MEMORANDUM

April 30, 2007

To: Docket 060649
From: Commission Staff
Re: Summary of Rulemaking Inquiry Comments

On June 7, 2006, the Washington Utilities and Transportation Commission (Commission) filed with the Code Reviser a Preproposal Statement of Inquiry (CR-101) to examine whether new regulations are needed to govern five aspects of investor-owned electric utility operations for which new federal standards are included in the Energy Policy Act of 2005. These new federal standards address: 1) net-metering, 2) fuel sources, 3) fossil fuel generation efficiency, 4) smart metering, and 5) interconnection. This memorandum provides background and summarizes the activity in this inquiry regarding the fifth of these standards – interconnection – through March 2007.

BACKGROUND

On August 8, 2005, the President signed the Energy Policy Act of 2005 ("Energy Policy Act"). Sections 1251(a), 1252(a) and 1254(a) of the Energy Policy Act amend Section 111(d) of the Public Utility Regulatory Policies Act of 1978 ("PURPA") to add five new utility standards. The Energy Policy Act further amends PURPA Sections 112 and 115 to require that state regulatory authorities examine these new standards and determine whether they should be adopted as requirements for state regulated electric utilities.[1]

Section 1254(a) establishes a standard to require that utilities make available to utility customers with on-site generation facilities interconnection service to the utility's local distribution system. State regulatory authorities are required to begin consideration of this standard by August 8, 2006, and make a determination of whether to adopt the standard by August 8, 2007. The requirement for regulatory authorities to consider the interconnection standard established in Section 1254(a) does not apply if a state has taken "prior action" to adopt or

[1] Energy Policy Act §§ 1251(b), 1252(b),(g),(i), 1254(b)

consider the standard or a comparable standard, or the state's legislature has voted on the standard or a comparable standard.[2]

COMMISSION PROCESS

The Commission initiated its Rulemaking Inquiry on June 9, 2006, by filing with the Code Reviser a Preproposal Statement of Inquiry (CR-101) and by issuing a Notice of Opportunity To File Written Comments. The Commission will consider the new interconnection standard as well as the other four new federal standards and comply with the time limitations and other requirements included in the Energy Policy Act for each standard.

Interconnection

Section 1254(a) of the Energy Policy act establishes an Interconnection Standard:

> ''(15) INTERCONNECTION — Each electric utility shall make available, upon request, interconnection service to any electric consumer that the electric utility serves. For purposes of this paragraph, the term 'interconnection service' means service to an electric consumer under which an on-site generating facility on the consumer's premises shall be connected to the local distribution facilities. Interconnection services shall be offered based upon the standards developed by the Institute of Electrical and Electronics Engineers: IEEE Standard 1547 for Interconnecting Distributed Resources with Electric Power Systems, as they may be amended from time to time. In addition, agreements and procedures shall be established whereby the services are offered shall promote current best practices of interconnection for distributed generation, including but not limited to practices stipulated in model codes adopted by associations of state regulatory agencies. All such agreements and procedures shall be just and reasonable, and not unduly discriminatory or preferential.''

On August 12, 2005, the Commission initiated a rulemaking inquiry to consider establishing regulations to govern the interconnection of customer-owned generation facilities to investor-owned electric utility delivery systems under Docket UE-051106. On March 6, 2006, the Commission permanently adopted WAC 480-108 establishing standards for interconnection of consumer-owned

[2] Energy Policy Act § 1254(b)(3).

generation facilities up to a capacity of 25 kW.[3] These regulations include standards for applications for interconnection, processing of such applications, technical and engineering standards for interconnections, safety standards, insurance and liability provisions, and other provisions.

Having adopted standards for interconnection of relatively small scale systems, the Commission now turns to an investigation of whether standards are needed to govern interconnection of larger systems. In this regard, the Commission notes that the 2006 Legislature enacted ESHB 2352 which amended RCW 80.60 (net metering) to increase the maximum facility size for net metering service from 25 kW to 100 kW.[4] The Commission will consider whether amendments to WAC 480-108 are necessary and appropriate.

