment is not permitted).

1 then, a utility can only curtail a QF with a long-term PPA under system
2 emergency conditions. Curtailing a QF when transmission is unavailable, as can
3 occur with non-firm transmission service, is not an emergency condition. Under
4 this circumstance, FERC prohibits curtailing the QF project even though ESM
5 would have no transmission to move the QF output to load. Therefore, use of
6 non-firm transmission service is not an option when transmitting QF power.

7 **Q. Are minimum load and excess generation issues unique to QF resources?**

8 A. No. Any generator that sites in a load pocket can create an over-generation
9 situation. In the case of purchases from non-QF resources, however, excess
10 generation issues are handled through contract price adjustment and/or
11 curtailment of the resource. Those options are not available for standard Oregon
12 QFs.

13 **Q. Are these the costs the Commission has held to be allocated to QFs that have
14 caused generation within a load pocket to exceed load?**

15 A. Yes.

16 SITING OF QF PROJECTS

17 **Q. Can the Company provide guidance to a QF on where to site a project?**

18 A. No, for a number of reasons. First and foremost, this determination depends in
19 large part on non-public transmission information held by PacifiCorp
20 Transmission. ESM has no more access to this information than a QF. ESM,
21 which manages the PPA process, only receives information that would be
22 publically available on OASIS and relies on PacifiCorp Transmission for a
23 determination of the minimum load conditions in the load pocket to determine if

1 an excess generation condition exists. ESM can use OASIS information, as can
2 the QF, to determine at a high level if the addition of a new generator may cause
3 an excess generation condition but will need to complete a transmission service
4 request per PacifiCorp's OATT for final determination. As I will discuss in
5 further detail, under FERC rules, a request for designated network resource status
6 and a transmission service request can only be sent to PacifiCorp Transmission
7 after ESM has executed a PPA with a QF.

8 Second, even if ESM had access to non-public transmission information
9 and could legally share it, a load pocket is a dynamic situation, increasing or
10 decreasing as load and generation is added or removed, so updating load pockets
11 would be burdensome and likely not remain accurate for very long. Therefore, a
12 QF making a decision based on the information from a table or a map (as has been
13 suggested in the past), may be misinformed when it should be seeking the most
14 accurate and up-to-date information from the utility. In addition, per OATT and
15 FERC policy, and as described by Mr. Vail, PacifiCorp Transmission must
16 process all requests for transmission service, including new network resource
17 designation requests, in the order in which they are received and within
18 specifically-identified timeframes. Applications are assigned a priority in the
19 transmission service queue¹⁹ according to the date and time PacifiCorp
20 Transmission receives the application. Applications are processed in order, with
21 the earlier applications processed and studied at higher priorities under the OATT.

¹⁹ The transmission service queue is separate and distinct from the generation interconnection queue. Both queues are available on OASIS.

1 Third, development of a project is the QF's responsibility and PacifiCorp
2 (both ESM and PacifiCorp Transmission) have to operate in a non-discriminatory
3 manner with all QFs. Publishing a "map" or "guide" is not possible, and
4 providing available information and guidance to QFs on a case-by-case basis,
5 limited though that information may be, could be construed as discriminating
6 against other QFs.

7 Lastly, the QF itself will receive some preliminary information regarding
8 excess generation conditions and minimum loads when it conducts its
9 interconnection studies through PacifiCorp Transmission. A QF can use that
10 information for its own development needs.

11 **Q. Does ESM attempt to provide the QF with indicative information on an**
12 **excess generation condition caused by their proposed project?**

13 A. Yes, as soon as it is appropriate to do so. Once the Company has the QF project
14 information with site selected by the QF and the proposed interconnection point,
15 the Company informs the QF as soon as practical if it anticipates any excess
16 generation issues; however, details on timing and amount of excess generation are
17 not available to ESM until a transmission service request is placed in accordance
18 with PacifiCorp Transmission's OATT. This cannot occur until execution of the
19 PPA.

20 The details of the third-party transmission required by ESM including cost
21 and availability are not available until ESM receives the study results from the
22 DNR request and also contacts the third-party transmission provider through a
23 transmission service request per that transmission provider's OATT.

1 **PROCESS FOR OBTAINING TRANSMISSION SERVICE FOR QF POWER**

2 **Q. What is the transmission service process?**

3 A. As described above, the transmission service process involves the provision of
4 transmission service from a point of interconnection to another point on the
5 transmission system. The parties to a transmission service agreement are the
6 transmission customer and transmission provider. In the case of a QF siting in a
7 load pocket, the transmission customer is ESM and the transmission provider is
8 PacifiCorp Transmission. ESM needs transmission service because it has
9 purchased the power from the QF at the point of delivery and must move it to
10 load; PacifiCorp Transmission provides that transmission service.

