



STATE OF WASHINGTON

## UTILITIES AND TRANSPORTATION COMMISSION

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September 2, 2016

NARUC Staff Subcommittee on Rate Design

### **Re: Comments on the draft NARUC Manual on Distributed Energy Resources Compensation**

The Washington Utilities and Transportation Commission (commission) appreciates the opportunity to comment on the draft version of the NARUC Manual on Distributed Energy Resources Compensation (manual). The commission praises the Staff Subcommittee on Rate Design (subcommittee) for the work it has accomplished on this difficult topic on a short timetable.

The draft manual provides a framework for an objective approach to this complicated subject – one that will hopefully contribute to the de-polarization of what has proven to be a contentious debate. The commission strongly supports this effort, and offers these comments in the hope that they will contribute to a final manual that will aid us in taking a fair and balanced approach to the issues associated with distributed resource development as they arise in the State of Washington.

The commission recognizes that the subcommittee was tasked with preparing this manual on an aggressive schedule, and that the current version of the manual is a draft. These comments focus on providing substantive feedback on the issues and ideas presented rather than providing substantive edits. These comments are divided into three sections: general feedback, answers to the questions posed by the subcommittee, and detailed feedback on specific topics.

#### **I. General Feedback**

Overall, the manual is well structured and includes significant detail of all aspects of the ratemaking process and how that process is impacted by distributed energy resource (DER) adoption. Providing references or examples, by footnotes or other means, of state or commission actions or decisions on specific topics would be helpful. For example, one of the implied outcomes of the manual is to help regulators identify the tipping point at which DER adoption will require ratemaking reform, however, the manual offers no practical guidance on how this point might be quantified or recognized. Some examples of how jurisdictions have identified this point and the factors that should be evaluated would add significant value to the manual.

In addition, while the overall tone of the manual is objective, there are occasional lapses in that tone that create the appearance of bias in some passages. For example, the revenue erosion section on page 22 appears to suggest that a DER “does not necessarily reduce any of the utility’s costs,” which could be taken to imply that DERs do not provide benefits. The subcommittee should carefully review the manual to ensure that the objective tone it has endeavored to establish remains constant throughout the document.

## **II. Responses to the Subcommittee’s Questions**

When it presented the manual at the NARUC summer meeting, the subcommittee asked for feedback to eight questions. This section provides the commission’s responses to those questions.

1. **Q: Has the draft manual addressed the issue in a comprehensive and useful manner?**

A: Yes. The subcommittee has been thorough in its work. We found the discussion on rate design options and their impacts (Section IV) to be particularly strong.

2. **Q: Are there any other considerations not included in the draft manual that impact distributed energy resources?**

A: The manual could benefit from a more detailed discussion of the consumer protection issues raised by the growth of distributed resources and the role of a utility commission in addressing those issues. For reference, the commission has explored this question and issued a policy statement discussing its role in regulating third-party solar providers from a consumer protection standpoint.<sup>1</sup>

3. **Q: Are there other compensation methods not included in the draft manual?**

A: We believe that the subcommittee has compiled a thorough summary of the available options.

4. **Q: How could the manual be written in a way that is more useful to regulators?**

A: As we discuss above, including specific references to state and commission actions, such as the tipping point for DER adoption, would provide useful examples for regulators. Further, we recommend that the manual undergo rigorous technical editing – both to make the needed refinements and to integrate the manual’s various authors into a more cohesive voice.

5. **Q: Should the draft manual include a discussion of distribution system planning or distribution system operators?**

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<sup>1</sup> *In the Matter of Amending and Repealing Rules in WAC 480-108 Relating to Electric Companies – Interconnection with Electric Generators* (July 30, 2014), Docket UE-112133. Available online at <http://www.utc.wa.gov/docs/Pages/DocketLookup.aspx?FilingID=112133>.

A: No; including such a broad and complicated subject in this manual would dilute its intent. However, we agree that there would be value in exploring the challenges and potential benefits of distribution planning, and recommend that NARUC do so in a separate effort.

6. **Q: Does the draft manual provide sufficient discussion on considerations of equitable treatment between customers in the context of ratemaking?**

A: The manual could address more fully the needs of low-income customers. While there is a section describing low-income bill assistance programs, there is limited discussion of the direct impacts that the various compensation systems have on low-income customers. The rate design section, in particular, could benefit from a more detailed exploration of low-income customer impacts.

7. **Q: Since the initial survey and request for information was released in March 2016, have there been any new developments that the staff subcommittee should take into account in this draft manual?**

A: A number of states have continued to address this issue in general rate cases and other proceedings, but the Washington Utilities and Transportation Commission has not addressed such rate design issues.

8. **Q: Is the draft manual missing any key technologies that should be included?**

A: No, the draft manual provides a complete discussion of the current key technologies involved in utility service. However, we suggest that the discussion on transactive energy would be more suitable in the context of the final chapter, "Technology, Services, and the Evolving Marketplace." We appreciate the forward-looking tone of the final chapter, and believe it offers an important forum for an ongoing dialogue regarding developing technologies and policies that may become available to regulators in the future. At this stage, we feel that transactive energy remains a theoretical concept that will require significant technological advances and infrastructure investment before it becomes a practical tool available to regulators. There are also jurisdictional and regulatory questions posed by this concept that have not yet been resolved. We also recommend that the manual be updated periodically to monitor this and other technological and rate design options as they become available and feasible.