As context for its inquiry the Commission will consider the purposes of PURPA to encourage:

- Conservation of energy supplied by electric utilities.
- Optimal efficiency of electric utility facilities and resources.
- Equitable rates for electric consumers.[5]

The Commission requested written comments on the following questions:

1) Should WAC 480-108 be amended to include customer-owned facilities up to 100 kW? If so, would the increase to facility size necessitate any other changes to the rule?
2) Is there another "break-point" to which it would be appropriate for practical reasons to increase the scope of WAC 480-108 (e.g., 300 kW, 500 kW)? If so, would the increase in facility size necessitate any other changes to the rule?
3) Should interconnection of facilities larger than those covered currently by WAC 480-108 be governed by a standard rule? If so, would the Federal Energy Regulatory Commission's (FERC) Small Generator Interconnection

[3] General Order No. R-528, Docket UE-051106, § 480-108, filed March 6, 2006, effective April 5, 2006.
[4] Chapter 201, Laws of 2006.
[5] 16 U.S.C. § 2611.

Rule serve as a good model?[6] If so, how should the FERC rule be adapted to Washington circumstances?

4) If interconnection of facilities larger than those covered currently under WAC 480-108 should not be governed by a standard rule, what principles should apply to such interconnections?

The Commission welcomed any comprehensive recommendations or proposals that stakeholders or utilities might propose for state-wide standards for interconnection as an alternative to the FERC model. While the Commission's rulemaking authority extends only to those utilities under its jurisdiction, there may be benefit to state-wide uniformity in interconnection standards. Accordingly, the Commission invited participation in its inquiry by municipal utilities and public utility districts, which are not within the Commission's jurisdiction.

INITIAL WRITTEN COMMENTS

Interconnection

PSE, Avista, and a group of non-jurisdictional load serving utilities identified for purposes of this filing as the Public Power Ad-Hoc Interconnection Standards Committee (**"PPAISC"**) filed joint comments addressing the questions posed in the Commission's Notice and included a collaboratively developed set of interconnection standards for facilities of 300 kW or less. The joint comments also state that, given the complexity of interconnecting generation in excess of 300 kW to utility distribution systems, each utility should develop standards that take into account each utility's unique circumstances. The groups' interconnection standards include a set of principles they contend should govern each utility's standards for facilities greater than 300 kW. According to the joint comments, these interconnection standards are intended to insure the safe and reliable operation of the distribution system.

As to the specific questions posed by the Commission's Notice of this inquiry, the joint commenters say as follows:

[6] Standardization of Small Generator Interconnection Agreements and Procedures, Order No. 2006, 70 FR 34190-01 (June 13, 2005), 2005 WL 1382263 (F.R.), order on reh'g, Order No. 2006-A, 70 FR 71760-01 (November 22, 2005), 2005 WL 3171564 (F.R.).

1) Should WAC 480-108 be amended to include customer-owned facilities up to 100 kW? If so, would the increase to facility size necessitate any other changes to the rule?

"The Commission should amend WAC 480-108 to include generation facilities up to 300 kW as discussed in the response to question two below."

2) Is there another "break-point" to which it would be appropriate for practical reasons to increase the scope of WAC 480-108 (e.g., 300 kW, 500 kW)? If so, would the increase in facility size necessitate any other changes to the rule?

The group refers the Commission to its attachment that sets forth standards and observes that they "could be accomplished with minimal changes to WAC 480-108."

3) *Should interconnection of facilities larger than those covered currently by WAC 480-108 be governed by a standard rule? If so, would the Federal Energy Regulatory Commission's (FERC) Small Generator Interconnection Rule serve as a good model?*[7] *If so, how should the FERC rule be adapted to Washington circumstances?*

Interconnection of generating facilities larger than 300 kW should not be governed by a standard rule. The Washington Load-serving Utilities propose that interconnections larger than 300 kW be governed by procedures developed by each utility. For the utilities over which the commission has jurisdiction, these interconnection standards would be filed and approved by the Commission using the principles outlined in the attached document. The FERC Small Generator Interconnection rule was designed to facilitate interconnections to the transmission system and would require significant modification to be suitable for interconnections to the distribution system.

