

September 2, 2016

Dear Subcommittee Members,

The Convergence Project (TCP) at New York Law School¹ respectfully submits the following comments regarding the *NARUC Manual on Distributed Energy Resources Compensation* (Manual). The Subcommittee and NARUC are to be commended for spearheading this inquiry and developing a resource that can guide regulators as they grapple with the difficult questions arising from the ongoing transformation of the utilities space.

We appreciate the opportunity to comment and look forward to working with NARUC on these and related issues going forward.

Kind regards,

/s/ Michael J. Santorelli

PROJECT MANAGER, THE CONVERGENCE PROJECT

DIRECTOR, THE ADVANCED COMMUNICATIONS LAW & POLICY INSTITUTE

* * * * *

A. FRAMING THOUGHTS

The NARUC DER Manual is being developed at a time of significant change in the U.S. utilities space. The emergence of DER, coupled with the use of advanced communications technologies to make networks “smarter” and shifting consumer expectations for more interactivity, control, and personalization of everything they purchase, represents an historic turning point in how electricity is delivered to and consumed by Americans. Accordingly, NARUC’s efforts to assist regulators in navigating the many difficult and novel questions that are arising in the context of DER are welcome, as are the Association’s broader efforts to spearhead conversations about how regulators, service providers, consumers, and other stakeholders can work together to seize the opportunities for better, more reliable,

¹ An initiative of the law school’s Advanced Communications Law & Policy Institute, the Convergence Project examines the interplay of regulation, investment, and innovation in the utilities sectors and evaluates opportunities for collaboration among stakeholders in the telecom, energy, and water spaces. For more information, please visit <http://www.nyls.edu/advanced-communications-law-and-policy-institute/the-convergence-project/>.

more resilient, and more affordable services that are arising almost daily as a result of greater utility convergence.

An important notion at the heart of the Manual is balance – *i.e.*, how to balance new rate-making mechanisms in a manner that:

- Supports investment and innovation across the energy ecosystem;
- Preserves the ability of utilities to maintain and modernize the primary enabler of forward progress in the energy space – the electric grid²;
- Encourages promising advances being made in the renewables space and in the development of pro-consumer energy efficiency tools; and
- Is economically rational in methodology and outcomes.

In striking this balance, regulators must remain attuned to the possibility that inequitable outcomes might arise as a result of policies that seek to provide particular business models or services within the energy ecosystem with specific advantage.

Investment in DER and related clean energy systems is on the rise as investors in companies not subject to state PUC jurisdiction pursue opportunities to capitalize on the disruption of a sector that is characterized, at least in part, by the pervasive regulation (economic and otherwise) of incumbent service providers. The policy responses to the emergence of discrete distributed energy platforms, like rooftop solar, have been accommodating. Generous tax breaks and reimbursement mechanisms like net-energy metering (NEM), among other favorable policies, have hastened the rise of rooftop solar and the fall of the cost of solar power.³ A similar dynamic is evident across the renewables space, from wind power to battery storage.⁴

As enthusiasm for alternative means of electric production and consumption has increased in various venues, however, existing regulatory constructs – constructs that have helped ensure regulatory predictability and reliability – are being fundamentally challenged.

² See, e.g., *The Integrated Grid: Realizing the Full Value of Central and Distributed Energy Resources*, EPRI (Feb. 2014), <http://www.epri.com/abstracts/Pages/ProductAbstract.aspx?ProductId=000000003002002733>.

³ See, e.g., David Frankel, Kenneth Ostrowski, and Dickon Pinner, *The Disruptive Potential of Solar Power*, McKinsey Quarterly (April 2014), <http://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/the-disruptive-potential-of-solar-power>.

⁴ See, e.g., *Direct Federal Financial Interventions and Subsidies in Energy in Fiscal Year 2013*, March 12, 2015, EIA, <http://www.eia.gov/analysis/requests/subsidy/>.

As reflected in the Manual, a central challenge of DER, especially in relation to addressing other long-standing and emerging issues in the energy space, is understanding and properly calibrating the actual costs and benefits of new approaches to serving customers. As noted, DER like rooftop solar have benefited from policies that may have obscured the actual costs of the service. For example, customers may see the benefit in the form of lower electric bills, but they may not see cost shifts to other customers or other impacts on the wider electric system. The Manual highlights both the potential consequences of such cost-shifting and the need for regulators to come to terms with these issues.⁵ Grappling with these issues now would facilitate continued investment, supported by rational rate-making, in core electric infrastructure.

B. SPECIFIC FEEDBACK

Our specific feedback regarding the Manual is focused on three areas:

1. Highlighting the potential role for demand charges;
2. Recognizing that notions of “value” are difficult to operationalize; and
3. Adding “framework” questions to assist regulators as they operationalize the manual.

* * * * *

1. *Demand charges can play a role*

Implicit in the Manual is recognition that certain DER like rooftop solar have reached a point where regulators must begin to rethink incentive structures and recalibrate regulatory and policy frameworks. The success of rooftop solar, perhaps the most widely deployed DER, has been largely driven by NEM. As with any subsidy, though, failure to update a program like NEM in a timely manner to better reflect the realities of the marketplace – from a cost and rate-making perspective – could lead to ongoing dependency on the subsidy. Such could, in turn, foster a contentious environment within which to rationalize regulation.⁶ As such, the Manual has been developed in such a way that it can readily be utilized by policymakers and regulators to promote robust dialogue and debate regarding how to best ensure rational and equitable outcomes across the board.

