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Attn: David W. Danner
Executive Director and Secretary
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Submitted on-line

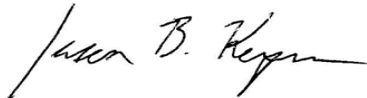
RE: Docket UE-112113, Filing of Comments of the Interstate Renewable Energy Council Responding to the UTC's Notice of Opportunity to Comment Issued July 26, 2012

Dear Mr. Danner:

Attached for filing in docket UE-112113 are the **Comments of the Interstate Renewable Energy Council Responding to the UTC's Notice of Opportunity to Comment Issued July 26, 2012.**

Thank you for your assistance.

Sincerely,



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**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

Docket UE-112113

**COMMENTS OF THE INTERSTATE RENEWABLE ENERGY COUNCIL
RESPONDING TO THE UTC'S NOTICE OF OPPORTUNITY TO COMMENT
ISSUED JULY 26, 2012**

September 7, 2012

I. INTRODUCTION

On July 26, 2012, the Utilities and Transportation Commission (“UTC” or “Commission”) issued a Notice of Opportunity to Submit Comments regarding model interconnection rules for generating facilities up to 20 megawatts (“MW”). Those model rules were developed by a working group consisting of the state’s three Investor Owned Utilities (“IOUs”), the Washington PUD Association (“WAPUDA”) and some of its members, the Interstate Renewable Energy Council, Inc. (“IREC”), and others. IREC was an active participant in the working group and submitted comments in the UTC docket on January 30, 2012.

IREC supports the model rules in most respects, and commends the working group on its diligent and thoughtful efforts. The perseverance and collaborative skills of WAPUDA’s David Warren deserve special acknowledgement. IREC comments separately for the following reasons:

- The working group felt that the issue of third party ownership of generating facilities was outside of the scope of its charge, while the UTC is in a position to clarify that third party ownership is permissible. Favorable resolution of this issue is the most important element of updated interconnection rules.
- The model rules were tailored to accommodate even the smallest utilities. They can be modified for application to the IOUs, which have fully-staffed engineering departments. In particular, timelines for review can be shortened, the upper limit for

Tier 2 can be raised, and disconnect switch requirements for small, inverter-based generating facilities can be waived.

- The model rules are incomplete in certain respects. In particular, standardized application forms and interconnection agreements are not included, and application fees have not been specified.

The issues noted above are discussed in Section II. Questions posed by the UTC in the July 26 Notice of Opportunity to Submit Comments are addressed in Section III. In Section IV, IREC briefly notes a few oversights in the model rules.

IREC looks forward to further participation in this docket.

II. OVERARCHING ISSUES

A. Third Party Ownership

The Commission has the opportunity in this docket to potentially quadruple the number of renewable energy generating facilities interconnected in Washington by clarifying that third party ownership (“TPO”) of net metered facilities is allowed. IREC filed comments with the UTC in docket UE-110667 on July 8, 2011 with extensive analysis of this issue, which is briefly summarized here.

Third party ownership has become the dominant model across the nation for new solar energy facilities.¹ For residential customers, this is often done through a leasing arrangement. For commercial and some residential customers, a retail power purchase agreement (“PPA”) is used, with the energy purchased from the third party owner of the generating facility. Recent

¹ A summary map of state policies regarding third-party ownership can be found at the Database of State Incentives for Renewable Energy (DSIRE) web site, *available at* www.dsireusa.org/documents/summarymaps/3rd_Party_PPA_map.pdf. The leading states for solar energy installations allow and rely heavily upon the TPO model, including California, New Jersey, Colorado, Hawaii and Oregon.

data from the California market, with over half of the installed solar capacity in the country, shows that more than 75% of new solar facilities in that state use the TPO model.²

Presumably, the Washington market would respond to allowance of the TPO model as the California market has. Most people do not have \$20,000 or more available to install a solar array on their home, and will not install a system without the TPO model. The TPO model allows them to install an array with little or no money down, and the promise of lower overall energy bills. If the current uncertainty in Washington is precluding 75% of the market from installing solar arrays, that means that this simple step can quadruple the market size.

The working group facilitated by WAPUDA discussed third party ownership and, at IREC's suggestion, modified the definition of an "Interconnection Customer" so that the TPO model would not be precluded. However, the group properly concluded that the issue of whether the model is allowed in the state was beyond the charge of the group. The working group was largely technical, and whether the TPO model is allowed is purely a matter of policy.