### **III. Specific Feedback**

This section provides additional, detailed comments on the substance of the manual. For the sake of simplicity, we present these comments as bullet points:

- The inclining block rate section on pages 8-9 could be strengthened with a discussion about price signals, i.e., how much of a differential in the blocks is necessary to elicit a response from customers.

- The language on page 9 implies that the higher rates charged to high-use customers under inclining block rates may not be reflective of the increased costs to serve those customers. This discussion should be clarified, as it implies that the higher rates are not appropriate for high-use customers. However, in our experience, high-use customers clearly impose more costs on the system than low-use customers.
- The real-time pricing section on page 10 should include more discussion of the downsides of this approach, notably the lack of transparency and predictability for customers, as well as the potential for negative impacts on low-income customers, as low-income customers may have less ability to shift their times of energy use.
- The demand response section on page 19 accurately captures the reduced energy costs associated with demand response, but fails to identify the avoided or delayed capacity benefits. The manual should mention those benefits to ensure that parties account for them when analyzing demand response as a resource option.
- The electric vehicles section on page 19 fails to consider the significant obstacles to using electric vehicles as distributed resources, such as vehicle warranty restrictions on the use of batteries for grid storage and supply.
- The resource definition section on page 20 needs significant work. For example, it conflates the definition of a resource with the definition of ancillary service, introduces several abbreviations and technical terms without explaining them, and implies that the resource value of energy efficiency is subjective. Several organizations have established protocols for documenting the resource value of energy efficiency, such as the Regional Technical Forum in the Pacific Northwest and the U.S. Department of Energy's Uniform Methods Project.<sup>2</sup>
- The resource definition section on page 20 also unfairly implies that a resource must be dispatchable for it to be included in the official definition of a resource. While we recognize that energy efficiency is not a dispatchable resource, it nonetheless provides predictable load shapes that, when properly considered alongside other resources in an integrated resource planning process, can displace the need for other, more costly resources.
- On page 21, the manual states that the growth of DERs has been driven by "policies and compensation," which fails to consider other key drivers, such as cost declines, technological advancement, and local climate. Narrowly defining the drivers of DER adoption fails to capture broader, more fundamental factors that, in time, will likely drive DER adoption even in jurisdictions that lack supporting policies and compensation.
- The cost-shifting section on page 23 appears to assume that cost shifts from DER customers to non-DER customers are inevitable. This is another example of potential bias in the manual, and is likely to receive a number of comments, especially given the pending proceedings in Nevada and Arizona. The section should objectively

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<sup>2</sup> To review the RTF's protocols for determining the resource value of various efficiency measure, please see <http://rtf.nwccouncil.org/measures/Default.asp>. To see the protocols being developed by the Uniform Methods Project, see <http://energy.gov/eere/about-us/ump-home>.

- discuss the issue, identify the most current studies and analyses of the issue, encourage regulators to analyze the costs and benefits of DERs to determine whether a net cost shift is taking place, and provide guidance on how such a study might be framed.
- Similarly, on page 44, the manual implies that a “duck curve” outcome is inevitable under high DER penetration rates. The manual should include some discussion of policies and programs to better incorporate high amounts of DERs to avoid such ramping issues, such as those presented in the Regulatory Assistance Project’s “Teaching the Duck to Fly” publication.<sup>3</sup>
  - The value of solar tariff section on page 47 states that regulators will have to redefine a utility in order to incorporate a value of solar tariff. This argument does not match with our understanding, and requires a more detailed explanation.<sup>4</sup>
  - The coincident peak considerations section on page 51 discusses the suggestion that billing demand charges on an annual basis would create volatile bills that would harm all residential customers, especially low-income customers. We agree that this would be the likely outcome of such an approach, and that this option therefore does not merit discussion in the manual.
  - Page 57 of the manual cites to Wikipedia. We suggest that the manual should only cite original sources to ensure credibility.
  - Also on page 57, the manual implies that higher costs associated with high DER penetration, if not properly recovered, could reduce system reliability. This conclusion requires further discussion and explanation.

The commission reiterates its appreciation for the work of the subcommittee and strong support for this effort. We and our staff are willing to help bring the manual to fruition, and will gladly make ourselves available to the subcommittee. Should you have any questions concerning these comments, please contact Jeremy Twitchell, Energy Policy Advisor, at [jtwitche@utc.wa.gov](mailto:jtwitche@utc.wa.gov), or (360) 664-1138.

Sincerely,

Steven V. King  
Executive Director and Secretary

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<sup>3</sup> See <http://www.raonline.org/wp-content/uploads/2016/05/rap-lazar-teachingducktofly-2014-jan.pdf>.

<sup>4</sup> To our knowledge, Minnesota is the only state to have adopted a value of solar tariff. The official report describing the methodology for calculating the value of solar and process of implementing the tariff makes no mention of redefining the utility, and Minnesota does not appear to have made any such fundamental shifts in its regulatory philosophy in implementing the value of solar tariff. See <https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId={EE336D18-74C3-4534-AC9F-0BA56F788EC4}&documentTitle=20141-96033-02>.