

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

Participation of Distributed Energy Resource            )  
Aggregations in Markets Operated by Regional        )  
Transmission Organizations and Independent            )  
System Operators                                                )

Docket No. RM18-9-000

**SUPPLEMENTAL COMMENTS TO THE POST-TECHNICAL CONFERENCE OF  
ADVANCED ENERGY MANAGEMENT ALLIANCE**

Pursuant to 18 CFR Part 35, Advanced Energy Management Alliance (“AEMA”)<sup>1</sup> submits these supplemental comments (“Supplemental Comments”) regarding the Federal Energy Regulatory Commission (“Commission” or “FERC”) Docket No. RM18-9-000 Notice Inviting Post-Technical Conference Comments on Participation of Distributed Energy Resource (“DER”) Aggregations in Markets Operated by Regional Transmission Organizations (“RTO”) and Independent System Operators (“ISO”). The Commission issued the Noticing Inviting Post-Technical Conference Comments on April 27, 2018 in response to the Technical Conference held on April 10 and April 11, 2018. These comments are supplemental to comments originally filed in RM18-9-000 by AEMA on June 25, 2018.

AEMA is a trade association under Section 501(c)(6) of the Federal tax code whose members include national distributed energy resource companies and advanced energy management service and technology providers, including demand response (“DR”) providers, as well as some of the nation’s largest demand response and distributed energy resources. AEMA members support the beneficial incorporation of distributed energy resources (“DERs”) into wholesale markets for purposes of achieving electricity cost savings for consumers, contributing

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<sup>1</sup> Advanced Energy Management Alliance website: <http://aem-alliance.org>.

to system reliability, and ensuring balanced price formation. This filing represents the collective consensus of AEMA as an organization, although it does not necessarily represent the individual positions of the full diversity of AEMA member companies.

## **I. EXECUTIVE SUMMARY**

AEMA submits these supplemental comments to demonstrate to the Commission the breadth of state-level and RTO/ISO-level DER activity since the convening of the Post-Technical Conference in April of 2018. Much of this activity centers around topics the Commission is actively considering, including but not limited to dual participation, eligibility for wholesale market participation and the role of the Relevant Electric Retail Regulatory Authority (“RERRA”), and state-level planning for DERs including interconnection processes. AEMA members have been actively engaged in these discussions. AEMA maintains the positions we took in our June 25, 2018 comments, and we believe these state and RTO/ISO developments can further inform the Commission’s position; as such, AEMA respectfully request the Commission consider these supplemental comments in RM18-9-000.

These developments support the following AEMA positions:

- The Commission should require that each RTO/ISO develop rules that facilitate the dual participation of the same DER in retail and wholesale programs, if such rules do not currently exist. The New York Independent System Operator (“NYISO”) recently offered a concrete proposal for dual participation as part of their DER Roadmap that demonstrates the feasibility of dual participation frameworks.
- Similar to Order 841, the Commission should allow all DERs the option of participating directly or through an aggregator in wholesale markets. As demonstrated in the recent

March 15, 2019 filing made by the Arkansas Public Service Commission, this does not violate the jurisdiction of RERRAs, and still allows for cooperative federalism.

- FERC should recognize the clear distinction between the distribution interconnection process and the wholesale market registration process. RERRAs have authority over criteria for a non-discriminatory distribution interconnection process, and have the authority necessary to ensure that interconnecting DERs that wish to participate in the wholesale market do not create distribution reliability issues. FERC has authority over criteria for wholesale market registration and participation, and because of the existing authority of RERRAs and distribution utilities for interconnection, FERC does not need to cede non-discretionary authority over wholesale market registration to distribution utilities. These processes can work together to coordinate the operation of DER aggregations. As captured in this document, several states are actively working to safely and reliably integrate DERs onto the electric grid, including through the interconnection process.

AEMA recognizes the complexity of the issues before FERC, and we hope that our solutions-oriented approach over the course of the proceeding, as well as the information in this filing, will assist the Commission in reaching a decision.

## **II. AEMA SUMMARY OF ADVANCEMENT IN DER INTEGRATION**

Through its stakeholder participation on state and federal levels, AEMA has observed advancements in integrating DER across state and wholesale electric markets over the nine months since AEMA submitted its Post-Technical Conference Comments. In the sections below,

we summarize these advancements in the context of the issues that FERC is considering as part of the DER rulemaking.