The Commission does appear to have the authority to determine that the TPO model is allowed, which entails a finding that third party owners do not fall within the definition of a public utility. That discussion has occurred in state after state, as our comments of July 8, 2011 document. In state after state, the conclusion has been reached by utility commissions or legislators that third party owners are not public utilities. IREC strongly encourages the UTC to step through the same analysis for Washington.

To clarify that the TPO model is permitted in Washington, the Commission can simply add a sentence to the definition of an Interconnection Customer. For example, the Commission could add, "A net metered Interconnection Customer may lease from, or purchase power from, a third party owner of an on-site generating facility." Presumably the order implementing the new rules would include the relevant discussion of the issue.

² PV Solar Report Analysis Executive Brief: Third-party-owned Residential Solar Delivers \$1 Billion to California (8/23/12) (showing that 75% of PV installs in California in 2012 were accomplished by third-party ownership), *available at* www.pvsolarbuzz.com/images/stories/PDFs/thirdprty_solar_1billion_ca.pdf.

B. Model Rule Revisions for IOUs

The working group strove to craft rules that would be workable for all utilities in the state, including rural PUDs with a single engineer on staff. While consistency across the state is a noble goal that IREC supports, some provisions can be modified for larger utilities that have substantial engineering staff. Timelines, waiver of the external disconnect switch (“EDS”) requirement, and the upper limit for Tier 2 can be revised for the IOUs while preserving the rest of the model rules.

i. Timelines

Largely based on input from rural utilities, the model rules allow utilities approximately a month and a half to review a Tier 1 application and two and a half months to review a Tier 2 application. This makes sense for a utility with a single engineer, who may be busy or on vacation, but is excessive for larger utilities. As described in the Tier 1 Application Process, the utility has ten business days to give notice that the application is complete and twenty business days to complete its review of the application. The Tier 2 Application Process provides that the utility has twenty business days to give notice that the application is complete and thirty business days to review the application. These timelines are longer than the federal interconnection rules and leading state rules allow: IREC suggests that Washington’s IOUs can reasonably be expected to review applications in the amount of time taken by IOUs in other states.

Using Oregon as an example, review for completeness of the application takes 10 business days for any tier, then 15 business days for Tier 1 and 20 business days for Tier 2. IREC suggests that Washington follow this example for the IOUs.

ii. External Disconnect Switch Requirements

In our comments in this docket in January of this year, IREC explained its position that the EDS requirement can safely be waived for small, inverter-based systems. Waiver of the EDS requirement was a point of considerable discussion in the working group, and the July 13, 2012 report of the working group documents that discussion. The model rules allow a utility to waive the requirement for inverter-based generating facilities under five kilowatts (“kW”), while the

default rule is that the EDS is required for all generating facilities. IREC suggests that the Commission can establish that the waiver is in effect for the three IOUs.

IREC encourages the UTC to rely on the available evidence to reach a decision rather than investigating the issue in any greater depth. As noted in IREC's prior filing and in the working group report, two exhaustive studies funded by the U.S. Department of Energy in the past three years concluded that the EDS is not necessary for inverter-based systems under 10 kW, primarily because inverters reliably detect loss of utility grid power and disconnect automatically.³ As well, over 100,000 systems are operating in the United States without EDSs and there have not been reports of utility grid impacts.⁴

Washington's grid is not uniquely designed such that waiver of the EDS requirement presents a safety issue. IREC's technical expert, Mr. Michael Sheehan, has twenty years of engineering experience at Puget Sound Energy, authored one of the DOE-funded studies on the EDS, and was active on the IEEE 1547 working group that is the basis of all state interconnection rules. He sees no need for an EDS requirement for inverter-based facilities under 10 kW.

The model rules drafted by the working group allow for a utility waiver of the EDS requirement at a 5 kW level, which would be the lowest waiver level in the country. Some states do not allow waiver of the EDS requirement at all, but otherwise Oregon is one of the most conservative, with a waiver at just over 7 kW (or more, for certain configurations). The proposed 5 kW waiver in Washington has the benefit of covering any installation that maximizes the state's incentive program for facilities using modules and inverters made in-state, so the 5 kW waiver would presumably be useful in practice. IREC recommends that the Commission adopt the waiver for the IOUs.

³ See working group report at p. 4, footnote 2 for report references.

⁴ The three major California IOUs do not require an EDS, and collectively they have over 80,000 interconnected solar facilities. The switch is not required for small systems in most leading solar states; see the map at www.freeingthegrid.org and filter by Interconnection and EDS to see that 24 states waive the requirement for at least the smallest facilities (scores of -1 or more, as described in the publication available on the site).

iii. Tier 2 facility size cap

Most state interconnection rules follow the lead of the federal Small Generator Interconnection Procedures (“SGIP”) by setting the upper limit for Tier 2 at two MW. The model rules developed by the working group raise the Tier 2 upper limit in Washington from 300 kW to 500 kW, which is a significant improvement, but well short of the norm nationally. WAPUDA was understandably concerned that an upper limit set any higher would be unacceptable to rural utilities. For the IOUs, IREC suggests that the cap could be set higher, either at the national norm of 2 MW, or even setting the level at 1 MW would be an improvement.

