



## PUGET SOUND ENERGY

Puget Sound Energy, Inc.  
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*Via electronic filing*  
<records@wutc.wa.gov>

January 5, 2007

Ms. Carole Washburn  
Executive Secretary  
Washington Utilities and Transportation Commission  
1300 South Evergreen Park Drive S.W.  
P.O. Box 47250  
Olympia, WA 98504-7250

**Subject: Docket No. UE-060649 – Standards for Interconnection to Electric Utility  
Delivery Systems  
Comments of Puget Sound Energy, Inc.**

Dear Ms. Washburn:

On December 15, 2006, the Washington Utilities and Transportation Commission (WUTC or Commission) convened a workshop to consider the interconnection issues raised to date in the above-referenced docket. Unfortunately, Puget Sound Energy, Inc. (PSE) was not able to participate in the workshop due to extensive system damage and customer outages caused by an unprecedented windstorm on December 14-15. PSE appreciates the opportunity to provide the following comments on certain of the questions raised in the Commission's Notice of Workshop issued on November 1, 2006.

**Question 6: Should the requirement of an external disconnect switch contained in WAC 480-108 be retained?**

The disconnect switch requirements in WAC 480-108 should be retained. The requirement for a disconnect switch on all generation facilities that can supply energy into a utility system is rooted in the worker safety regulations in WAC 296-45, Safety Standards for Electrical Workers. These regulations are intended to protect electric utility workers from injury while on the job. The regulations are written and enforced by the Washington State Department of Safety and Health.

In order to safely make repairs or do maintenance on electric lines, utility workers must sometimes de-energize these lines. State regulation, WAC 296-45-335, titled "De-energizing lines and

equipment for employee protection,” lists requirements workers must follow when de-energizing electric lines. WAC 296-45-335(3)(b) provides that “[a]ll switches, disconnectors, jumpers, taps, and other means through which known sources of electric energy may be supplied to the particular lines and equipment to be de-energized shall be opened.” This worker safety requirement is taken verbatim from federal regulations, OSHA 1910.269(m)(ii), and is therefore a required practice in all areas of the United States. In addition, WAC 296-45-335(16) provides that “...only a visible break of all phases shall be regarded as clearing a line or equipment.” Accordingly, for utilities in Washington a visible break is required for a line to be considered open.

PSE’s practice for generation systems smaller than 5kW and a 200A or smaller electrical panel, a utility employee can safely remove the electric meter to achieve the necessary open.

For generation systems larger than 5kW or when a customer has an electrical panel with a capacity larger than 200A, PSE requires that a separate rated disconnect switch be installed. The electrical loads from larger generators or the larger electrical loads inherent to customers with larger electrical panels make disconnecting the load by removing the meter problematic. PSE is concerned that the meter or meterbase might be damaged by the electric arc created during meter removal, and is especially concerned that the utility worker removing the meter might be injured by that electric arc.

Removing the meter from electrical panels with current transformer metering does not disconnect the electrical service. Therefore, to achieve the requirements of the WAC safety regulations where current transformer metering systems are used, a disconnect switch must be installed for almost all generation (except for very small facilities as noted above).

Prior to establishing these rules, PSE looked for other options to meet the safety regulations that would not add to the customer’s interconnection costs. All methods other than the customer installed disconnect switch were rejected because, when a scheduled outage or storm repair was needed, they would add to the outage time that other non-generation owning customers would endure. This extended outage time was considered to be unfair to those customers that would have to endure them.

**Question 8: Given the Commission’s general authority to address disputes (WAC 480-07) what, if any, additional dispute resolution processes are needed to apply specifically to generator interconnection?**

PSE believes the current alternative dispute resolution rules, WAC 480-07, provide an adequate framework to resolve disputes and do not need to be modified specifically to address generator interconnection disputes. On this issue, PSE supports the comments filed by PacifiCorp on January 5, 2007 in this docket.

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PSE appreciates the opportunity to present its viewpoint on these issues. Please direct any questions regarding these comments to undersigned at (425) 462-3495.

Sincerely,

/s/ Wrp #GhE ru

Tom DeBoer  
Director – Rates & Regulatory Affairs

cc: Dick Byers – via e-mail [dbyers@wutc.wa.gov](mailto:dbyers@wutc.wa.gov)