11 **Q. How does the transmission service process work?**

12 A. I will outline the transmission service process from ESM's perspective. Mr. Vail
13 also reviews a number of points in the process from PacifiCorp Transmission's
14 perspective.

15 When ESM receives a PPA request from a QF, ESM is obligated by
16 PURPA to make the necessary transmission arrangements to move that power to
17 its load on a firm basis. In doing so, both ESM and PacifiCorp Transmission are
18 required to follow the OATT requirements and procedures. In accordance with
19 the OATT, ESM must first execute a QF PPA. Once that PPA is executed, ESM
20 submits an application with PacifiCorp Transmission to request the executed QF
21 PPA be designated as a network resource, or DNR, allowing for firm transmission
22 of the QF power to load under the network transmission agreement between
23 PacifiCorp Transmission and ESM. ESM must follow the same OATT

1 requirement that *any* transmission customer must follow in order to obtain
2 appropriate transmission service to deliver its resource to load.

3 This DNR application is ESM’s standard practice for fulfilling its PURPA
4 obligation to make firm transmission arrangements for delivery of QF power to
5 load. PacifiCorp Transmission must study the DNR request using the OATT-
6 mandated study processes, and then give ESM information about, among other
7 things, whether there is sufficient network transmission capacity available to
8 accommodate the DNR request. This determination depends on a host of factors
9 that can affect expected transmission conditions in the particular area of the
10 system where the QF has sited its project and during the particular timeframe of
11 the request. As noted, the majority of information PacifiCorp Transmission
12 includes in its transmission studies is non-public, meaning the information is only
13 available to PacifiCorp Transmission and, in accordance with the strict
14 requirements of the SOC, cannot be shared with any transmission customer,
15 including ESM. Thus, ESM’s ability to make definite determinations about
16 transmission needs for the QF is limited until PacifiCorp Transmission performs
17 the OATT-required studies.

18 Under the OATT, ESM cannot submit this application to PacifiCorp
19 Transmission until the PPA is signed.²⁰ I have included Exhibit PAC/1701 with
20 my testimony which is the template attestation and requirements per PacifiCorp
21 Transmission’s OATT. On the last page of Exhibit PAC/1701, PacifiCorp

²⁰ Although the OATT does not explicitly address legally enforceable obligations, or LEOs, under PURPA, some utilities have interpreted the “executed contract” language to include the moment a LEO arises. See Exhibit PAC/1701 at p. 8.

1 Transmission has an attestation to be executed by the transmission customer,
2 ESM, regarding the timing of when the DNR can be submitted and that the
3 resource is committed to serve ESM's load on a non-interruptible basis.

4 **Q. What is the significance of this attestation?**

5 A. Under the OATT, ESM does not have the flexibility to request PacifiCorp
6 Transmission to conduct an early system impact study needed to determine
7 transmission needs prior to execution of the PPA. In other words, ESM cannot
8 know for sure what transmission arrangements might be necessary to
9 accommodate QF generation until a PPA is signed, ESM sends a request to
10 PacifiCorp Transmission, and PacifiCorp Transmission conducts certain studies.

11 Although ESM works with the QF early in the PPA process to identify any
12 excess generation issues based on the project information, it cannot try to guess at
13 the right transmission arrangements (and associated costs) for a particular QF.
14 ESM will not know what final transmission service is required and at what price
15 until a formal DNR request is submitted and studied by PacifiCorp Transmission,
16 and that is the case across the board—every transmission customer request to any
17 transmission provider is treated on a non-discriminatory basis in accordance with
18 the transmission service queue order and methodology, due to FERC's open
19 access policies.

20 **Q. Can transmission costs be rolled into the avoided cost in the PPA, as a
21 practical matter?**

22 A. No. As noted above, ESM has to wait until the PPA is signed to even request
23 transmission service for the QF output. Trying to roll the costs of transmission

1 service into the PPA pricing is therefore putting the cart before the horse. By
2 contrast, a PPA addendum that includes the actual third-party transmission costs
3 identified by PacifiCorp Transmission can be added at the appropriate time. An
4 avoided cost rate adjustment in the PPA makes little sense, as it would have to be
5 made when transmission costs are not yet known.

6 QFs cannot receive special treatment on this issue. PacifiCorp
7 Transmission must conduct its studies on a non-discriminatory basis, and their
8 reliability-based assessment of all transmission service requests (affiliated or not,
9 QFs or not), does not allow for special treatment outside the OATT process.