4) *If interconnection of facilities larger than those covered currently under WAC 480-108 should not be governed by a standard rule, what principles should apply to such interconnections?*

[7] Standardization of Small Generator Interconnection Agreements and Procedures, Order No. 2006, 70 FR 34190-01 (June 13, 2005), 2005 WL 1382263 (F.R.), order on reh'g, Order No. 2006-A, 70 FR 71760-01 (November 22, 2005), 2005 WL 3171564 (F.R.).

The following guidelines should govern interconnection of facilities greater than 300 kW:

1. All interconnection customers shall be treated in a non-discriminatory and non-preferential manner.
2. The utility shall review all interconnection to maintain safe, adequate and reliable electric service to its retail electric customers.
3. The utility shall evaluate the cumulative effect on circuits and load pockets.
4. Interconnection customers shall bear the costs of interconnection, operation and maintenance.
5. Interconnection service does not include retail electric or other services.
6. The electric utility shall establish, and amend as necessary to maintain the safe and reliable operation of its system, operating, system design, and maintenance requirements.
7. Any requirements should not restrict utilities from developing timelines that allow the utility and interconnection customer to engage in discussions regarding study results and design options.
8. Technical requirements for all interconnections shall comply with applicable IEEE, NESC, NEC and other safety and reliability standards.

PacifiCorp comments that the Commission should amend WAC 480-108 to apply to net metering facilities with generating capacity of up to 100 kW, but no larger. PacifiCorp believes WAC 480-108 adequately addresses net metering issues for most installations up to that size. PacifiCorp emphasizes its view that WAC 480-108 should not apply to any non-net metering facilities of any size. PacifiCorp states the planning requirements and system impacts of QF interconnections and the system requirements for parallel no-sale interconnections are not adequately recognized by WAC 480-108.

PacifiCorp recommends that the Commission not adopt the federal regulations governing small generator interconnection to transmission, citing reliability concerns in the case of distribution level interconnection for generation facilities up to 2 MW. PacifiCorp comments that the Commission can adopt a set of guidelines to establish general requirements such as consistent electrical standards and formalized processes, while allowing each utility to develop a process that fits its unique needs. In response to the Commission's question 4, Pacificorp says the Commission should consider 8 principles that are the same as those included in the joint comments, discussed above.

ICNU recommends that the Commission adopt generator interconnection guidelines for all interconnections subject to state jurisdiction. ICNU says generators and utilities should not have to comply with inconsistent state and federal requirements. However, it does not appear that ICNU recommends simple adoption of the federal standards; ICNU states that they should be used "as the starting point" for the Commission to establish its own standards. ICNU says the specific standards will need to be different based on the size of the generator, but believes there should be clear standards that will reduce cost, impediments, and disputes.

The Vote Solar Initiative says the current rules are technically sufficient for generation facilities up to 100 kW. Vote Solar, however, suggests this inquiry may present an opportunity "to consider additional procedural and legal changes" to WACC 480-108 to reflect updated best practices that have developed nationally over the past several years. Vote Solar specifically recommends the adoption of different procedures for different sizes and types of generation, and standard agreements for all interconnections.

Vote Solar recommends the Commission adopt rules for small generator interconnection up to 20 MW, with simplified procedures for those below 2 MW. Vote Solar believes FERC Order 2006 establishes the appropriate technical and procedural framework. Vote Solar urges the Commission to develop standard rules that will reduce interconnection costs, prevent undue discrimination, and facilitate the development of non-polluting alternative energy sources.

Vote Solar offers additional recommendations for modifying WAC 480-108 by implementing "technical screens" to determine when additional studies are needed for non-inverter based systems; removing the requirement for manual external disconnect switches; and perhaps removing the option of utilities to require customer-generators to pay the cost of a dedicated distribution transformer if one is deemed necessary by the utility. Vote Solar also recommends better defined dispute resolution procedures and standards, and imposition of time limits for each step of the interconnection process.