⁵ Manual at p. 23-24.

⁶ The recent and ongoing proceedings in Nevada around recalibrating the NEM program there offers an illustrative case of the difficulties inherent in changing an established subsidy framework. For an overview of recent changes spearheaded by the PUC, see *Net Metering Rules & Rates*, PUCN (March 2016), [http://puc.nv.gov/uploadedFiles/pucnv.gov/Content/Consumers/Be Informed/Fact Sheet Net Metering.pdf](http://puc.nv.gov/uploadedFiles/pucnv.gov/Content/Consumers/Be%20Informed/Fact%20Sheet%20Net%20Metering.pdf).

From this vantage, it is respectfully submitted that demand charges should be one of the tools in the regulator’s toolbox. While not a panacea, demand charges can be an effective addition to DER policies. Not all costs are variable (especially in the short run and medium term). That there are fixed costs in this space is axiomatic. As such, demand charges of various ilk can be useful in rate-structures aimed at ensuring that adequate returns are being made on services that benefit everyone (*e.g.*, the grid) regardless of the varying extent to which a customer uses that service.⁷

In the specific context of NEM reform, demand charges could be an effective mechanism to address concerns about cost-shifting.⁸ Regulators should be encouraged to explore them as an option and refine them as appropriate in order to protect against an outcome where investment in a common resource like the grid declines or is spread across a smaller base of ratepayers. Every person and every school, hospital, and merchant in America benefits from the electric grid. Utilities have an obligation to maintain this essential infrastructure – that is a core element of the regulatory compact that was forged decades ago in the electric space. Thus, if the number of full-paying customers declines as a result of DER adoption, those who are unable or unwilling to participate could very well be left with higher bills in order to sustain grid investment. Something like a demand charge could help to bring more balance to what has the potential of being a fundamentally inequitable dynamic, one that would disproportionately impact the most vulnerable among us.

In sum, having more – not fewer – tools in the toolbox at this juncture will provide regulators with more options for tackling the tough issues in a manner that makes the most sense in their respective states.

2. *Notions of “value” are inherently difficult to operationalize*

Assigning discrete values to specific resources or services like solar is inherently subjective. As the Manual notes, it might be difficult or “unwise” to try to “set[] a fixed value for a long period of time.”⁹ The Manual does provide some ideas for establishing a more dynamic framework for “set[ting] the values periodically to ensure that technological and practical considerations can be changed as the distribution and transmission and growth of DER occurs.”¹⁰

It is respectfully submitted that, before embracing this kind of mechanism, a critical first step ought to be the development of objective criteria through which a proper “value” can be developed and assigned. Regulators developing these values – in the specific context of DER and, ideally, across all forms of generation – should consider actual and potential negative

⁷ See James C. Bonbright et al., *Principles of Utility Rates* (2nd Ed.), at p. 401 (1988).

⁸ See, *e.g.*, Francisco Flores-Espino, *Compensation for Distributed Solar: A Survey of Options to Preserve Stakeholder Value*, at p. 25, NREL (2015), <http://www.nrel.gov/docs/fy15osti/62371.pdf>.

⁹ Manual at p. 45.

¹⁰ *Id.*

consequences that may spill over to other customers, like cost-shifts in the rooftop solar context, and the potential for other DER to create vulnerabilities in the grid. Highlighting these kinds of considerations in the Manual might provide even more guidance to regulators looking to be as comprehensive as possible.

3. *“Framework” questions to assist regulators as they operationalize the manual*

Below are suggested questions designed to guide PUC analyses as commissioners seek to apply the Manual to emerging issues in their states. The suggested questions are framed to help ensure the development of informed outcomes that reflect and promote rational and progressive regulation, innovation, investment, and inclusiveness.

1. Does the proposed DER compensation mechanism accurately and objectively assess the costs, benefits, and risks of DER?
2. To what extent does a proposed rate structure account for core infrastructure costs and impacts relating the grid?
3. Do the projected benefits of the DER outweigh the likely costs – to the utility, to other customers, and to society at large? Benefits might include bill impacts and compliance with environmental mandates; costs might include cost-shifts, impacts on utility planning, and possible reliability implications.
4. Does the proposal result in a cost-shift?
5. Are possible cost-shifts minor, reasonable and non-regressive? A threshold question here, though, might be whether and to what extent any cost-shift is acceptable.
6. If costs arise as a result of DER deployment, will the rate structure ensure that the “causer” of the cost pays?
7. Does the proposed system ensure equitable access to benefits, such as decreases in electric bills?
8. Are there alternatives to realizing the core public policy objectives at issue in the proposed DER compensation mechanism? Are there alternative paths to the public good at issue?
9. Does the proposal further core notions of regulatory neutrality and parity? Does the proposal endorse a particular technology or business model, or does it create opportunities for an array of market participants?
10. Are there alternative models, incentive structures or regulatory policies that might accomplish the stated goal of the proposed system in a more efficient, economical, and/or prudent manner?