

December 21, 2012

VIA ELECTRONIC FILING

Washington Utilities and Transportation Commission
1300 S. Evergreen Park Drive, S.W.
P.O. Box 47250
Olympia, Washington 98504-7250

Attn: David W. Danner
Executive Director and Secretary

**RE: Docket No. UE-112133 – Comments
Review Standards for Interconnection with Electric Generators in WAC 480-108**

PacifiCorp d/b/a Pacific Power & Light Company (PacifiCorp or Company) submits the following comments in accordance with the Washington Utilities and Transportation Commission's (Commission) Notice of Opportunity to Submit Written Comments (Notice) issued in Docket UE-112113 on November 21, 2012.

In the Notice, the Commission requested written comments on draft rules that amend and replace the current rules governing the interconnection of generation facilities with utility electric systems. Specifically, the Commission requested comments on the draft rules with specific emphasis on questions set forth in the Notice. The Company will address each of these questions in detail below. In addition to its responses to the specific questions below, the Company first addresses a number of critical threshold issues as well as minor drafting notes on the draft rules.

A. OVERVIEW AND BACKGROUND

As noted in prior comments, the rules applicable to a particular interconnection request are determined by the nature of the proposed project and whether or not it is subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC). Where a project falls under FERC jurisdiction, PacifiCorp is required to follow the interconnection processes and cost allocation methodologies mandated by its Open Access Transmission Tariff (OATT). Where a project is not subject to FERC jurisdiction, PacifiCorp is required to follow the interconnection processes and cost allocation methodologies developed by relevant state commissions. Therefore, the comments provided herein address only projects that are *not* subject to FERC jurisdiction.

B. THIRD-PARTY OWNERSHIP OF NET-METERING SYSTEMS

While the Company will answer the specific questions posed by the Commission below, given the significant concern that the Company has with the draft rules' apparent proposal for allowing third-party ownership of net-metering systems, this issue is highlighted first.

The Company is very concerned that the draft rules appear to reflect a significant policy shift with respect to third-party ownership of net-metered facilities. The proposed definition of interconnection customer in proposed section WAC 480-108-010 includes, in relevant part, “a customer generator of net-metered facilities, as defined in RCW 80.60.010(2), *including the third-party owner of an on-site generation facility.*” (emphasis added). This modification has significant legal, regulatory, and administrative ramifications that should be carefully addressed and considered prior to the adoption of such a significant new policy. As far as the Company is aware, third-party ownership of net-metering facilities has not been authorized by Washington law nor has there been prior indication that it will be addressed in this docket. In fact, the concept was not discussed in detail as part of the development of the draft rules by the Model Rule Workgroup. In order to facilitate the discussion, the Company addresses its concerns below.

First, third-party ownership of on-site customer generator net-metering facilities may not be legal under Washington law. Under RCW 80.04.010(12), an electrical company is defined with an exception for “a company or person employing a cogeneration facility solely for the generation of electric[ity] for its own use or the use of its tenants or for sale to an electrical company, state or local public agency, municipal corporation, or quasi municipal corporation engaged in the sale or distribution of electrical energy, *but not for sale to others*, unless such company or person is otherwise an electrical company.” (emphasis added). If a third-party is allowed to install and own net-metering facilities on a customer site and then sell the power generated from the installation to the customer, that would appear to be a prohibited sale unless the seller is an electrical company under RCW 80.04.010(12). The Company is not aware if this arrangement will be proposed, however, it highlights this issue as one that should be considered prior to allowing third-party ownership of net-metering facilities.

Second, even if third-party ownership of net-metering facilities is not prohibited under Washington law, the Company foresees significant potential issues if utilities are required to enter into contractual arrangements with third-party owners of net-metering facilities. Currently, the Company only contracts with its retail customers for the interconnection of net-metering facilities. The introduction of a third party to this equation could cause potential contracting issues as well as create utility access concerns. In Oregon, where third-party net-metering is allowed, it is clearly articulated that the utility’s sole contractual relationship is with its retail customer;¹ the third-party leasing arrangement is between the retail customer and the third party, and does not have any bearing on the utility. If third-party ownership of net-metering facilities is not prohibited under Washington law, the Company urges the Commission to adopt an approach similar to Oregon in its interconnection rules to ensure the retail customer is clearly identified as the interconnection customer.