10 **Q. What happens once the DNR is submitted to PacifiCorp Transmission?**

11 A. As discussed by Mr. Vail, once ESM submits a DNR application to PacifiCorp
12 Transmission, PacifiCorp Transmission follows the OATT procedures and
13 timelines to determine how best to reliably accommodate the transmission
14 request, including identifying whether the addition of the new DNR would cause
15 an excess generation condition in a load pocket at any time. If an excess
16 generation situation occurs, PacifiCorp Transmission may identify through a
17 system impact study the amount of third-party transmission capacity that ESM
18 must make obtain in order to move the QF power out of the load pocket and
19 thereby maintain reliability.

20 **Q. What does ESM do once it receives the transmission service system impact**
21 **study results from PacifiCorp Transmission?**

22 A. If there is no excess generation, and no further study by PacifiCorp Transmission,
23 ESM receives a letter from PacifiCorp Transmission deeming the resource to be a

1 network resource, contingent upon satisfaction of all construction and testing
2 within the interconnection agreement between the QF and PacifiCorp
3 Transmission. ESM keeps the letter confirming this DNR status on file for
4 documentation as part of the QF's commercial operation designation.

5 By contrast, where PacifiCorp Transmission's system impact study
6 identifies excess generation, PacifiCorp Transmission sends the results of the
7 study to ESM. The results of the study dictate the amount of excess generation in
8 megawatts (MW) that could be satisfied through the purchase of third-party
9 transmission, the affected system(s), and identifies that condition as a prerequisite
10 for network resource status in addition to completion of all interconnection
11 requirements. I have prepared Exhibit PAC/1702 as an example of what
12 PacifiCorp Transmission provides regarding network resource designation and
13 contingencies that must be met.

14 At this point, ESM now has sufficient information to inform the QF of the
15 amount of transmission service it would need to request from the third-party
16 transmission provider in order to move its power to load. It does not yet have
17 information about the cost of the transmission service. That cost cannot be known
18 until ESM makes a transmission service request to the third-party transmission
19 provider and obtains the results of that request. At this point, ESM would inform
20 the QF of the results but would also have a discussion with the QF about the
21 expected cost for long-term point-to-point transmission. ESM would estimate this
22 cost based on the third-party transmission provider's OATT, and would provide
23 this estimate before requesting the transmission service. ESM would then put in

1 its request to the third-party provider in accordance with that provider's OATT to
2 determine timing of a response to the request as well as what cost components
3 from the provider's OATT would be applicable to the request.

4 **Q. What are third-party transmission service arrangements that ESM requires**
5 **for QFs?**

6 A. ESM requires third-party arrangements that would satisfy PacifiCorp
7 Transmission' requirements for designation of the QF as a network resource
8 under PacifiCorp Transmission's OATT. This means that the third-party
9 transmission must be long-term, firm and point-to-point.

10 Point-to-point arrangements on third-party systems are made by requesting
11 point-to-point service under that third party's OATT. This means the rate is
12 public (i.e., in the OATT), and subject to change when the transmission provider
13 proposes and FERC approves a rate change. ESM would simply pass through its
14 monthly invoices to the QF, whatever they are, with no need to update it every
15 five years or try to guess at a fixed price at the outset of the PPA execution.

16 **Q. Is there a meaningful difference between an off-system QF delivering to**
17 **PacifiCorp via long-term point-to-point and the use of that same product by**
18 **ESM out of a load pocket for excess generation?**

19 A. No. The use and acquisition of third-party transmission are very similar on a
20 physical delivery basis. First, they are both OATT-based purchases. An off-
21 system QF is required to demonstrate it can deliver its output to PacifiCorp's
22 system via long-term, firm point-to-point transmission over a third party
23 transmission provider such that ESM receives it on a firm scheduled basis and can

1 seek network resource designation of that QF resource.²¹ In that case, the QF is
2 the purchaser of long-term point-to-point transmission for the term of the PPA to
3 meet its firm delivery obligation to ESM. Those costs are borne by the QF.

4 In the load pocket situation, ESM has received the generator output
5 directly from the QF but must transport the excess generation via a third-party
6 transmission service provider to another location to load. In this excess
7 generation case, ESM, in order to secure network resource designation from
8 PacifiCorp Transmission for the QF must demonstrate to PacifiCorp Transmission
9 it has acquired long-term, firm point-to-point transmission from the third party
10 transmission provider. Both situations require a minimum five-year term for
11 long-term, firm transmission in order to secure roll-over rights to cover the full
12 term of the PPA. Thus, in both cases, in order for the Company to secure network
13 designation of the QF resource, long-term, firm point-to-point transmission
14 service is necessary to move the resource to load and the cost responsibility
15 associated with that transmission service is assigned to the QF.

