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PUGET SOUND ENERGY
The Energy To Do Great Things

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Via electronic mail – records@utc.wa.gov

March 6, 2013

Mr. Steven V. King
Acting Executive Director and Secretary
Washington Utilities and Transportation Commission
1300 South Evergreen Park Drive S.W.
P.O. Box 47250
Olympia, WA 98504-7250

Subject: **Docket No. U-112133**
Review Standards for Interconnection with Electric Generators in WAC 480-108.
Comments of Puget Sound Energy, Inc.

Dear Mr. King:

Puget Sound Energy, Inc. ("PSE" or the "Company") submits these comments in response to the February 5, 2013, Notice of Opportunity to File Written Comments On Revised Interconnection Draft Rules ("Notice"). These comments address primarily the latest changes to the draft rules. PSE appreciates the opportunity to be a participating party in this rulemaking proceeding and to comment on the draft rules.

Puget Sound Energy General Comments

The draft rules attached to the Notice included many changes not previously discussed by the parties or at the workshops convened for the purpose of developing revised state-wide rules for interconnection. Therefore, PSE hopes that the Commission's plans include another circulation of the draft version of proposed rules in order to allow the parties an opportunity to comment on changes made as a result of comments to the Notice and to have a better understanding of the intent of any proposed changes.

In general PSE has found the draft rules workable but has some specific concerns which are described below.

Puget Sound Energy Comments on February 5, 2013 Draft WAC 480-108

Draft WAC 480-108-010 Definitions –

The definition of "Interconnection customer" has been expanded to provide that "A net metered interconnection customer may lease from, or purchase power from, a third party owner of an on-site generating facility." This provision introduces a third party which is undefined, a "third party owner" which will connect a generating system to a utility's electrical system without any agreement. This third party has no obligations, rights or responsibilities under RCW 80.60, WAC 480-108, WAC 480-100 or PSE's current tariff. The draft rules have not been edited to accommodate this new concept and the concept is not ripe for addition at this time and should be deleted. Substitute House Bill 1106 provides for third-party ownership but makes it clear that the third-party owner may not resell electricity (the draft rule allows for such resale). The same bill provides that the customer-generator is responsible to the electric utility for the interconnection, operation and maintenance of a net metered system. The proposed addition to this definition does not include any of these concepts so the addition should be deleted or further revision of these rules should be delayed until the outcome of SHB 1106 is determined. PSE has no issues with an Interconnection customer leasing generation equipment since RCW 80.60 and PSE's tariff makes it clear that the relationship regarding net metering is between the customer (not the owner of the generation equipment) and the utility. This "third party owner" language makes it possible for the owner of generation equipment to sell energy to the public at large as long as the generating equipment is located "on-site". For example, an apartment building owner may lease roof space for construction of a solar installation and the owner of that solar installation may offer the output to all the tenants of the building and neighboring buildings if they are on the same "site". It is PSE's belief that this provision was added in order to provide for such third party ownership if RCW 80-60 is amended to allow such ownership (however as pointed out above the balance of WAC 480-108 has not been edited to accommodate this concept, nor has it been discussed with the parties to this rulemaking). If that is the case PSE suggests that "If allowed by RCW 80-60" be added to the beginning of the newly added sentence and that a definition of "on-site" be added to WAC 480-108-010. A suggested definition of on-site is ""On-site" means on the premises of a net metered interconnection customer." Also, a definition of "third party owner" should be added which obligates the third party owner to meet all of the requirements and obligations of the "Interconnection customer". Suggested wording for the definition of third party owner is: ""Third-party owner" means and entity that own a generating facility used in a net metering system (as defined in RCW 80.60) located on the premises of a net metered interconnection customer. The third party owner shall have entered into a contract with the interconnection customer for provision of power from the net metering system. A third-party owner may not resell the electricity produced from the net metering system." In addition, the third-party owner should be obligated to notify all "On-site" customers that disconnection of service may occur should the electric company need to disconnect the generating facility and the electric shall have such right under the provisions of WAC 480-108-BBB(2)(a)(iv)(D) and WAC 480-108-BBB (2)(b)(ix)(D). The definition of