There are a number of sections in the proposed rules that highlight this issue. For instance, proposed section WAC 480-108-BBB(2)(a)(v)(D) states:

¹ See Oregon Administrative Rules 860-039-0005. “Customer-generator” is defined as “the person who is the user of a net metering facility and who has applied for and been accepted to receive electricity service at a premises from the serving public utility.” “Interconnection agreement” is defined as “an agreement between a customer-generator and a public utility...”

To maintain electrical company operating and personnel safety in the absence of an external disconnect switch, the interconnection customer shall agree that the electrical company has the right to disconnect electric service through other means if the generating facility must be physically disconnected for any reason, without liability to the electrical company. These actions to disconnect the generating facility (due to an emergency or maintenance or other condition on the electrical company's system) will result in loss of electrical service to the customer's facility or residence for the duration of time that work is actively in progress. The duration of outage may be longer than it would otherwise have been with an AC disconnect switch. If the interconnection customer is a different entity than the electrical company customer receiving service through the meter that may be used for disconnection or that may have a loss of electric service due to a need to disconnect the generating facility, *the interconnection customer shall obtain these agreements and permissions from all other entities affected by such disconnection.* (emphasis added)

This provision sets up an untenable situation: the interconnection customer must act as a liaison between the utility and the retail customer in order to ensure that the *electrical company* may physically disconnect the retail customer due to an emergency or necessary maintenance, without liability. This is problematic first and foremost if it results in the Company being denied access to the generating facilities to physically disconnect or otherwise perform necessary maintenance on Company facilities. In addition, it is unclear how this provision will be enforced. The consequences for failure to obtain necessary agreements or permissions must be clearly defined and the Company must be able to require proof of such agreements and permissions prior to energizing the net-metering facilities. Even if the Company were able to request proof of such necessary agreements or permissions, it would be extremely administratively burdensome to manage contractual arrangements with potentially high volumes of third-party owners of net-metering facilities. It is inadvisable from a policy perspective to rely on third parties, who do not have a legal obligation to serve, to be the interface with utility customers in the event of a disconnection.

A third-party owner of net-metering facilities is not analogous to a third-party owner of non-net-metered interconnection facilities. With respect to the latter, there is typically no residential retail customer. Further, if a third-party owner of non-net-metered interconnection facilities goes out of business, the Company may be in a position of simply disconnecting the facilities. In the event a third party owner of net-metering facilities goes out of business, the Company cannot simply disconnect and abandon its contractual arrangement with the retail customer.

Section WAC 480-108-FFF(20) contains similar infirmities. That section states that:

If the interconnection customer is a different entity than the owner of the real property on which the generating facility is located, the interconnection customer shall indemnify the electrical company for all risks to the owner of the real property, including disconnection of service.

In addition the interconnection customer shall obtain all legal rights and easements requested by the electrical company for the electrical company to access, install, own, maintain, operate or remove its equipment and the disconnect switch, if installed, on the real property where the generating facility is located, at no cost to the electrical company.

This provision sets up a similarly untenable situation, when applied to the interconnection of a net-metering system. With respect to non-net-metering interconnections, the Company typically requires indemnification for all risks to the owner of the real property, and does so prior to commercial operation. However, with respect to a net-metering customer, the owner of the real property would typically be a residential retail utility customer. The Company questions the wisdom, and potentially the legality, of requiring third parties to indemnify the Company for risks associated with residential customer disconnection of service. Again, it is inadvisable to rely on third parties, who do not have a legal obligation to serve, to be the interface with utility customers in the event of a disconnection.

The Company urges the Commission to carefully consider the profound ramifications of this relatively minor definitional change prior to adoption of modified interconnection rules.

C. RESPONSE TO QUESTIONS SET FORTH IN THE NOTICE

(1) Much of the original language found in WAC 480-108 was deleted in favor of the simpler language found in the recommended Model Rule. In deleting this language, did the Commission inadvertently eliminate critical conditions that govern interconnection installation or operation?

No.

(2) Are all the necessary footnotes and detailed comments found in Table 1 of the original WAC 480-108, preserved or otherwise adequately addressed in the new sections addressing terms and conditions?