16 **ALTERNATIVE SUGGESTIONS ARE UNWORKABLE**

17 **Q. Do the arrangements suggested by parties provide a better alternative to the**
18 **PPA addendum?**

19 A. While parties in this docket claim there are better alternatives to the Company's
20 proposal, the alternatives described thus far have been vague and difficult to
21 understand, and some appear to be clearly unworkable. As noted above, it is

²¹ Under that scenario, ESM, the transmission customer, would be required by OATT Section 29.2(v) to provide as part of its application for DNR status for the off-system QF, details about the “[t]ransmission arrangements on the external transmission system(s).” FERC has stated such external transmission arrangements must be firm. *See, e.g.*, Order No. 890-B, 123 FERC ¶ 61,299 at P 178 (2008).

1 critical that any cost-allocation proposal meet the following minimum criteria: (1)
2 comply with FERC open access / federal transmission policies; (2) provide for
3 firm delivery of QF power to PacifiCorp's load; (3) be guaranteed and remain
4 available for the duration of the QF PPA; (4) be designed to achieve customer
5 indifference; and (5) rely on existing processes and procedures and industry
6 standards. PacifiCorp's proposal satisfies these principles for the reasons
7 discussed above. To the extent alternatives presented in this docket also meet
8 these minimum standards, the Company is open to reviewing those alternatives as
9 well.

10 **Q. Are there some transmission service options that ESM is willing to pursue**
11 **with proposed QF projects that are creating an excess generation situation?**

12 A. Yes. While ESM's position is that the required third-party transmission service
13 are firm and point-to-point, there are options that ESM would consider to
14 minimize the cost to the QF yet still protect our customers from paying more than
15 avoided costs. For example, Short Distance Discount (SDD) is provided by BPA
16 for point-to-point on short paths. In that case, if the third party arrangement ESM
17 is making to move the power out of the load pocket is a point-to-point
18 transmission arrangement on BPA's system, ESM could be eligible for the SDD if
19 the path is less than 75 miles in accordance with BPA's rate schedule. If so, this
20 discount would be passed onto the QF because PacifiCorp is proposing to directly
21 pass through the actual cost of transmission each month.

22 **Q. Are there aspects of this issue PacifiCorp is in agreement with parties?**

23 A. Yes. Parties are requesting that existing QFs be grandfathered and exempt from

1 paying any third-party transmission costs if the area they are located in becomes a
2 load pocket. Under the OATT, if the QF has been granted Network Resource
3 (NR) status, it remains a NR and not subject to additional transmission costs. Of
4 course, this is subject to the QF remaining a QF selling its output to PacifiCorp
5 and the NR designation is renewed in accordance with the OATT at renewal of
6 the PPA. A second aspect is whether QFs will continue to be treated as NRs upon
7 renewal of their PPA. As noted above, subject to the QF remaining a QF selling
8 its output to PacifiCorp and the NR designation renewed in accordance with the
9 OATT at renewal of the PPA, there would be no discontinuation of the NR status.

10 **Q. Please restate your conclusions from your testimony.**

11 A. The Commission's rulings in Order Nos. 14-058 and 16-174 in this proceeding
12 did not direct the abandonment of basic OATT and FERC policies to determine
13 appropriate calculation and assignment of third-party transmission costs. The
14 Commission ruled on the issue raised within this original OATT-based context,
15 concluding that it would be consistent with PURPA avoided cost principles to
16 assign to QFs any third-party transmission costs incurred by a utility for the
17 purpose of moving QF output from the point of delivery to load because such
18 costs are not otherwise included in the calculation of avoided cost. The
19 Commission deferred the question of how to calculate and assign those third-party
20 transmission costs attributable to a QF, but it did not suggest that parties should
21 disregard previous work and results in determining the appropriate calculation.

22 Regardless, when the calculation question is examined with the relevant
23 OATT requirements, OATT processes, and standard industry practice,

1 PacifiCorp's original proposal to allocate the cost of third-party, long-term, firm,
2 point-to-point arrangements to QFs on an individual project basis by reflecting the
3 actual costs of those arrangements in an addendum to the contract is the best
4 alternative for customers and for the QF, far superior to other parties' suggestions
5 and ensuring PacifiCorp's ability to comply with its OATT and act in a manner
6 that is consistent with the processes FERC has previously recognized for QF
7 transmission arrangements.

8 In most circumstances the Company's proposal is the only legal or
9 workable proposal. It complies with all relevant federal transmission
10 requirements, including OATT requirements and OATT processes and business
11 practices, comports with standard industry practice, and is consistent with the
12 processes FERC has previously recognized for QF transmission arrangements.

13 Furthermore, the Company's proposal maintains customer indifference
14 while being fair to QFs because a QF pays nothing more than the actual incurred
15 cost of the third-party transmission service necessitated by the QF's project site,
16 passed through according to the PPA addendum.