The United States Environmental Protection Agency (EPA) is interested in this rulemaking because it has identified interconnection standards as a significant factor affecting the success of new clean energy projects. EPA provided information concerning how FERC and other states have addressed

interconnection issues for systems larger than 100kW. EPA states it is important for larger generation facilities to have "the protection of a comprehensive interconnection process" even though such systems individually require additional studies and procedures relative to what is required for smaller systems (less than 25 kW). EPA believes interconnection rules should address technical requirements and application procedures, including studies and timelines, for both small and large systems. EPA notes that tiered systems have met with success in differentiating technical and application requirements between various system sizes.

WORKSHOP

The Commission convened a workshop on December 15, 2005, to further address the comments and proposal by the load-serving utilities and the other comments received. In its notice of the workshop the Commission noted that the proposal by the load-serving utilities was "a useful starting point for discussion of possible amendment to the Commission's regulations that govern the interconnection of customer-owned generation facilities to electric utility delivery systems." Workshop participants were requested to respond to eight additional questions.

The Cogen Coalition, Clark County PUD, Grant County PUD, International Brotherhood of Electrical Workers and Department of Community Trade and Economic Development attended the workshop in person and another 7 persons attended by phone due to inclement weather. Persons participating on the phone included representatives of: Tacoma Power, PacifiCorp, Benton County REA, ICNU, Avista Corp., U.S. Environmental Protection Agency, and Inland Power and Light. PSE, Benton REA and Parker Holden submitted written responses to the workshop questions.

Responses to Workshop Questions

1) What criteria should be used to distinguish customers eligible to apply for interconnection to a utility's distribution system from customers eligible to apply for interconnection to the utility's transmission system under FERC rules?

The workshop participants expressed a consensus view that the major criteria distinguishing state from FERC jurisdictional interconnections is the nature of the power transaction(s) facilitated by the interconnection. Sales for resale to any

party other than the host-system utility are FERC jurisdictional, consequently those participants expressing a position advocated that interconnections supporting a sale for resale necessarily fell under FERC's interconnection rules and those involving sales to the host utility (as a QF, standby generator, or any other sales to the host utility)) fell under the distribution utility's state jurisdictional interconnection tariff(s).

Workshop participants expressed a consensus view that state and FERC standards should be as consistent as possible to facilitate customer understanding and to provide for "seamless" processes. EPA and ICNU emphasized the goal that there should be no facilities that fall in a gap between the state rules and the FERC rules.

Benton County REA expresses the opinion that system size should determine whether distribution or transmission interconnection is involved. Benton REA contends that standardization of interconnection to transmission is not possible; analysis must be case by case.

PacifiCorp noted that some issues may be unique to Qualifying Facilities (QFs) under PURPA. See question 3 below.

2) Should standards governing distribution-level interconnections be limited in application to net-metered facilities and if so, why?

Workshop participants expressed a consensus that interconnection rules need not be limited to net-metered facilities. PacifiCorp, who had argued in its initial comments that interconnection rules should be strictly limited to applications of net-metering, contended in the workshop that the "physics are the same" so there is no reason to limit interconnection rules to net-metering. Benton REA holds a dissenting view and argues that interconnection standards should apply only to net-metered facilities and only to 100 kW.

3) Should standards governing distribution-level interconnections apply to interconnection of qualifying facilities (QF) under the Public Utility Regulatory Policies Act and if not, why not?

Workshop participants expressed a consensus view that the physical aspects of interconnection should be as consistent as possible across all applications, including interconnection of QFs. Cogen Coalition, Avista, and PacifiCorp all

agreed that certain commercial aspects of QF interconnection were distinct from non-QF interconnections and might require special treatment in the rules. In particular, QF interconnections must cover all system upgrade costs so that other customer do not pay the cost of any new facilities made necessary by the interconnection. QF metering may also need special provisions. EPA and ICNU again emphasized their view that no gaps should exist between FERC and state interconnection rules.

Benton REA argues that QF interconnections are too large to be covered by general interconnection standards.

4) Do the engineering requirements and limitations relevant to distribution-level interconnections up to 300 kW vary among utility distribution systems? If so, what characteristics of the distribution system cause the engineering requirements and limitations to vary? How might this be addressed via rule?