Yes.

(3) Should the Commission include a definition for the term "Nameplate Rating"? If so, should the Commission expand the definition to include Inverter-based generation systems?

Yes, the Commission should include a definition of Nameplate Rating similar to that included in the proposed rules. For non-inverter-based system, the nameplate AC output rating should be used. The rule as written will provide consistency as it clarifies that the DC nameplate value is to be used for inverter based systems.

(4) Are there additional terms and conditions, time constraints, or other provisions found in the Tier 3 Section of Chapter 2 of the model rules that could improve the installation and operation of facilities interconnected under the Tier 3 process as proposed in these draft rules?

No.

(5) For the Tier 1 inverter-based systems only, there was considerable debate among stakeholders regarding the appropriate maximum size of the facility to allow in the fast track application process. The maximum sizes for Tier 1 under consideration are 25 kW and 50 kW. The Commission chose 25 kW as the appropriate level. Are there strong technical arguments that support going to 50 kW, which the Commission overlooked?

No, 25 kW is the appropriate level for a Tier 1 Interconnection

(6) In its review of the major issues, the Commission identified "Insurance Requirements" as an issue that could have a negative impact on implementing an aggressive distributed generation program. In this draft rule the Commission excluded all interconnected facilities 100 kW or smaller from any requirement for additional insurance. Many parties suggested this issue should be addressed outside this rulemaking. Are there strong technical arguments that support continuing the insurance discussion within this rulemaking that the Commission has overlooked?

No.

(7) The Commission proposes the following language from IREC as an addition to the "interconnection customer" definition: "A net-metered Interconnection Customer may lease from, or purchase power from, a third party owner of an on-site generating facility." The Commission requests comments on the proposal to modify the definition of "interconnection customer" to allow for third-party ownership of net metering systems.

As noted above, the Company has significant concerns with third-party ownership of net-metering systems. In addition, the Company has concerns with managing contractual relationships with net-metered interconnection customers who are not also the Company's retail customers. However, the proposed definition in the paragraph above is different from, and less problematic, than the definition included in the draft rules. The draft rules appear to allow the interconnection customer to be a third-party owner of net-metering facilities. The above definition is slightly but significantly different in that it allows an interconnection customer (who is presumably also a retail utility customer) to lease or purchase power from a third-party owner of an on-site generating facility. In the latter scenario, the Company would not be in a position of entering into a contractual arrangement with a net-metering party other than its retail customer. If the Commission determines that third-party ownership of net-metering systems is legal and advisable from a policy perspective, the Company strongly urges that the definition in the paragraph above be adopted rather than the one included in the draft rules.

D. ADDITIONAL COMMENTS

Definition of Interconnection Customer

The proposed definition of Interconnection Customer hinges in part on whether or not an Interconnection Agreement with the electrical company has been executed. This is problematic and results in circularity and internal inconsistencies. As an example, the interconnection customer is repeatedly referred to in the application process, sometimes as “interconnection customer” and sometimes as “potential interconnection customer.” This is confusing and unnecessary. The Company proposes that the Commission take the approach taken in the Federal Energy Regulatory Commission (FERC) *pro forma* Open Access Transmission Tariff (OATT), which is “any entity *** that *proposes to* interconnect its Generating Facility with the Transmission Provider's Transmission System.” (emphasis added)

Dates and Timelines

The draft rules should aggregate all timelines and deadlines associated with the interconnection process into one location within the rules. Combining all time-sensitive requirements in one location will make the rules easier to comprehend for the utilities and average customers seeking to participate. As currently drafted, dates are addressed in numerous different sections. For example in 480-108-AAA (4): the rules state that the utility must respond in 15 days. Then in 480-108-AAA (8) the rules state that the Utility must notify the customer within 10 days if the interconnection request is complete. Timelines are then addressed again in 480-108-CCC(1)(A) where there is a directive to notify the customer that their application is complete within 5 days in certain circumstances. In short the company suggests that the rules be modified to capture all timelines in one location within the rules. This is already nicely done in 480-108-CCC; other references to timing and deadlines should be removed from other sections.

Disconnect Switch

The Company supports the proposed rules with respect to the treatment of disconnect switches.

