

January 30, 2012

VIA ELECTRONIC FILING

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

Attention:

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 File Written Comments (Notice) issued in Docket UE-112113 on December 23, 2011.

In the Notice, the Commission requested written comments on the proposal to review the rules for interconnection with electric generators, as well as changes commenters would like to see in the rules. In general, PacifiCorp believes that no changes are *required* to existing rules to accommodate more distributed energy, but PacifiCorp is interested in evaluating proposals that may be offered by other parties to this proceeding. PacifiCorp believes that the interconnection rules in Washington State are flexible enough to allow the interconnection of distributed energy resources, identify any system upgrades or improvements necessary to maintain reliability, and properly allocate the expenses related to interconnection between the customer generator and the utility.

In the Notice, the Commission also noted that the focus of the rulemaking will be on existing requirements that may need modification because: 1) they are no longer be necessary due to technological changes; 2) they impose a significant burden on interconnection; and 3) if modified, would reduce the costs for interconnection and accelerate the development of distributed generation systems, without unduly shifting costs between customers or classes. The below comments are organized into sections based on these categories. In addition, the Company's below discussion incorporates relevant comments made in Docket UE-110667.

A. OVERVIEW AND BACKGROUND

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

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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. RULES NO LONGER NECESSARY DUE TO TECHNOLOGICAL CHANGES

In general, as noted above, PacifiCorp believes that the existing rules remain equitable and reasonable. However, PacifiCorp offers the below suggestions with respect to rules that may no longer be necessary due to technological changes.

1. External Disconnect Switch (WAC 480-108-020(2)(a)-(b))

The rules for interconnection of facilities under 300 kW include the requirement that the interconnection customer installs "a UL-approved safety disconnect switch that can fully disconnect the interconnection customer's generating facility from the electrical company's electric system."(480-108-020(2)(a)) The purpose of a manual, lockable disconnect switch is to ensure the safety of utility personnel when working on customer meters or electrical lines. However, this requirement does add an additional cost for the interconnection of a generating facility. The issue is to balance the added safety provided by the requirement to the additional cost to the interconnection customer.

In the case of a small inverter based generating facility, like small residential solar systems, there may be some validity in formalizing a rule exempting these systems from this additional requirement. The current rule contains an exemption provision for the disconnect requirement if the interconnection customer can demonstrate the generating facility includes equipment that performs the physical disconnection internally, and agrees that the utility can disconnect the service entirely if the need arises. (480-108-020(2)(b)) In other states the net metering rules have formalized this exemption by granting a blanket waiver to facilities that meet certain requirements. A well drafted waiver could remove the burden on interconnection customers and the utilities of individually justifying and analyzing each interconnection request to see if the waiver requirements are met. This would allow contractors to more accurately predict the interconnection costs upfront while also reducing the administrative burden of installing generation facilities for both the utility and the interconnection customer.

If well drafted, a blanket waiver could have little impact on the safety of the utility personnel responsible for working on the system. Inverter based systems that meet the standards of UL 1741 are required to include internal disconnect equipment which in most cases will automatically protect utility personnel in the case of an outage. Should the necessity arise to disconnect a generating facility when there is no system outage a properly sized system could be disconnected by disconnecting the entire system at the meter. Limiting systems that are eligible for a blanket waiver to those that have limited production capabilities which could be safely disconnected by removing the meter allows utility personnel to disconnect the electric service directly should the need arise.

The Oregon net metering rules might serve as a potential model of how to strike a balance between utility personnel safety and predictability and cost reduction for interconnection customers. In OAR 860-039-0015(2), the Oregon Public Utility Commission granted a blanket

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waiver to systems that have less than 30 amperes worth of impact on the system. It grants a blanket exemption to an inverter based generating facilities that meet certain requirements.

