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September 2, 2016

The Honorable Travis Kavulla
President, National Association of Regulated Utility Commissioners
1101 Vermont Avenue, NW
Suite 200
Washington, DC 20005

RE: Comments to NARUC Manual on Distributed Energy Resources Compensation

Dear President Kavulla;

Advanced Energy Management Alliance (AEMA) respectfully submits these comments to the draft staff manual¹ on Distributed Energy Resources (DER) Compensation. AEMA believes that, as our utility grid is in a state of incredible flux and change, this is a critical effort on the part of NARUC. We are grateful for the opportunity for stakeholders to participate and would urge NARUC leadership to fully consider all comments, allow them to be made public, and ensure that the ensuing process is thoughtful and iterative.

I. Introduction.

AEMA² is a trade association under Section 501(c)(6) of the Federal tax code whose members include demand response providers of commercial, industrial, and residential services; consumers that use demand response and advanced energy management tools to reduce the cost of energy; and organizations that provide services and choices to these consumers and providers. Our members are united in an effort to overcome barriers to

¹ Draft NARUC Manual on Distributed Energy Resources Compensation, Staff Subcommittee on Rate Design, 2016.

² See AEMA website at <http://aem-alliance.org> for more details about the organization.

nationwide use of demand response and advanced energy management technologies for a more efficient, reliable, and resilient grid. This filing represents the opinions of AEMA rather than those of individual association members.

Our alliance of providers and supporters of demand response is united to overcome barriers to nationwide use of demand response for an environmentally preferable and more reliable grid. We advocate for policies that empower and compensate customers to manage their energy usage to make the electric grid more efficient, more reliable, more environmentally friendly, and less expensive.

While our electric grid is considered an engineering marvel, new technologies, applications and business models are changing the way it operates and the manner in which consumers interact with the system. Given the increasing demand for electricity, public policy must allow for innovative applications and technologies to become part of the grid infrastructure in ways that do not compromise the system, but instead provide additional resources and benefits. Nowhere are these changes occurring more quickly than on the distributed side of the system. As a result, it is critical that state regulatory policy allow for utilities, consumers, and innovators to fully participate in this evolving grid.

II. Demand Response Benefits

Of concern to AEMA in the NARUC manual is the seeming focus on costs rather than benefits of distributed energy resources, including demand response. Demand response programs in states, regional transmission organizations (“RTOs”), and Independent System Operators (“ISOs”), have historical and empirical evidence to indicate that these programs:

- Reduce emissions from fossil-fueled EGUs by an estimated 2%, as detailed in the study by Navigant Consulting attached as Attachment A to AEMA’s

Comments on the Environmental Protection Agency's ("EPA") Draft Clean Power Plan;³

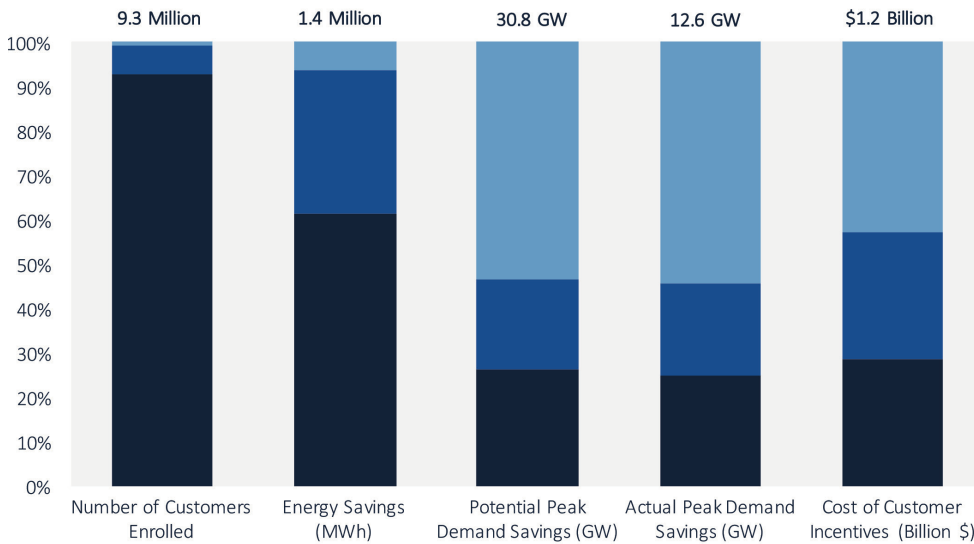
- Can be delivered at very low cost, especially relative to other grid technologies, in turn placing downward pressure on overall energy costs;
- Have proven technically feasible, as evidenced by the greater than 28,000 megawatts participating in wholesale electricity markets in 2012;⁴
- Facilitate the implementation of renewable energy technologies such as solar and wind energy, key to implementation of state greenhouse gas reduction goals (both internal to states and as a result of the Clean Power Plan); and
- Impact energy usage during periods when the electricity grid is most constrained, with evaluation, measurement and verification protocols for demand response that have tracked energy use reductions.