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

18 **A. Yes.**

Docket No. UM 1610
Exhibit PAC/1701
Witness: Bruce W. Griswold

**BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON**

PACIFICORP

Exhibit Accompanying Opening Testimony of Bruce W. Griswold

Template Attestation and Requirements per
PacifiCorp Transmission's OATT

January 2017

NETWORK INTEGRATION TRANSMISSION SERVICE SERVICE MODIFICATION FORM

*** FOR USE BY PACIFICORP/TRANSMISSION PROVIDER ONLY:	
Customer:	AREF:
Service Description:	MWs:
Service Start Date:	Service End Date:

Submit the application as soon as possible. Submit the Service Modification Form via facsimile to:

PacifiCorp
Attn: Transmission Service
Fax Number: 503-813-6893
Verification Phone Number: 503-813-5588

*** FOR USE BY PACIFICORP/TRANSMISSION PROVIDER ONLY:	
Date of receipt of OASIS Request:	Date of receipt of Written Application:
 Initial Application review completed by: Date:	
<i>By signing, I certify that I have reviewed this form and any accompanying materials and to the best of my knowledge have determined that all of the information required by OATT Section 29 has been provided and is a Completed Application.</i>	
 Control review completed by: Date:	
<i>By signing, I certify that I have reviewed this form and any accompanying materials and to the best of my knowledge have determined that all of the information required by OATT Section 29 has been provided and is a Completed Application.</i>	
*** FOR USE BY PACIFICORP/TRANSMISSION PROVIDER ONLY:	
The Transmission Provider may, on a non-discriminatory basis, waive the deposit requirement for an existing Network Customer, provided (Transmission Provider must check each box and indicate date of waiver determination and OASIS posting):	
<input type="checkbox"/> Network Customer has maintained its creditworthiness pursuant to the Tariff and is not in default in its obligations under the Tariff; and	
<input type="checkbox"/> Transmission Provider has posted on OASIS notice of such waiver if granted in favor of an affiliate within one business day of the act of a waiver and that Transmission Provider has added the act of waiver to its waiver log.	
Date of waiver determination:	Date of OASIS posting:

SERVICE MODIFICATION FORM
NETWORK INTEGRATION TRANSMISSION SERVICE

INSTRUCTIONS:

This form is intended to be used by a Network Customer seeking to modify any aspect of its existing Network Integration Transmission Service Agreement (NITSA) on the PacifiCorp Transmission System.

This form should not be used to:

- Temporarily undesignate a Network Resource, or
- Make an initial request for Network Integration Transmission Service (NITS).

Network Customer must submit an application pursuant to Section 29 of PacifiCorp's Open Access Transmission Tariff (OATT or Tariff) consisting of the following (Network Customer must check each box to indicate that the required data or information is enclosed with this Service Modification Form):

- Network Customer requests that Transmission Provider waive deposit,*** and

ELIGIBLE CUSTOMER INFORMATION
OATT Sections 29.2 (i) and (ii)

Provide the following information:

Name:

Address:

Telephone Number:

Facsimile Number:

Identify NITSA to be Modified (Service Agreement #):

- Check Box to attest that the Network Customer continues to be an Eligible Customer under the Tariff.

NETWORK LOAD DESCRIPTION

OATT Section 29.2 (iii)

Check Box to attest that there are no changes to the Network Load description(s) identified in the Network Customer's Load and Resources data submittal to PacifiCorp, dated:

Unless the above box is checked, the following changes are requested to the Network Load at each delivery point identified in the NITSA/Loads and Resources data submittal. Separately identify your best estimate of the following:

Identify Network Load	Delivery Point	Total MW Load To Be Served	Transmission Voltage	Network Customer's other Loads served from Transmission Provider substation at the same Transmission Voltage

Service Start Date and Hour	Service End Date and Hour

Check Box to attest that a ten (10) year forecast of summer and winter load requirements beginning with the first year after the service is scheduled to commence is included in Network Customer's OASIS transmission service request, or is otherwise attached herewith for each modification. If OASIS transmission service request is for less than ten (10) years, please attach forecast of summer and winter load requirements (or if loads are not expected to vary seasonally, a forecasted peak load requirement) for balance of ten (10) year period or explain why a ten (10) year period cannot be provided:

INTERRUPTIBLE LOAD INCLUDED IN NETWORK LOAD
OATT Section 29.2 (iv)

Check Box to attest that there are no changes to the interruptible load description in the Network Customer's Loads and Resources data submittal to PacifiCorp, dated:

Unless the above box is checked, the following are requested changes to the interruptible load description in the NITSA/Loads and Resources data submittal:

Interruptible Load	Delivery Point	Summer Capacity Requirements		Winter Capacity Requirements		Conditions under which an interruption can be implemented and any limitations on the amount and frequency of interruption
		Total (MW)	Interruptible Amount (MW)	Total (MW)	Interruptible Amount (MW)	

NETWORK RESOURCES

OATT Section 29.2(v)

Check Box to attest that there are no changes to the Network Resource(s) identified in the Network Customer's Loads and Resources data submittal to PacifiCorp, dated:

Unless the above box is checked, the following are requested changes to the Network Resource(s) identified in the NITSA/Loads and Resources data submittal. Attach additional sheets as necessary.