All participants agreed that the physical characteristics vary among utility distribution systems and that this variation will require different engineering requirements. The larger utilities contended that the proposal advanced by the load-serving utilities accommodates these variations. The large utilities (Clark PUD, PacifiCorp, Tacoma, and Avista) contended that the 300 kW "break-point" was a good one. Benton and Inland – both smaller systems with lower capacity distribution circuits – argued that loads greater than 100 kW could overload substation loads that might be as low as 1000 kW. Both Benton and Inland advocated that interconnections greater than 100 kW should not be covered by a single standard and should require special studies.

5) Do the engineering requirements and limitations relevant to distribution-level interconnections up to 2 MW vary among utility distribution systems? If so, what characteristics of the distribution system cause the engineering requirements and limitations to vary? How might this be addressed via rule?

Participants generally agreed that procedures and rules should cover all interconnections. However those above 300 kW are more likely to require system-specific analyses. Consistent with its response to question "4," Benton REA opposes addressing interconnections above 100 kW with an administrative rule.

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

Workshop participants generally agreed that the disconnect switch requirement should be retained. The proposal made by the load-serving utilities allows this requirement to be waived if inverter-based equipment can be demonstrated to separate automatically. EPA noted that this requirement is evidently not common in other states' interconnection rules.

7) Should utilities be allowed the option to require an interconnecting customer to bear the cost of a dedicated distribution transformer if one is deemed necessary by the utility?

Workshop participants expressed a consensus view that cost should follow benefit and therefore cost-causers should be required to cover any facility costs made necessary by their interconnection. Parker Holden observes that an interconnecting customer should be permitted to supply its own equipment, in lieu of paying for new utility equipment, to reduce the impact of harmonic influence on the utility's system. In addition, Mr. Holden recommends that while the interconnecting customer should pay the cost of system protection, those costs should be standardized.

8) Given the Commission's general authority to address disputes (WAC 480-107) what, if any, additional dispute resolution processes are needed to apply specifically to generator interconnection?

Opinions concerning dispute resolution varied among the workshop participants. CogenCoalition and ICNU opined that some identified alternative to commission dispute resolution might be beneficial. PacifiCorp had no favored approach. EPA pointed the commission toward the rules in place in Massachusetts. Parker Holden noted that disputes are likely to occur around electrical system "protection" measures.

The staff invited participants to file supplemental comments on this question. PacifiCorp and PSE filed comments on January 5, 2007, expressing the opinion that the commission's existing dispute resolution rules were adequate and no other alternative was necessary. No other participant filed supplemental comments.

DISCUSSION DRAFT

On January 25, 2007, the Commission issued a Notice soliciting comments on a Discussion Draft rule. Staff prepared the Discussion Draft based on the written and workshop comments and recommendations received through January 5, 2007. The Notice requested written comments by February 28, 2007.

Eight persons filed written comments in response to the Commission's Notice:

- Avista and Puget Sound Energy Joint Comments
- PacifiCorp
- Northwest CHP Center
- United States Combined Heat & Power Association
- Allied Electric, LLC
- Industrial Customers of Northwest Utilities (ICNU)
- U.S. EPA
- IBEW Local Union 77

Distillation of Comments Received

The large majority of comments focused on procedural requirements (or lack thereof) in the draft rule. Technical requirements drew little or no comment.

Key issues raised by the commenters:

- Procedural requirements related to timelines, deposit requirements, insurance and dispute resolution need more specificity and should strike a better balance between customer and the utility. (Northwest CHP Center, US CHP Association, Allied Electric, EPA, and PacifiCorp – as to specificity)

- Requirements for facilities larger than 300 kW should be uniform rather than left to each utility .(Northwest CHP, ICNU, EPA)

- The prohibition on interconnection to grid network distribution systems is too extreme and should be allowed if case-specific studies demonstrate it is safe and feasible. (Northwest CHP, Allied Electric, EPA, Avista/PSE)

- Cost-sharing between the interconnecting customer and the utility should be required to reflect the value of distributed generation to other ratepayers. (Northwest CHP, US CHP Association, Allied Electric, ICNU)

- The rule should clarify that the utility must review and approve the certificate of completion, that the facility will never produce reverse flow and that the interconnecting customer is responsible for all costs of interconnection. (PacifiCorp, Avista/PSE)

- Various definitions and language should be modified to promote clarity. (PacifiCorp)