### **A. Dual Participation in Retail and Wholesale Programs**

On February 28, 2019, as part of their “DER Roadmap” initiative, the NYISO presented a framework for allowing the same DER to participate in both retail and wholesale markets.<sup>2</sup> Specifically, the NYISO stated “The NYISO’s proposed market design will allow resources that provide Wholesale Market services to also provide services to another entity (e.g., the utility or a host facility)...*The NYISO believes that providing resources with the flexibility to meet wholesale and distribution system needs will deliver the maximum benefit to New York electricity consumers*” (emphasis added). As part of the framework, the NYISO is proposing that DERs “Appropriately offer into the wholesale markets to reflect any non-wholesale (e.g., retail) obligations” and DERs “be required to follow NYISO dispatch instructions at all times” and “submit offers to NYISO when providing non-wholesale service.”

Such requirements will enable DERs to meet retail and wholesale obligations while allowing the NYISO to have visibility into wholesale DERs even when they are responding to retail-level signals. Such retail-level signals could include a Non-Wires Alternative solution to offset traditional distribution infrastructure investment or using a DER to reduce on-site distribution-level demand charges. AEMA is supportive of RTOs/ISOs having such visibility and believe that this type of high-level framework can facilitate retail-wholesale coordination. The New York Public Service Commission has also recently convened a Market Design and

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<sup>2</sup> “DER Energy Market Design: Dual Participation”. New York Independent System Operator, Feb 2018, 2019. <https://www.nyiso.com/documents/20142/5256593/DER%20Energy%20Market%20Design%20Dual%20Participation%20022819.pdf/cfaf3647-4b77-a706-b86d-24129d460ecf>.

Integration Working Group to further enable this coordination.<sup>3</sup> Although New York is a single state ISO, NYISO's dual participation framework can be replicated by other RTO/ISOs that may lack such a framework now. In multi-state RTO/ISOs, nothing stops states and RTO/ISOs from convening similar working groups as the one convened by the New York Public Service Commission ("NYPSC") as necessary. As detailed later in these Supplemental Comments, PJM Interconnection, LLC ("PJM") is already convening such a group, and FERC could recommend or direct each RTO/ISO to convene similar working groups, with state participation as voluntary. Any such working group must allow for participation by DER Aggregators, as is the case in the NYISO and PJM processes.

And as discussed in AEMA's June 25, 2018 comments, there are several options available to prevent a DER from receiving compensation twice for the "same service," and many states already have policies in place that protect against this happening. FERC does not need to be overly prescriptive in this regard, but rather offer guidance to RTOs/ISOs on what they consider to be the "same service"<sup>4</sup> and/or adopt the type of flexible solution AEMA recommended in our June 25, 2018 comments.

We concur with the NYISO that allowing dual participation will result in the maximum benefit to customers, and these activities in New York lend support to AEMA's position that the Commission should allow dual participation.

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<sup>3</sup> *In the Matter of Energy Storage Deployment Program*. Order Establishing Energy Storage Goal and Deployment Policy, page 103. State Of New York Public Service Commission, Case 18-E-0130, December 13, 2018.

<sup>4</sup> In AEMA's June 25, 2018 comments, we recommended the Commission adopt the following guidance: "The "same service" is limited to instances where a retail tariff or program compensates a DER for a wholesale revenue stream, and at the same time, the same exact kW or kWh from that DER is receiving compensation from the wholesale market for the same wholesale revenue stream. This is a straightforward determination and clear examples exist. For instance, if a DER on a net metering tariff or participating in a retail-level program receives compensation for the value of wholesale energy for every kWh of output or reduction, and at the same time, the same kWh from the DER also receives wholesale energy market compensation, it is a "same service." The DER has provided no incremental value to the retail and wholesale system, and has earned the same revenue stream twice for the same kWh of dispatch.

## **B. DERs Should Always Have the Option of Direct Participation in Wholesale Markets**

AEMA generally supports the March 15, 2019 filing made by the Arkansas Public Service Commission in this docket. Specifically, we strongly endorse the statement “competitive wholesale markets deliver consumer benefits and drive technological innovation, and is eager for DERs to be able to access Regional Transmission Organization (RTO)/Independent System Operator (ISO) markets on equal footing with traditional generation and demand-side resources.”<sup>5</sup> Under the Arkansas proposal, DERs would always have the option of participating in the wholesale market through DER Aggregators. For states, mainly vertically integrated ones, that wish to exert greater control over the integration of DERs into their system planning, they can create attractive retail tariffs that mimic wholesale market outcomes and motivate DERs to participate under those tariffs. Regardless of any action taken under retail tariffs, DERs must have the option of participating in the wholesale market, regardless of location.