Check Box to attest that a ten (10) year forecast of summer and winter resource requirements beginning with the first year after the service is scheduled to commence is included in Network Customer's OASIS transmission service request, or is otherwise noted herein for each modification. If OASIS transmission service request is for less than ten (10) years, please attach forecast of summer and winter resource requirements (or if resources are not expected to vary seasonally, a forecasted peak load requirement) for balance of ten (10) year period or explain why a ten (10) year period cannot be provided:

Part A Resource Information

Resource Name
Delivery Information Start Date and Time: End Date and Time:
Control Area where title to the resource output is received:
Resource Size
Total MW of ownership rights in the resource:
MW of Capacity being designated:
On-System Resources Only: Describe the sale arrangements for the Network Customer's portion of the resource output that is not being designated:
System Resources Only: VAR Capability of all Generators (Indicate if other than +/- 0.95)
Leading:
Lagging:

Part B
External Transmission Arrangements

Check Box to attest that resource(s) is located within the PacifiCorp transmission system.

Unless the above box is checked, the information requested in this Part B is required when title to the resource output is received outside the PacifiCorp transmission system.

Delivery Locations:			
Point of Receipt where title to the resource output is received:			
Specific location where the resource output will enter the PacifiCorp transmission system:			
The firm, Point-to-Point Transmission Arrangements for delivery of the resource output from the point of receipt where title to the resource output is received to the location where the resource output will enter the PacifiCorp transmission system are as follows:			
Transmission Provider	Point of Receipt	Point of Delivery	Transmission Reservation Number

CUSTOMER TRANSMISSION SYSTEM

OATT Section 29.2(vi)

- Check Box to attest that Network Customer does not have a transmission system,
or
- Check Box to attest that, if Network Customer does have a transmission system, there are no changes to the customer transmission system information identified in the Western Electricity Coordinating Council (WECC) base case study, dated

Unless one of the above boxes is checked, check the following boxes to indicate that the required data or information is enclosed with this Service Modification Form:

- Load flow and stability data, such as real and reactive parts of the load, lines, transformers, reactive devices and load type, including normal and emergency ratings of all transmission equipment in a load flow format compatible with that used by the Transmission Provider;
- Operating restrictions needed for reliability;
- Operating guides employed by system operators;
- Contractual restrictions or committed uses of the Eligible Customer's transmission system, other than the Eligible Customer's Network Loads and Resources;
- Location of Network Resources described in Network Resources section above;
- 10 year projection of system expansions or upgrades;
- Transmission System maps that include any proposed expansions or upgrades; and
- Thermal ratings of Eligible Customer's Control Area ties with other Control Areas

SERVICE DATES

OATT Section 29.2(vii)

- Check Box to attest that there are no changes to the Network Resource(s) identified in the Network Customer's Loads and Resources data submittal to PacifiCorp, dated:

Unless the above box is checked, the following service dates are requested. This information must be submitted over the OASIS and on this form. Unless mutually agreed to, the minimum term for NITS is one year.

Service Start Date and Hour	Service End Date and Hour

ATTESTATION and SIGNATURE

OATT Section 29.2(viii)

Check Box to attest that there are no changes to the Network Resource(s) identified in the NITSA.

Unless the box is checked, answer the following questions for all Network Resource changes requested in this form:

<p>1. Do you, an authorized officer or agent of the applicant, attest that the applicant owns the proposed Network Resources identified above, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Part III of the OATT?</p>	<p>Yes <input type="checkbox"/></p>	<p>No <input type="checkbox"/></p>
<p>2. Do you, an authorized officer or agent of the applicant, attest that the proposed Network Resources identified above do not include any resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the applicant's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program?</p>	<p>Yes <input type="checkbox"/></p>	<p>No <input type="checkbox"/></p>

By:
Print Name:
Company:
Title:
Date:

Docket No. UM 1610
Exhibit PAC/1702
Witness: Bruce W. Griswold

**BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON**

PACIFICORP

Exhibit Accompanying Opening Testimony of Bruce W. Griswold

Example of PacifiCorp Transmission Network Resource Designation

January 2017



P.O. Box 2757
Portland, OR 97208-2757

October 3, 2014

Jim Schroeder
Manager, C&T Contract Administration
PacifiCorp Merchant Function ("C&T")
825 NE Multnomah St., 600-LCT
Portland, OR 97232