- The rule should make clear whether or not it applicaties to stand-by and emergency generators. (PacifiCorp)

- The rule should authorize utilities to require interconnecting customers to supply and pay the costs of meters capable of remote interrogation. (PacifiCorp)

Summary of Comments on the Discussion Draft

Avista Corporation and Puget Sound Energy (PSE)

Avista and PSE generally support the discussion draft. They offer some specific suggestions and also support the suggestions and edits proposed by PacifiCorp. Avista and PSE make the following specific recommendations:

- The "certificate of completion" described in WAC 480-108-050 must be reviewed and approved by the utility before an interconnection is made.
- Nominal voltage and phase configuration should require review and written approval by the utility.
- WAC 480-108-020(e) should require that the applicant must demonstrate that the generating facility will never result in reverse flow at the point of common coupling.

- WAC 480-108-020(g) should allow interconnection to grid network distribution systems if allowed by the utility.
- WAC 480-108-030(3) should specify that applicant processing should provide interconnection "of the same type" in a time frame consistent with the average of other service connections.
- The date for filing tariffs for interconnections larger than 300 kW should be extended from August 31, 2007, to October 31, 2007.

PacifiCorp

PacifiCorp generally supports the Discussion Draft, but offers a number of edits and suggestions to clarify certain issues. PacifiCorp supports the comments of Avista and PSE. It also seeks clarification on some topics. Specifically, PacifiCorp recommends:

- The rule should make clear that it does not apply to interconnections under the jurisdiction of the FERC.
- The definitions of "applicant" and "utility" should be deleted and replaced with "interconnection customer" and "electrical company," respectively. In addition, definitions should be added for "interconnection facilities," "system upgrades" and "network protectors."
- The "certificate of completion" must be reviewed by the utility and approved in writing before an interconnection is completed.
- Application of WAC 480-108 to net-metering should be clarified.
- Application of WAC 480-108 to stand-by and emergency generators should be clarified.
- The applicability of the various technical standards to various kinds of interconnection should be made clearer.
- The timeframe for providing interconnection (WAC 480-108-030(3)) should specify that more time for processing an application is allowed if an interconnection requires "studies to determine safety, reliability and/or power quality impacts."
- The phrase "in a timeframe consistent with the average of other service connections" needs clarification.
- The rule should make clear that the interconnection customer is responsible for all interconnection costs.

- Utilities should be authorized to require metering capable of "remote interrogation" and require the interconnection customer to pay for related telecommunications.
- NERC and WECC standards should be added to the list of codes and standards.

Northwest CHP Application Center

- The Commission should initiate a rulemaking process for facilities larger than 300 kW "in lieu of proposed WAC 480-108-070"
- Cost-sharing for interconnection costs should be included for transmission in congested areas, or weak "feeder lines." Utilities should be required to post this information on the web, or congested lines should be deemed to have "quantifiable benefits."
- The definition of "grid network" should be separated from the definition of "network distribution system (grid or spot)."
- The prohibition on interconnection to grid networks is extreme and in need of an amendment to allow a "path forward" for projects that are located on such networks.
- Response timelines should be equitable (or in parity) between applicants and utilities.

United States Combined Heat and Power Association

- The standard has proportionally little emphasis on the commercial aspects of interconnection.
- Timelines, procedures, fees, insurance requirements and dispute resolution should be better addressed.
- Standards should be "size-agnostic" and based on technical screens rather than on facility size.
- The proposed standards lack a balance of interests to the detriment of the interconnecting party.
- The utility is given too much authority to reject interconnections and the interconnecting party too little leverage to contest such rejection.
- Interconnecting customers need access to a dispute resolution mechanism that "better balances the interests of the parties."
- If "average time" is used for prioritization of applications, it needs to be transparent. Utilities should be required to file and publish the applicable

"average time" so that interconnection customers can know the likely timeline.
- The Commission should consider requiring specific timelines as has been done in Massachusetts and other states.
- Time-certain deadlines required of applicants should be similarly required of utilities.
- Cost-sharing for costs made necessary by interconnection when the interconnection provides broad benefits is a good policy and should be extended to the less than 300 kW class of projects. The Commission should be responsible for determining these benefits. "The Commission should commence a generic investigation into the costs and benefits of on-site generation . . . and use the results as the basis for" cost-sharing.