GTM Research recently published a report that included the below graph showing dollar and energy savings of demand response (darkest residential, medium commercial, lighter industrial), *Sectoral Composition and Breakdown of Demand Response*.

³ Navigant Consulting Study of Carbon Dioxide Reductions from Demand Response ("Navigant Study"), Attachment A to the AEMA's Comments, at 17. <http://aem-alliance.org/advanced-energy-management-alliance-touts-demand-response-as-tool-in-clean-power-plan/>

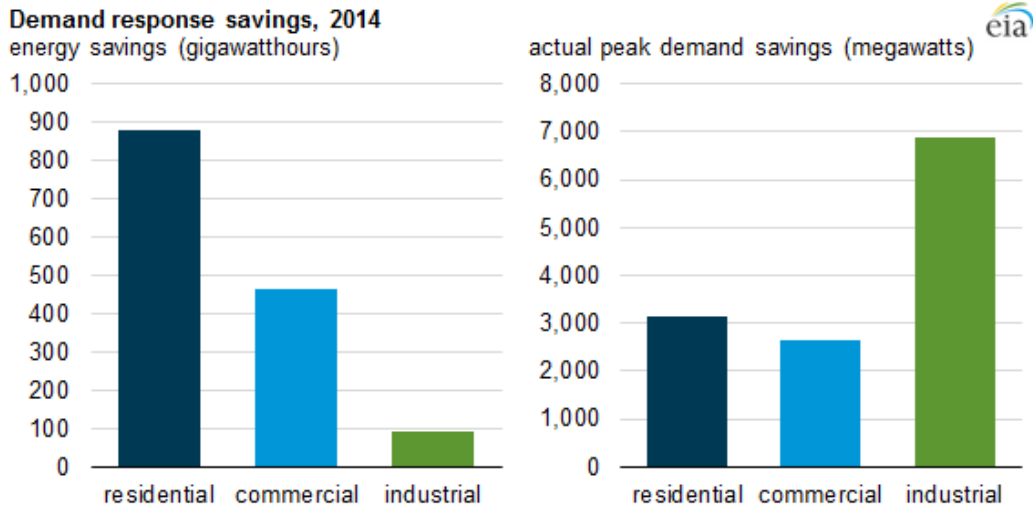
⁴ 2013 Assessment of Demand Response and Advanced Metering, Federal Energy Regulatory Commission, Staff Report, October 2013: <http://www.ferc.gov/legal/staff-reports/2013/oct-demand-response.pdf>.

Source: GTM Research⁵



The Energy Information Administration also graphed and noted that demand response saves energy and reduces peak demand.⁶

Source: Energy Information Administration



⁵ GTM Research Report, U.S. Wholesale DER Aggregation: Q1 2016. <http://www.greentechmedia.com/research/report/us-wholesale-der-aggregation-q1-2016> and <https://www.greentechmedia.com/articles/read/slideshow-demand-response-at-the-grid-edge>

⁶ <http://www.eia.gov/todayinenergy/detail.cfm?id=24872>

In addition to “curtailment services”, as aggregators of resources, AEMA members bring myriad demand resources to the market, including rapid response load drop, slower response load drop, seasonal capabilities, annual capabilities, and back-up generation powered with different fuels. Depending on the resource needs of the grid operator and utility, any combination of those resources might be called upon to meet the grid requirements. As demand response is considered in the context of state regulatory policy, these benefits should be taken into account and valued either through state programs or the market.