**Re: Approval of Request to Designate [REDACTED] QF PPA a Network
Resource (OASIS AREFs [REDACTED] and [REDACTED])**

Dear Mr. Schroeder:

On September 4, 2014, C&T requested to designate the [REDACTED] as a network resource effective October 31, 2016 through October 31, 2036. This service will be accommodated using two AREFs: AREF [REDACTED] will provide network service to Madras area load. If necessary, AREF [REDACTED] in conjunction with long-term firm point-to-point transmission service with Portland General Electric ("PGE") and Bonneville Power Administration ("BPA"), and AREF [REDACTED] with PacifiCorp, would combine to integrate surplus Madras generation during low load hours to the Prineville bubble. As of today's date, C&T has not secured transmission with PGE or BPA.

C&T's request is hereby approved in accordance with section 30.2 of PacifiCorp's Open Access Transmission Tariff provided that 1) all facilities and requirements identified in the associated generation interconnection queue request are installed, tested, and in-service, and 2) point-to-point transmission service with PGE and BPA is acquired.

AREFs [REDACTED] and [REDACTED] will remain in RECEIVED status until such time as facilities are in service and C&T provides documentation of valid point-to-point transmission with PGE and BPA. If you have any questions, please call me at (503) 813-6958.

Sincerely,

Veronica Stofiel
Account Manager, Transmission Services

Docket No. UM-1610
Exhibit PAC/1800
Witness: Richard A. Vail

**BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON**

PACIFICORP

Opening Testimony of Richard A. Vail

January 2017

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1 **Q. Please state your name, business address, and present position with**
2 **PacifiCorp d/b/a Pacific Power (PacifiCorp or Company).**

3 A. My name is Richard A. Vail. My business address is 825 NE Multnomah Street,
4 Suite 1600, Portland, Oregon 97232. My present position is Vice President of
5 Transmission. I am responsible for transmission system planning, customer
6 generator interconnection requests and transmission service requests, regional
7 transmission initiatives, capital budgeting for transmission, and administration of
8 the Open Access Transmission Tariff (OATT).

9 **QUALIFICATIONS**

10 **Q. Briefly describe your education and professional experience.**

11 A. I have a Bachelor of Science degree with Honors in Electrical Engineering with a
12 focus in electric power systems from Portland State University. I have been Vice
13 President of Transmission for PacifiCorp since December 2012. I was Director of
14 Asset Management from 2007 to 2012. Before that position, I had management
15 responsibility for a number of organizations in PacifiCorp's asset management
16 group including capital planning, maintenance policy, maintenance planning, and
17 investment planning since joining PacifiCorp in 2001.

18 **PURPOSE OF TESTIMONY**

19 **Q. What is the purpose of your testimony in this proceeding?**

20 A. I am testifying to the Open Access Transmission Tariff (OATT) requirements and
21 Federal Energy Regulatory Commission (FERC) policies that govern PacifiCorp
22 Transmission's processing of transmission customer requests for new network

1 resource designations, including the designation of qualifying facility (QF)
2 resources.

3 **NETWORK RESOURCE DESIGNATION**

4 **Q. Do special OATT requirements and FERC policies apply when designating a**
5 **QF project as a network resource?**

6 A. No. The OATT requirements and FERC policies that govern PacifiCorp
7 Transmission's processing of new network resource designation requests apply to
8 requests from all of PacifiCorp Transmission's transmission customers, not just
9 PacifiCorp Energy Supply Management (ESM), requesting designation of QFs.

10 This is consistent with the underlying goal of FERC's 1996 Order No. 888
11 mandate that transmission providers begin providing "open access" to their
12 transmission systems, i.e., to remedy undue discrimination in access to the
13 monopoly-owned transmission wires that controlled whether and to whom
14 electricity can be transported in interstate commerce. FERC's aim was to replace
15 that regime with one where all sellers could compete on a fair basis. Thus, FERC
16 directed transmission providers to provide transmission service under rates, terms
17 and conditions that are consistent with FERC's established pro forma tariff, or
18 request FERC permission to deviate from the pro forma tariff.

19 **Q. What does it mean to be a network resource?**

20 A. Under OATT Section 30.1, network resources can include generation that is
21 owned, purchased, or leased by the network transmission customer and designated
22 to serve the network transmission customer's network load. This includes QF
23 resources that execute Power Purchase Agreements (PPA) with PacifiCorp ESM.

1 **Q. How does a transmission customer request designation of a new network**
2 **resource?**

3 A. An existing network transmission customer, such as PacifiCorp ESM, may
4 request designation of a new network resource by submitting an application with
5 PacifiCorp Transmission under Section 29 of PacifiCorp Transmission's OATT.