"Interconnection customer" in WAC 480-108-010 is one example where the concept of the "third-party owner" has not been carried through the draft rules. Currently the "Interconnection customer" is defined as the party that "(1) **owns** a generating facility interconnected to the electric system;" (emphasis added). Unless the concept of the third-party owner is deleted in its entirety this requirement should be modified as follows: "(1) unless third-party owners are allowed by law, owns a generating facility interconnected to the electric system, if third-party owners are allowed by law the third-party owner shall have entered into a contract with the net-metered Interconnection customer as provided by RCW 80-60;"

The new definition of "Islanding" can lead to unintended consequences. When a generator is operating the circuit will not be de-energized even when disconnected from the utility as a whole. In addition, simple energization can be an issue even if no energy is being exported into the utility. PSE recommends that the definition be changed to: ""Islanding" means a condition that occurs when the generator or generators on a circuit are no longer connected to the bulk or entire electric system of the utility."

The new definition of "Nameplate capacity" defines the nameplate capacity to be based on the manufacturers AC output rating of the inverter. This means for one generator installation the DC rating of the generator is used and for another (that has an inverter) the AC rating is used. This is confusing for customers and not necessary. The inverter is a minor component of the system and in PSE's experience is often replaced in order to increase the output of the system and thereby causing electrical problems on PSE's system. To allow for flexibility the definition should be re-worded as follows: ""Nameplate capacity" means the manufacturer's DC output capacity of the generating facility unless the utility agrees to base the system capacity on the AC output capacity."

Draft WAC 480-108-BBB Eligibility for tier 1, tier 2, and tier 3 interconnection.

In Section (1)(a)(ix) Applicability, Tier ,1the wording is unclear. A radial distribution circuit is limited to serving one customer at the PCC. Perhaps this should be reworded as follows: "Is not proposed for interconnection to a radial distribution circuit where the entire circuit serves only one customer or to a spot network distribution circuit serving one customer."

In Section (2)(a)(iv)(A) Technical Requirements, Tier 1, Disconnect switch (This appears on page 9 of the clean copy distributed on February 5.) the draft rule provides that the disconnect switch be "...located between the production meter and the sub-panel or other connection to the generating facility." This wording is unclear in its meaning and does not allow the location to be standardized for safety of workers and operational efficiency. Operational efficiency is impacted because the lack of standardization would result in increased costs and delays in outage restoration and other activities because workers would have to determine the location of the disconnect switch and then determine how it is connected into the system. The disconnect switch on existing systems connected to the PSE system is between the generator and the production meter. By locating the disconnect switch at this position it allows the

production meter to stay energized by the electrical panel and remain in communication for meter reading purposes. PSE suggests that the wording be revised as follows: "... located between the generator and the production meter or other location specified by the utility."

Draft WAC 480-108-CCC Application procedures for tier-specific interconnection.

In Section (1) (c), Tier 1 (This appears on page 14 of the clean copy distributed on February 5.) the draft rule provides that electrical companies anticipate when or if an interconnection customer (or does it include other customers on the same circuit) will experience voltage irregularity as described in WAC 480-108-FFF(23)(a). This provision adds new requirements on utilities and a new cost of up to **$10,000 per generator**. Utilities are presently required to maintain the voltage on their systems by WAC 480-100-373. Implementing a more stringent requirement on circuits of utilities that have a generator connected is not acceptable.

This provision should focus on requiring the interconnection customer to ensure that their facilities can operate within the existing voltage range. Adding a reporting requirement related to possible future voltage simply adds cost and if allowed to remain in place the application fee for tier 1 and the availability of tier 1 should be reviewed.