In practice, many facilities over 500 kW fail the interconnection screen that requires aggregate generating capacity on a line section to be less than 15% of the line section’s peak load (see Tier 2 – Applicability, screen 9, and note that often, the entire radial distribution circuit is the “line section”). For a rural circuit with a peak load of 3 MW, a generating facility over 450 kW would fail this screen. However, a circuit with a 10 MW peak load can accommodate a 1.5 MW facility under the screen, and IREC suggests that the Tier 2 facility size cap should not otherwise preclude expedited review of the interconnection.

C. Gaps in the Model Rules

i. Standardized Application Forms and Interconnection Agreements

The federal SGIP includes standard Interconnection Agreements (“IAs”) and application forms for small and large generating facilities. Many states have adopted similar standard forms and IAs, to the benefit of customers in those states. Letting each utility develop its own forms and IAs means that businesses installing generating facilities need to be familiar with dozens of different forms and IAs, adding cost. As well, it is unlikely that anyone but the utility and the regulator will participate in development of the utility’s forms and IAs, opening the possibility that provisions will be included that severely limit the ability to interconnect.

With strong model forms and IAs available, IREC suggests that the Commission start with what has already been tested. Puget Sound Energy has the most experience with

interconnections in the state, and its IAs and forms could be a starting place (IREC has not reviewed PSE’s documents and is not endorsing them). The Oregon rules are another alternative, as is the SGIP. Any of these options is better than leaving development of model forms and IAs up to the individual utilities.

One correction to the model rules that IREC strongly suggests is to assure that at least the individual utility needs to have standard IAs, rather than leaving the utility the option of negotiating an IA for each customer. Faced with that uncertainty, no one would install a facility. The necessary correction is to the definition of Interconnection Agreement in the model rules, which says that the utility “may establish model interconnection agreements.” IREC suggests that if the Commission does not adopt IAs for all three IOUs, the Commission should at least replace “may” with “shall” in the definition to assure that each utility has standard IAs.

ii. Application Fees

The model rules have blank spaces in Section 4.4 for the application fees for each tier and the Commission needs to establish standard fees. IREC does not take a position on the standard fees to apply, but notes that applicable fees have been discussed at length by other utility commissions. While some, including California, waive application fees, most have set fees on the basis that the customer absorb the average cost of processing applications. To avoid comparisons with its southern neighbor, one option is to match the fees charged in Oregon, which are the same as Washington’s current rates. Both charge \$100 for Tier 1 applications, and \$500 for Tier 2 applications. Washington has not set a Tier 3 rate, while Oregon has a \$1000 application fee. Many states have lower fees that Washington could emulate, and some have fees per kW so that larger and more complex interconnections are assessed a higher fee.

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III. RESPONSES TO UTC QUESTIONS IN THE JULY 26 NOTICE OF OPPORTUNITY TO COMMENT

- 1. Does the model rule language regarding electrical safety avoid potential regulatory mismatches with current and future Department of Labor and Industries rules regarding electrical safety? If not, please identify how such a mismatch could be avoided.*

IREC assumes that this question addresses the use of the External Disconnect Switch. In discussions of the working group, there was concern that the Department of Labor and Industries (“L&I”) has instituted rules that require the use of the EDS. IREC review of those rules was not conclusive; they do not appear to explicitly require the EDS. L&I is charged with implementing U.S. Occupational Safety and Health Administration (“OSHA”) rules, which do not require the EDS in all cases. As discussed earlier in these comments, 24 states waive the EDS requirement for at least the smallest inverter-based facilities, and these states are subject to OSHA rules.

The simplest course of action is to ask L&I whether the EDS is required under their rules and get a definitive answer. If not required by L&I, IREC sees no reason why the UTC cannot proceed with a rule that has the limited waiver in the model rules. As noted earlier, IREC recommends that the UTC institute the waiver for the state’s IOUs.