Allied Electric, LLC (Chuck Collins)

Allied Electric states that it does not oppose this rulemaking, but it does offer its review of the rulemaking and "how it seeks to address the real-world challenges present in the electric power industry today." Allied makes the following points:

- Draft WAC 480-108 does a good job outlining the technical requirements of interconnection.
- "The procedural requirements are written in way that is too vague and potentially left open to interpretation."
- Lack of specificity in the procedural requirements may give an unfair advantage to utilities during the application and negotiation process.
- The rulemaking is "necessary," but not sufficient to fix the existing problems with generator interconnections.
- Interconnection to grid network distribution systems should not be banned.
- Interconnections to grid network distribution systems are technically feasible and can offer benefits.
- Limiting network grid interconnections to a percentage of peak demand or a certain number of customers is preferable to a ban.
- The WUTC should delicately balance the interests of the customers and the utility companies, and to add emphasis on areas that need to be fixed.
- Utility processing and prioritizing interconnection requests based on "time frame consistent with the average of other service connections" is too vague and serves only to "add cloudiness to the application process." The first-

come, first-served approach may hurt the utility as well as the applicant if the applicant's project meets a particular need faced by the utility.

- The actual amount of any deposit requirements should be in the rule, "as well as procedural requirements for submission, holding, and refund of the deposit."
- Requiring the applicant to determine if an interconnection provides any values to the utility's grid or its customers (for cost-sharing) places an undue burden on the applicant. This should be a responsibility of the utility.
- Both distributed generation and conservation benefit the utility by reducing its load requirements, yet interconnections are required to bear all the cost of interconnection while conservation receives positive incentives from the utility and its other ratepayers. A tiered payment system should be developed to recognize the added value of distributed generation (i.e. standardized cost-sharing).
- "Beyond the technical details in this rulemaking, there is little to guarantee a generator a right to interconnect."

Industrial Customers of Northwest Utilities (ICNU)

- The proposed amendments to WAC 480-108 are a "step in the right direction," but they should be made more consistent with FERC interconnection rules.
- The WUTC should require:
    - A tiered system drawing the same distinctions between large and small interconnections as FERC;
    - A "fast-track" option and "10 kilowatts Inverter" option;
    - Standardized procedures and applications for facilities larger than 300 kW;
    - Provisions for facilities under 300 kW regarding the recovery of costs for transmission upgrades that benefit an electrical company's other customers.
- The utilities have not demonstrated why "unique" circumstances preclude them from applying otherwise applicable national standards (FERC) to interconnections larger than 300 kW.
- To promote uniformity between state and federal rules, the Commission should adopt the "fast-track" and 10 kW Inverter processes set out in FERC's Small Generator Interconnection Agreements and Procedures.

- To promote uniformity, reduce confusion and prevent discrimination, the WUTC should adopt requirements similar to FERC's rules to apply to all utilities for interconnections larger than 300 kW.
- Interconnection customers below the 300 kW threshold should be compensated for network upgrade costs that benefit the utility's other customers.

U.S. Environmental Protection Agency (EPA)

EPA offers the following comments:

- A number of entities have developed interconnection standards to apply to facilities larger than 300 kW: FERC, Connecticut, Minnesota, New Jersey, and Wisconsin.
- The prohibition on interconnection to grid network distribution systems is overly stringent – the customer should be allowed an opportunity to request a study.
- Other states have allowed interconnection to spot networks on a fast-track if the generator has reverse power relays.
- The rule should provide greater clarity regarding deposit requirements.
- Other states include timeline requirements for both the utility and the customer – not just the customer.
- Other states do not impose a limitation on interconnection of 10 percent of feeder's peak capacity.

IBEW

- Disconnect equipment should be mandated by the utility and required to comply with utility specifications.
- Disconnect equipment should be on the host utility's structures, controlled by the host utility and must have a visual "open."
- Any required signage should be universal among all utilities to allow electrical workers to recognize the present of interconnected generators, regardless of the system they are on.