The concept of tier 1 was agreed upon based on the requirements discussed among all of the parties and to simply add new requirements without re-evaluating the tier is not possible and the entire tier may need to be eliminated. The concept of tier 1 as originally designed is still described in WAC 480-108-BBB, especially in Section (1)(a)(v) which states that a tier 1 interconnection "*Does not require an upgrade to or construction of new electrical company facilities, other than meter changes;*" (emphasis added). This newly proposed requirement completely changes the concept of tier 1 such that no interconnection customer will qualify for tier 1. PSE currently has 1,546 interconnection customers that are net metering customers that would likely fall under tier 1 as originally proposed in WAC 480-108-BBB(1)(a). The Company has about 21 interconnection customers that would fall under tier 2 or 3. In other words of PSE's 1,567 interconnection customers 98.7% would fall in the originally proposed tier 1. The addition of Sections (23)(a) and (23)(b) of WAC 480-108-FFF and the definition of "Minor modification" in WAC 480-108-010 would cause all of these net metered interconnection customers to fall in tier 2. However, PSE is in favor of a tier (such as the originally proposed tier 1) where the costs and impacts are expected to be very minimal, and no upgrade or construction is required as it allows the interconnection of the vast majority of the typical residential net metering customers or solar generation customers with very little examination, study, process or cost. **The new requirements embodied in the additions to WAC 480-108-FFF and WAC 480-108-010 has the effect of moving all applications for net metering into tier 2.** If this requirement is allowed to remain, at a minimum the application fee, timelines and other requirements for tier 1 should reflect the proposed obligation of the utility to study the circuit for anticipated voltage irregularities and to have more stringent voltage control on circuits with interconnection customers. The other option is to eliminate tier 1.

Finally, the words "anticipated" and "irregularity" are not defined. Does irregularity mean a momentary change in voltage occurring is less than one cycle or over one or more cycles or over hours, days or months? Does anticipated mean forever?

PSE believes that this addition to WAC 480-108-CCC(1)(c) should be revised as follows: "The interconnection customer shall install and operate their generating facility so that it can operate within the voltage range defined in WAC 480-100-373." Sections (23)(a) and (23)(b) of WAC 480-108-FFF should be deleted in their entirety as they provide for voltage regulation beyond what customers of the utility receive. Or, section (23)(a) could be retained and revised to provide that the interconnection customer shall enter into an agreement with the utility and pay the costs of enhanced voltage regulation (both current and future costs) if the interconnection customer desires to be interconnected on a circuit with enhanced voltage regulation.

Draft WAC 480-108-GGG Completion of interconnection process.

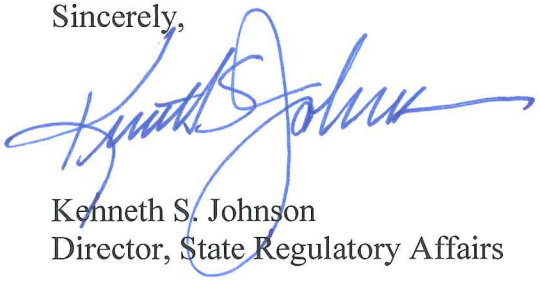
Section (4) provides for a witness test if required by the electrical company. Section (5) provides that all requirements and conditions of the interconnection agreement be satisfied. In order for the rule to also educate possible interconnection customers PSE believes that either section (4) or (5) should mention the need for the interconnection customer to obtain a state or local electrical permit and inspection. Suggested wording to make this change is: "At the witness test the representative of the electrical company will insure that the generating facility has received a state or local electrical permit and inspection."

Draft WAC 480-108-110 Required filings—Exceptions.

PSE respectfully requests that any timeline for the required filings allow several months so that the utilities can work with Commission Staff regarding their filings.

PSE appreciates the opportunity to comment on the draft new rule or modifications to existing rules to clarify the use of electronic documents. Please direct any questions regarding these comments to Lynn Logen at (425) 462-3872 or at lynn.logen@pse.com or the undersigned at (425) 462-3495.

Sincerely,



Kenneth S. Johnson
Director, State Regulatory Affairs