Additional Protection Equipment

Section WAC 480-108 BBB(2)(b)(i) does not allow the utilities to require adequate protection equipment for inverter based systems. The statement “for inverter based systems, this requirement is satisfied by compliance with UL 1741” does not take into account the larger interconnection requirements outlined in IEEE 1547 – 2003 (R2008) and does not acknowledge that UL 1741 is a supplement to IEEE 1547 which is outlined in the scope section under item 1.2 of UL 1741 which states: “1.2 For utility-interactive equipment, these requirements are intended to supplement and be used in conjunction with the Standard for Interconnecting Distributed Resources With Electric Power Systems, IEEE 1547, and the Standard for Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems, IEEE 1547.1.” UL 1741 is recommended to supplement IEEE 1547 not replace it and therefore it is not appropriate for the rule to indicate that UL 1741 satisfies all requirements. The Company recommends requiring adherence to IEEE 1547 except where the standard is supported or

complemented by UL 1741. For non-inverter based systems, this requirement is satisfied by compliance with IEEE 1547 in its entirety including the required separate protection package.

The Company recommends the following wording:

In all cases, the interconnection facilities must isolate the generating facility from the electrical company's electric system as specified by IEEE 1547 and the interconnection agreement. The interconnection customer shall prevent its generating facility equipment from automatically re-energizing the electric system as specified by IEEE 1547 and the interconnection agreement. For inverter-based systems, the interconnecting facility must comply with IEEE 1547, UL 1741 and the interconnection agreement set forth by the electric utility. For non-inverter based systems a separate protection package will be required to meet IEEE 1547 and the interconnection agreement set forth by the electric utility.

The Company further recommends that the draft rules be modified to address potential future changes to technical standards. For instance, the current version of IEEE 1547 (which is IEEE 1547 - 2003 (R2008)) satisfies the above requirement for non-inverter based systems. However, in the event IEEE 1547 or UL 1741 is modified, the Company would need to revisit whether or not additional or different references would be appropriate. One way to accomplish this may be through the addition of a reference document or the ability to review the rules when changes are made to relevant technical standards.

Section WAC 480-108-AAA

Proposed section WAC 480-108-AAA(4) requires that the electrical company respond within ten business days to an interconnection application. As noted above, the timelines and deadlines should be consolidated into WAC 480-108-CCC. However, the Company proposes that this timeline be reduced to ten days so that it is consistent with all other jurisdictions in which the Company operates.

Proposed section WAC 480-108-AAA(6) sets forth the interconnection application fees. The Company proposes a change to (6)(c), which is the application fee for facilities 500 kW to 20 MW. The fee is currently one thousand dollars. In the Company's experience, one thousand dollars may be adequate for small systems but when proposed interconnections are larger and closer to 20 MW, one thousand dollars may represent only a small percentage of the total study costs. In addition, the wide range of size 500 kW and 20 MW and potential project complexity, the Company proposes a different approach for calculating the fee for these facilities. The greater the size the facility, the great potential impact to the system and typically, the higher the study costs. The Company therefore proposes an initial fee of five hundred dollars plus two dollars per kW of proposed nameplate capacity. This is the approach taken in Utah and the Company has found that it better accounts for the differences in facility sizes and associated study costs. In Utah, total study costs are typically closer to the deposit amount.

Proposed section WAC 480-108-AAA(7) requires that, in relevant party, the "original date and time stamp affixed to the interconnection request will serve as the beginning point for purposes of any timetables in the application and review process." The appropriate start date should be

when both the application and deposit are received. Therefore, the Company proposes the following modification to the section: the “original date and time stamp affixed to the interconnection request, or receipt of deposit, whichever is later, will serve as the beginning point for purposes of any timetables in the application and review process.”

WAC 480-108-015

Proposed WAC 480-108-015 states that:

most electrical company distribution systems were not originally designed with the intent of interconnecting generating facilities. Interconnection can be detrimental to the safe and reliable operation of the system. Generating facilities must obtain the electric company’s permission to operate in an “islanded” condition (generating energy that flows onto the electrical company’s system) when the electrical company’s system serving the generating facility is de-energized.