OAR 860-039-0015

- (2) Except for customer-generators established as net metering customers prior to the effective date of this rule, a customer-generator of a public utility must install and maintain a manual disconnect switch that will disconnect the net metering facility from the public utility's system. The disconnect switch must be a lockable, load-break switch that plainly indicates whether it is in the open or closed position. The disconnect switch must be readily accessible to the public utility at all times and located within 10 feet of the public utility's meter.
 - (a) For customer services of 600 volts or less, a public utility may not require a disconnect switch for a net metering facility that is inverter-based with a maximum rating as shown below.
 - (A) Service type: 240 Volts, Single-phase, 3 Wire Maximum size 7.2 kW.
 - (B) Service type: 120/208 Volts, 3-Phase, 4 Wire Maximum size 10.5 kW.
 - (C) Service type: 120/240 Volts, 3-Phase 4 Wire Maximum size 12.5 kW.
 - (D) Service type: 277/480, 3-Phase, 4 Wire Maximum size 25.0 kW.
 - (E) For other service types, the net metering facility must not impact the customer-generator's service conductors by more than 30 amperes.
 - (b) The disconnect switch may be located more than 10 feet from the public utility meter if permanent instructions are posted at the meter indicating the precise location of the disconnect switch. The public utility must approve the location of the disconnect switch prior to the installation of the net metering facility.
- (3) The customer-generator's electric service may be disconnected by the public utility entirely if the net metering facility must be physically disconnected for any reason.

PacifiCorp believes that there is the potential to incorporate a blanket exemption from the disconnect switch requirement within the interconnection rules. Oregon set this limit by computing the maximum size of a system that has less than 30 amperes worth of impact. This allows the utility to safely disconnect a customer, and the corresponding generating facility, simply by pulling the meter and disconnecting the entire service. At higher amperes this method of disconnection can be dangerous for utility personnel and thus the generation facility specific disconnect switch is required. PacifiCorp believes that a methodology that is properly developed, whether modeled after Oregon or not, can be instituted without risking the safety of utility personnel.

2. Size Limitations

WAC 480-108-080 requires that, for facilities with nameplate generating capacity greater than 300 kW but no more than 20 MW, utilities offer service equivalent in all procedural and technical aspects to the interconnection service the electrical company offers under the small generator interconnection provisions of its OATT. In this way, both state and FERC-jurisdictional interconnection customers are treated comparably. PacifiCorp believes that this framework remains appropriate and that the OATT provisions should continue to generally apply equally to both FERC-jurisdictional and non-FERC-jurisdictional projects.

Further, under the OATT requirements, different rules and processes apply depending on the size and nature of the project. Generally, the interconnection process is more in-depth for larger projects, as larger projects can have a greater impact on the distribution or transmission system. The timelines set forth in the OATT are necessary in order to ensure the continued reliability of the distribution and transmission systems. The OATT is separated into a large generator interconnection process for projects greater than 20 MW and a small generator interconnection process for projects less than 20 MW. In addition, a fast-track process is available for projects

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under 2 MW. The timelines and size thresholds set forth in the OATT are designed to allow transmission providers to ensure the continued reliability and safety of its transmission and distribution systems. PacifiCorp believes that it is appropriate to continue to treat all projects (OATT and non-OATT) on a comparable basis and in accordance with the timelines set forth in the OATT.

However, if the Commission modifies its rules to raise the project size threshold (currently 300 kW) to which the OATT rules are applied, PacifiCorp proposes that the rules be modified to also incorporate additional criteria, other than size, that may be taken into account when determining the rules that apply. Projects that are the same size may vary significantly in their complexity depending on where on PacifiCorp's transmission or distribution system the proposed project may be interconnected. If additional criteria other than size are applied, the utility could conduct an initial assessment of a proposed project to determine which "track" or rules apply. In this way, the timelines for project completion are more appropriately based on the nature of the project, rather than on a single criterion that does not necessarily provide an accurate indication of the complexity of the project.

C. REDUCE INTERCONNECTION COSTS AND ACCELERATE DEVELOPMENT OF DISTRIBUTED GENERATION SYSTEMS

All interconnection costs, meaning costs associated with interconnection and service of a customer's on-site generating facility on the customer's premises connected to the PacifiCorp's distribution or transmission system, are paid for by the interconnection customer. Interconnection costs mean all reasonable costs, charges, and expenses (including all reasonable internal costs and overheads) incurred by PacifiCorp in the design, construction, installation, modification, testing, regulation, approval, inspection and commissioning of the desired interconnection. The total amount of the interconnection costs can vary significantly based on the specifics of interconnection required for service. Under the OATT, the burden of these costs is allocated with some costs falling on the customer generator while others are socialized and spread over the remaining customers. PacifiCorp believes that this framework continues to be appropriate and equitable.

PacifiCorp appreciates the opportunity to provide comments and looks forward to participating in the upcoming work session. If you have any questions regarding these comments, please contact me at (503) 813-6043.

Sincerely,

Andrea Kelly Andrea L. Kelly

Vice President, Regulation