6 **Q. Does PacifiCorp Transmission study all requests immediately?**

7 A. In accordance with OATT and FERC policy, PacifiCorp Transmission must
8 process all requests for transmission service, including new network resource
9 designation requests, in the order in which they are received and within
10 specifically-identified timeframes. Transmission customer applications are
11 assigned a priority in the transmission queue according to the date and time
12 PacifiCorp Transmission receives the completed application, with the earliest
13 applications receiving the highest priorities for OATT processing and studying.

14 **Q. What is the focus of a new network resource designation study?**

15 A. OATT Section 32 sets out the primary study process for new network service
16 requests, including new network resource designations. Generally speaking,
17 PacifiCorp Transmission studies whether sufficient existing transmission capacity
18 exists to accommodate new network resource requests.

19 **Q. Is this a simple study?**

20 A. Often times, no. The ultimate determination of transmission capacity availability
21 depends on a host of very dynamic factors that can affect expected transmission
22 conditions in the particular area of the system where the new network resource is
23 sited and during the particular timeframe of the request. Each study also reflects

1 assumptions about requests that are earlier in the queue. As a result, transmission
2 studies are based on the known conditions at the time, with many factors and
3 assumptions subject to change should conditions shift, requests drop out of the
4 queue, etc.

5 **Q. What happens if PacifiCorp Transmission determines in a study that it**
6 **cannot accommodate a request for designation of a new resource?**

7 A. Generally speaking, where a network customer's request for designation of a new
8 network resource cannot be reliably accommodated with the existing transmission
9 capacity, the OATT and FERC's policies contemplate that a transmission
10 provider will build transmission network upgrades to accommodate a request, or
11 the transmission customer will withdraw its request from the queue.

12 Sometimes, however, PacifiCorp Transmission is able to offer the
13 transmission customer an alternative to constructing time-consuming, costly new
14 transmission facilities. For instance, where a new network resource is located in a
15 load pocket (which is explained in detail in Mr. Bruce W. Griswold's testimony),
16 and the addition of the new network resource would cause generation to exceed
17 load within the load pocket and create operational and reliability issues in the load
18 pocket, PacifiCorp Transmission may be able to grant the request for designation
19 of the network resource contingent on a different option.

20 As an example, under the traditional model noted above, PacifiCorp
21 Transmission could upgrade PacifiCorp's transmission system, perhaps
22 constructing a brand new transmission line from the load pocket to another area of
23 PacifiCorp's system. As an alternative, PacifiCorp Transmission may be able to

1 identify third party transmission system(s) linking the load pocket to other areas
2 of PacifiCorp Transmission's system on which the transmission customer could
3 purchase firm transmission service to deliver the new network resource out of the
4 load pocket and preserve reliability.

5 **THIRD PARTY TRANSMISSION**

6 **Q. Is the third party transmission option always available to resolve load pocket**
7 **over-generation situations?**

8 A. No. The third party arrangement details necessary to approve a particular
9 designated network resource application will vary on a request-by-request basis
10 depending on, for example, the level of any over-generation conditions, which
11 third party system(s) connect the load pocket to a different part of PacifiCorp's
12 system, and the availability of capacity on those third party system(s).

13 **Q. Can a transmission customer make a determination itself regarding whether**
14 **its resource might cause an over-generation situation in a load pocket, or**
15 **whether a third party transmission arrangement may help resolve that over-**
16 **generation situation?**

17 A. No. The majority of the information that PacifiCorp Transmission uses to
18 perform its OATT studies is non-public transmission information. This means the
19 information is only available to the transmission provider and, under the strict
20 requirements of FERC's Standards of Conduct, cannot be shared with any
21 transmission customer.¹

¹ The Standards of Conduct includes three primary rules: (1) the "independent functioning rule," which requires transmission function and merchant function employees to operate independently of each other; (2) the "no-conduit rule," which prohibits passing transmission function information to marketing function employees; and (3) the "transparency rule," which imposes posting requirements to help detect any

1 **Q. Does PacifiCorp ESM have any special access to the transmission**
2 **information needed to make this determination?**

3 A. No. Under federal law, PacifiCorp ESM is treated like any other transmission
4 customer in terms of its access to the non-public transmission information
5 available to PacifiCorp Transmission. If PacifiCorp ESM needs transmission
6 service, PacifiCorp ESM must request transmission from PacifiCorp
7 Transmission and follow the OATT study and request process just like any other
8 transmission customer. It has no more access to transmission information than
9 any other transmission customer does, whether that customer is a QF, a non-QF
10 third-party, or PacifiCorp ESM.

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

12 A. Yes.

instances of undue preference due to the improper disclosure of transmission function information. *See generally* Standards of Conduct for Transmission Providers, Order No. 717, 125 FERC ¶ 61,064 (2008).