In addition to the strong legal and economic justifications for allowing DERs this option, states across the country are actively planning for the integration of DERs onto their systems, including but not limited to steps to ensure they are technically prepared. We provide greater detail on this in the following section.

## **C. States are Actively Planning for the Integration of DERs onto the Electrical Grid**

AEMA applauds the actions taken by several states to promote and/or plan for the growth of DERs on their system. States are demonstrating their preparation for DERs to reliably interconnect to their distribution systems. States are actively working to balance the full

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<sup>5</sup> Supplemental Comments of Arkansas Public Service Commission, Docket Nos. RM16-23-000 *et al.*, March 15, 2019 (“Supplemental Comments”).

utilization of DERs with distribution system operator (“DSO”) and RTOs/ISOs needs for visibility and insight into DERs operations. This includes interconnection processes in which states and distribution utilities are exerting their authority to ensure a safe and reliable electric grid. As AEMA detailed in our June 25, 2018 comments, these interconnection processes often account for both retail and wholesale participation and obviate the need for a lengthy distribution review upon wholesale participation registration by the DER. In those comments, we proposed a solution that enables distribution utilities to verify that a DER has received all necessary distribution-level interconnection approval before registering in the wholesale market, without creating an unnecessary barrier to entry or FERC handing over discretionary authority to the states and distribution utilities.

In Table 1 below, we summarize recent DER-related developments in several states. This is not meant to be an exhaustive document, but rather demonstrates the diversity and breadth of DER activity at the state-level over the last year alone. States such as California, who are already leaders on integrating DERs onto their grids through robust and streamlined interconnection processes, are not represented in this table but continue to set an example for other states; indeed, California’s interconnection rules are frequently cited and referenced in the state proceedings listed below. Through these proceedings, states are demonstrating their ability to:

- Exert their retail jurisdiction and authority over the distribution grid via the interconnection process;
- Plan for and incorporate DERs by ensuring any DER that could access the wholesale market first goes through the interconnection process to ensure the distribution grid safely and reliably accommodates their activity; and

- Collaborate with their regional RTOs/ISOs to develop a coordination and communication framework to harmonize transmission- and distribution-level operations of DERs.

Together, these activities support AEMA’s positions that:

- FERC should not grant states any ability to opt-out of any rule establishing DER participation models at RTOs/ISOs that would prevent DERs from accessing the wholesale markets;
- FERC should not grant additional authority to distribution providers by, for example, allowing them more control over the wholesale DER registration process than currently exists for DR resources; and
- FERC should allow for the dual participation of DERs.

*Table 1: Overview of state and RTO/ISO proceedings related to DER integration*

<b>State</b>	<b>Topics Covered that Relate to FERC DER NOPR</b>	<b>Details</b>
Arkansas <sup>6</sup>	DER aggregations, the role of distribution utilities, and interconnection standards	The Arkansas Public Service Commission issued a July 2018 Order to start exploring DER aggregation matters, including discussing the appropriate role for distribution utilities and interconnection standards.
Missouri <sup>7</sup>	Integration of DERs and distribution system planning	The Missouri Public Service Commission held a workshop and solicited comments in May/June 2018 on state rules regarding distribution system planning and the study/integration of DERs.
Arizona <sup>8</sup>	Distribution interconnection	Arizona Corporation Commission ordered staff to issue a NOPR to adopt

<sup>6</sup> *In the matter of an investigation of policies related to distributed energy resources.* Arkansas Public Service Commission Docket No. 16-028-U, Order No. 10, July 27, 2018.

<sup>7</sup> *In the matter of a working case to explore emerging issues in utility regulation.* Order scheduling a workshop meeting. File No. EW-2017-0245, dated April 27, 2018.