III. Specific Recommendations

Include all distributed energy resources—not just generation—in consideration of DER.

In order to consider benefits of demand response and advanced energy management when calculating costs and benefits of DER, it is imperative to include demand response in the full definition and discussion of DER. Following the initial chapter in the manual, much of the discussion focuses on DER as limited to distributed *generation*, such as solar photovoltaic applications. AEMA believes all distributed resources—demand response, energy efficiency, solar, energy storage, intelligent communications—must be fully taken into consideration as part of DER. Advanced energy management technologies and applications can operate complimentary with distributed generation to enhance the benefits of all DER technologies.

Include additional case studies and state policy and program examples.

Many states have moved forward with DER programs and have learned lessons—both through successes and failures—that can be beneficial to regulators. It would be helpful to the NARUC community to include more examples of successful model policies and programs in a more holistic way throughout the manual.

Ensure state policies align with Independent System Operator (ISO) programs and tariffs to enable more synergy.

For example, the manual⁷ does not consider situations--outside of Texas--in restructured states that the utility role is also to provide meter reads/usage amounts to the ISO for settlement. It is important for Commissions and staff to take this into account. Another section of the manual should be edited to synchronize more with ISO requirements.⁸ A state that wants effective use of the system for peak periods--for example, with PJM—the state tariff structure should align the use with how the ISO charges for peak load contribution.

Recognize that utilities are not the only entities that purchase power.

The manual implies for restructured states that only utilities purchase power.⁹ The manual does not take into account that a supplier could purchase power and the Commission authorize a proper settlement for that energy purchase. There exist specific requirements in tariff for pushing proper data for usage in/out to suppliers, as well as proper settlement data to the ISO for the usage in/out. The manual does not sufficiently discuss options when the supplier is the purchaser, thus the focus is on utility credits going toward transmission and distribution (T&D) instead of just generation (G) on the bill. This in turn reduces cost recovery for utility T&D. However, if a customer could only get energy purchased from a retail supplier then a Commission issue list is reduced because now the customer bill is separated only for G. T&D are paid for as they are used without an offsetting credit or with only a single demand type credit/charge related to the benefits listed above depending on how their system functions and is used.

DER investment should not be limited to or even required by utilities.

The manual implies that Commissions should require utility investment in DER.¹⁰ While it is important for DER to be compensated as needed and beneficial by the utility, the manual seems to indicate that utilities will allow a limited amount of DER, after which no additional will be allowed on the system. This manner of thinking would stifle innovation

⁷ Manual, page 11, C. 1

⁸ Manual, page 52, 4.

⁹ Manual, page 35, D. 1

¹⁰ Manual, page 46.

and the ability of consumers to make cost-effective and environmentally preferable choices. In fact, grid edge entrepreneurs may prefer to make investments outside of utility investments that can provide additional benefits to the system. Those innovators should be allowed full market access and competitive ability to participate in DER. In other words, third parties, including aggregators, should be allowed by regulators and their utilities to fully participate in the market with their assets. Markets and, in particular, meter data processes, are being designed in many cases only for competitive electric suppliers, not for competitive service providers. AEMA strongly supports non-discriminatory product design and meter access.

IV. Conclusion

Again, AEMA praises NARUC staff for undertaking this exercise to develop guidance for state utility regulators on distributed energy resources. We are hopeful that, given productive stakeholder input, many of these recommendations will be brought forward by NARUC so that our electric grid can fully enable innovation that creates additional value to our consumers and utilities alike.

Thank you for consideration of these comments.

Respectfully submitted,



Katherine Hamilton
Executive Director
Advanced Energy Management Alliance