The Company proposes modifying this section in order to prohibit generating facilities from operating in an “islanded” condition. Such operation is extremely problematic and the Company does not foresee ever permitting this circumstance. Operating in an “islanded” condition has a number of serious consequences, including but not limited to: 1) it exposes utility personnel to potentially harmful backfeed voltages; 2) it increases the difficulty of detecting and restoring faults when backfeed voltages exist; 3) it could potentially degrade or damage customer or Company equipment; and 4) the voltage and frequency may not be maintained within a standard permissible level causing compliance issues.

Section WAC 480-108-BBB

The proposed section WAC 480-108-BBB(1)(b)(viii), includes a requirement that the generating facility be single-phase. This should be struck because three-phase interconnections are allowed in Tier 2.

The proposed section WAC 480-108-BBB(2)(b)(iii) currently requires a three-phase connection for generating facilities 50 kW and greater. However, there are certain situations where a larger facility could be interconnection on a single-phase line safely and requiring the reconductoring of the entire line may be unnecessary. Therefore the Company proposes to add some discretion in the current language to allow for single-phase connections on a case-by-case basis. As such, the Company proposes the following modified language: “for proposed generating facilities 50 kW and greater, three phase connection is required, except in situations approved by the electric company at its sole discretion.”

Sections WAC 480-108-BBB(2)(b)(iv) and WAC 480-108-BBB(1)(b)(x) contain circular references. WAC 480-108-BBB(2)(b)(iv) states that “no construction of facilities by the electrical company on its own system shall be required to accommodate the Tier 2 generating facility except as allowed in subsection 1 of this section” and WAC 480-BBB(1)(b)(x) states that

“any upgrades required to the electrical company’s system must fall within the requirements in subsection (2)(b) of this section.” The only reference to eligible upgrades in Section 1 is (1)(b)(x), which in turn references back to section (2)(b). These sections should be modified to clearly state what upgrades are eligible.

Section WAC 480-108-DDD

The proposed section WAC 480-108-DDD(1) states that “each electrical company over which the Commission has jurisdiction must file an interconnection service tariff for facilities with nameplate generating capacity greater than 300 kW but no more than 20 MW.” However, consistent with WAC 480-108-BBB(b)(ii), the demarcation point for Tier 3 is 500 kW. In addition, there are criteria other than size that are considered when determining the appropriate tier for a particular interconnection. Therefore, WAC 480-108-DDD(1) should be modified to state: “nameplate capacity greater than 500 kW but no more than 20 MW, and for those that fail to meet the requirements to interconnect under a Tier 1 or Tier 2 Interconnection process.”

Section WAC 480-108-FFF

Section WAC 480-108-FFF contains two subsection (9)s. This comment addresses the second (9) which allows the electrical company to require a transfer trip system or equivalent protective function that “cannot: detect distribution system faults (both line-to-line and line-to-ground) and clear such faults within two seconds; or detect the formation of an unintended island and cease to energize the electrical company’s distribution system within two seconds.” This section should be revised to more clearly state what is and is not required; the use of the word “cannot” to describe what is technically required is confusing and potentially simply erroneous.

The Company proposes that this section be replaced with a reference to interconnection system response to abnormal voltages specified under IEEE 1547 Table 1 in section 4.2.3 and interconnection system response to abnormal frequencies under IEEE 1547 Table 2 in section 4.2.4 or as outlined in the interconnection agreement, which sets forth required clearing times for different types of system events. In some instances, two seconds is considerably slower than required and does not allow for adequate coordination with the electric utility. By not applying the IEEE table and only apply the two second requirement for all faults, the rule does not take into account the nature of the system event and is inconsistent with industry standards. Maintaining only a two second clearing time in all instances could result in damage to the customers system, a hazard to line personnel or damage to company equipment.

E. CONCLUSION

PacifiCorp appreciates the opportunity to provide comments and encourages the Commission to take these into account when finalizing these rules. The Company urges the Commission to carefully consider our concerns addressing third party ownership of net metering systems and how that will affect the utility's ability to supply safe and reliable service to our retail electric customers. If you have any questions regarding these comments, please contact Bryce Dalley at (503) 813-6389 or me at (503) 813-6051.

Sincerely,

A handwritten signature in black ink that reads "William R. Griffith" followed by a slash and the initials "PBD". The signature is written in a cursive style.

William R. Griffith
Vice President, Regulation