- 2. Do the model rules remove requirements in current rules from the interconnection applicant that increase the costs to the utility of interconnecting the applicant’s generation facility? Please identify those requirements and explain if those costs unduly shift costs to utility ratepayers or between ratepayers.*

IREC does not believe that the rules remove requirements in the current rules that increase the costs to the utility. In practice, the changes to the rules will not allow facilities to interconnect under the expedited procedures that would not have been able to do so under the prior rules, with the exception that facilities from 300 kW to 500 kW can now apply under Tier 2. For those facilities, the application fee should cover the cost of the expedited review, with no extra cost to the utility over the prior rules. IREC does not see any evidence that there are the model rules will produce cost shifts to utility ratepayers or between ratepayers.

3. *Do the model rules add requirements to the interconnection applicant that increase the costs to the applicant of interconnection? Please identify those requirements and explain if they are unduly discriminatory or shift costs from a utility or utility ratepayers to the interconnection applicant.*

Please see prior response. IREC is not aware of any added requirements that increase the cost to the applicant, and sees no evidence of cost shifts.

4. *Are the Tier 1, 2 and 3 application and completion processes reasonable obligations for both the applicant and the utility? Please explain why or why not.*

The Tier 1 and 2 processes are similar to those found in other states, which IREC believes fairly apportion obligations to the applicant and the utility. The Tier 3 process in the model rules is short on the specifics of the required studies, has no timelines for the studies, nor any requirement for good faith cost estimates for studies. This lack of detail in Tier 3 puts the applicant in the untenable position of not knowing being able to estimate the cost or time to interconnect a larger facility.

5. *Is there an industry definition of a “radial distribution circuit” as the term is used in item 3 under “Tier 1 – applicability” of the model rule?*

A group of utilities from the working group proposed a definition for the term that appeared reasonable to IREC, and presumably that definition is being submitted to the UTC.

6. *Is item 4 under “Tier 1 – applicability” of the model rule intended to reflect the requirements under current rule for generators with nameplate rating of 25 kW or less?*

IREC does not recall that there was an intent to replicate the Tier 1 requirements in the current rules. The “600 V Class” requirement in item 4 was considered to be one of several reasonable restrictions to assure that only the most simple interconnections would be processed under Tier 1. IREC agrees that this is a reasonable restriction.

7. *Is it possible to implement the Tier 1 and Tier 2 portions of the model rules without modifying the existing rules to include the Tier 3 portions of the model rules?*

IREC does not see an obvious impediment to doing so, but suggests that the Commission could instead use the SGIP or Oregon rules as a starting point.

IV. MINOR REVISIONS TO MODEL RULES

IREC suggests the following modest changes to the model rules:

- Define “Witness Test” – used in the Completion Process for each tier.
- Match the Tier 1 and Tier 2 Application Processes with Tier 3 regarding the start time of the application review process. Tier 3 starts a 45 day process upon receipt of the application, with the potential to restart the clock if the application is found to be incomplete. Tiers 1 and 2 start the clock upon “notice of application completedness” which unnecessarily adds five business days to the Tier 1 process and ten business days to the Tier 2 process.
- Include the signing of an Interconnection Agreement in the application process for each tier.
- Chapter 6, second paragraph, line 2, remove “that”
- Section 6.2, remove “electrical” (all “generating facilities” are electrical)
- Section 6.4, line 2, add “and” (“utility, and execute . . .”)
- Section 6.5, line 3, add “or” (“facility, or for . . .)
- Section 6.7, line 3, remove “any”
- Section 6.9, remove “will provide the reasoning in writing” and add that language in a new sentence at the end of the sentence.
- Section 6.14, remove existing language about the net metering program limitations, and replace with statement that a utility is not obligated to interconnect net metered customers if the utility has reached the program size cap.
- Section 7.2, remove “model”
- Section 7.3, remove “sample”

- Section 8.1(b) – cut part (b) (most of the listed standards are copyrighted; there is no need to say that just for the National Electrical Code)
- Sections 8.7 and 8.8 – do not include Washington law among the list of regulations and standards adopted by reference. Washington law already applies, whether it is listed in Chapter 8 or not.

V. CONCLUSION


IREC appreciates the opportunity to participate in the Commission’s consideration of improved interconnection rules. Standardized rules across the state are an important, and IREC supports the Commission’s use of the working group’s model rules, with the revisions suggested here.

Among IREC’s suggested changes for rules applicable to the IOUs, specific allowance of third party ownership is the most important. If nothing else, IREC urges the Commission to clarify this issue and allow IOU customers access to the low cost solar option enjoyed by utility customers in all of the states with vibrant solar energy markets.

IREC recommends that the Commission adopt all of the other changes to the model rules suggested in these comments, and looks forward to working with the Commission to implement revised interconnection rules.

Thank you for the opportunity to comment.

Respectfully Submitted on September 7, 2012.

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