

September 1, 2016

Staff Subcommittee on Rate Design  
National Association of Regulatory Utility Commissioners  
1101 Vermont Ave NW  
Suite 200  
Washington, DC 20005

**Via electronic submission through <http://responses@naruc.org>**

RE: Distributed Energy Resources Compensation Manual

The National Rural Electric Cooperative Association (NRECA) appreciates the opportunity to submit comments on the National Association of Regulatory Utility Commissioners' (NARUC) draft of the *Distributed Energy Resources Compensation Manual*.

NRECA is the national service organization for America's Electric Cooperatives. The nation's member-owned, not-for-profit electric co-ops constitute a unique sector of the electric utility industry – and face a unique set of challenges. NRECA represents the interests of the nation's more than 900 rural electric utilities responsible for keeping the lights on for more than 42 million people across 47 states. Electric cooperatives are driven by their purpose to power communities and empower their members to improve their quality of life. Affordable electricity is the lifeblood of the American economy, and for 75 years electric co-ops have been proud to keep the lights on. Because of their critical role in providing affordable, reliable, and universally accessible electric service, electric cooperatives are vital to the economic health of the communities they serve.

The following comments address some of the major questions on which NARUC seeks input.

## **Questions**

### **1. Has the draft Manual addressed the issue in a comprehensive and useful manner?**

Yes, the draft manual provides commissioners with a comprehensive set of rate options and issues for consideration. Overall, the manual objectively summarizes elements rate regulators should consider. The manual also does not advocate for particular Distributed Energy Resource (DER) compensation mechanisms. NRECA urges the staff subcommittee to retain the balanced and comprehensive approach in the final version of the manual.

NRECA does, however, have a few comments on specific issues:

Part II. There are a few sections where the manual would benefit from a more robust treatment of rate design criteria, other than just price signals, which seems to have a disproportionate focus. Other rate design options, such as criteria for recovering the

revenue requirement of the utility equitably from rate classes and customers should be expanded upon. For example, in section II.b.1.d, the manual discusses the three-part rate/demand charge option, but focusses on the improved price signal and not on other potential benefits such as recovery of costs and fairness.

Page 44. Valuation Methodology. As written, the differences between Value of Resource (VOR) and Value of Service (VOS) are unclear. Also, while the VOR section appropriately identifies key hurdles of establishing a VOR, it does not frame the purpose of a VOR from the perspective of stakeholders, such as the utility, ratepayers or society. Valuation is subjective: there is no single “standard” method. Decision-makers should clearly establish, for the benefit of all stakeholders, which perspective a VOR method is representing, what are the implications of each and how do they align or deviate from traditional ratemaking methodologies? This is a bone of contention, but it needs to be addressed. Does the VOR align with actual and measurable avoided costs or is it predicated upon the inclusion of externalities?

## **2. Are there any other considerations not included in the draft Manual that impact Distributed Energy Resources?**

Valuation Methodology: In addition to changes to VOR and VOS that are summarized under the response to Question 1, NRECA suggests that the manual includes a discussion of the relevance of valuation methodologies within the broader context of an overall evaluation of all resource and technology options. Valuing the net costs and benefits of DER is important to system planning and meeting consumer needs, but it is not the sole measure for evaluating and ultimately selecting least-cost options to meet those needs. Valuation is not a substitute for actual costs in establishing electric rates that should be based on specifically-measurable, rather than implied or estimated, costs. As a component of a broader, integrated process that seeks the best combination of resources to achieve safe, affordable, reliable, and environmentally-sustainable energy services, valuing DER should not be done in a vacuum.

NRECA also requests that the subject of opportunity cost be included under this section. In other words, what is the opportunity cost of adding distributed solar instead of another DER or other investment that could achieve the same result?

While DER has a major role to play in reducing greenhouse gas emissions, it should not be favored in all cases over other options, such as large-scale renewables. A 2015 MIT study found that current policies do not promote the lowest-cost options to meet carbon reduction goals. In particular, the study found that residential solar systems are 70 percent more expensive than utility scale PV systems. Even though the residential systems were found to be more expensive, the study concluded that state programs such as Net Energy

Metering (NEM) promotes small-scale systems over larger, more cost-effective, utility-scale projects.<sup>1</sup>

While distributed PV can provide significant benefits to the system, alternative resources, including demand-side management programs, can provide the same or even greater benefits. Thus, in order to achieve the best mix of resources that lead to an optimized system, valuation methodologies should consider the opportunity cost of not using other resources.

Finally, any valuation method should account for each value stream once-there should be no double-counting. The manual already identifies this as an issue, under Part III F-Benefits, page 25. However, NRECA believes that it bears repeating under the Valuation Methodology Section as well.

### **3. Are there other compensation options not included in the draft Manual?**

Part V.A Net Metering, page 41.NEM is not the least-cost compensation methodology. NRECA recommends that the manual include a discussion of “**net billing**” and “**dual metering**” programs. These compensation mechanisms permit interconnection of customer generation to the grid so that they can use their generation to reduce their consumption of utility power. They also ensure appropriate compensation to consumers for their excess generation at reasonable rates, and ensure consumer generators pay an appropriate share of system costs. This protects other consumers from cross-subsidies.

Under a **net billing** program, power imported by the consumer-generator and the power exported by the consumer-generator are measured separately. The consumer is charged under the retail rates for all of the power imported by the consumer, and the consumer is paid the appropriate wholesale rate for all the power exported onto the grid. Rather than account separately for the credits and debits, however, the two are netted out in a single bill each month. If the consumer owes more than he is owed, he receives a bill at the end of the month. If the consumer owes less than he is owed, he receives a check at the end of the month.

**Dual metering** also means that consumer generation and consumption are separately metered. Under this program, however, the utility purchases all of the output of the generator at wholesale rates and sells the consumer all of the power the consumer uses at retail rates. The consumer does not use any of the generator’s output behind the meter. The wholesale rate may be the utility’s avoided cost, or some other wholesale rate set by regulation or negotiated by the parties.

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<sup>1</sup> “The Future of Solar Energy.” MIT, May 2015 (<http://mitei.mit.edu/futureofsolar>).

**4. Does the draft Manual provide sufficient discussion on considerations of equitable treatment between customers in the context of ratemaking?**

The manual appropriately identifies DER market penetration levels as factor. However, the discussion needs to be expanded upon to discuss how growth of DER can impact rates and compensation methodologies, existing and future business structures and markets. While the penetration of DER in certain states is currently low, it would be helpful for regulators to understand the projected growth in various states and to plan accordingly. It is wiser to set equitable rates and compensation mechanisms before there is an increase in DER on the system, rather than adjusting rates after penetration has reached a certain threshold. In order to avoid having to remedy future cost-shifting through frequent rate cases, ratemaking should take into account the future growth of DER. Providing regulators with resources that can assist them in factoring in future growth will be more cost-effective, transparent and consumer-responsive.

Sincerely,

/s/

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