<sup>8</sup> *In the matter of the notice of proposed rulemaking regarding interconnection of distributed generation facilities.* Arizona Commerce Commission. Decision No. 77056 dated Jan 15, 2019 in Docket No. RE-00000A-07-0609.



		rules updating the interconnection process to incorporate energy storage and smaller DERs in January 2019.
Minnesota <sup>9</sup>	Distribution interconnection	The Minnesota Public Utility Commission convened a Distributed Generation Work Group in 2018 that led to the Commission’s approval of a Final Draft for DER Interconnection Process in March 2019.
Maryland <sup>10</sup>	Distribution interconnection	Maryland Public Service Commission is readying to release request to initiate a rulemaking to consider codifying recommendations for interconnection process improvements under the second phase of its PC44 Interconnection Workgroup, additive to improvements adopted in October 2018 under Phase 1.
Ohio <sup>11</sup>	Review of current interconnection services and standards	Public Utility Commission of Ohio convened a workshop in September 2018 to solicit feedback on needed interconnection revisions.
MISO States <sup>12</sup>	Coordination across the transmission and distribution interface; understanding of distribution interconnection standards	DER is one of Organization of MISO States’ (“OMS”) 2019 Strategic Priorities, including the objective to “lead stakeholder process on DER-related policies, market rules, and planning processes throughout the MISO region.” Jointly, MISO and the OMS have convened a series of DER workshops that cover a range of policy and technical issues.
New York <sup>13</sup>	Coordination between distribution utilities, ISO, and DER operators	The New York Public Service Commission convened a Market Design and Integration Working Group in February 2019, the scope of which

<sup>9</sup> *In the Matter of Updating the Generic Standards for the Interconnection and Operation of Distributed Generation Facilities Established under Minn. Stat. §216B.1611.* Notice of updated draft Minnesota interconnection process and agreement and associated utility tariff dockets. Minnesota PUC Docket No. E999/CI-16-521, Document ID 201811-148137-06, dated Nov 30, 2018.

<sup>10</sup> *In the matter of transforming Maryland’s electric distribution systems to ensure that electric service is customer-centered, affordable, reliable and environmentally sustainable in Maryland.* Leader of Phase II of the Public Conference 44 Interconnection Workgroup released intent to submit Phase II Final Report and a Request to Initiate a Rulemaking Associated with Public Conference 44 (“PC44”) and Interconnection Processes at a February 26, 2019 meeting.

<sup>11</sup> *In the matter of the Commission’s Review of Chapter4901:1-22 of the Ohio Administrative Code Regarding Interconnection Services.* Attorney Examiner Entry scheduling workshop for 09/11/2018 in accordance with Paragraph 6. Public Utilities Commission of Ohio Docket No. 18-0884-EL-ORD, dated Aug 1, 2018.

<sup>12</sup> See “OMS Strategic Priorities” from <https://www.misostates.org/index.php/about/strategic-priorities>.

<sup>13</sup> *In the Matter of Energy Storage Deployment Program.* Notice of formation of market design and integration working group and implementation plan. Case 18-E-0130, issued Feb 22, 2019.

		includes to “Determine the needs, both technical and economic, for coordinating DER operations from the perspectives of the NYISO, the utilities, and DER operators.”
PJM & PJM states <sup>14</sup>	Technical issues related to distribution-transmission coordination of DERs	PJM and Distribution Providers launched a collaborative effort in January 2019 to ensure DER ride-through capabilities can support both the distribution and transmission reliability standards and prevent interference with distribution protection schemes. New effort is the result of a DER ride through workshop jointly held between PJM and distribution providers in October 2018. <sup>15</sup>
Massachusetts <sup>16</sup>	Dual participation of DERs and not compensating twice for same revenue stream	Massachusetts Department of Public Utilities opened an inquiry into rules for DER developers to be eligible to participate in ISO-NE’s Forward Capacity Market, where DER would buyout capacity rights from utilities for net metered projects if they wish to offer the DER in ISO-NE capacity auction, so DERs only receive capacity compensation once.

Clearly, these examples show there is no cause for concern that DERs would be able to register to participate in the RTO/ISO wholesale markets to the surprise of the RERRA or the distribution utility. States are actively planning for increased levels of DERs, enhancing interconnection processes to ensure DERs safely and reliably interconnect on the distribution

<sup>14</sup> PJM Interconnection launched its Distributed Energy Resource Ride Through Task Force in collaboration with Distribution System Operators in January 2019. For more information, see <https://www.pjm.com/committees-and-groups/task-forces/derrttf.aspx>.

<sup>15</sup> PJM, Dominion, and EPRI jointly led workshop on DER ride through settings to identify relevant technical considerations and interests across transmission and distribution, see <https://www.pjm.com/-/media/committees-groups/stakeholder-meetings/ride-through-workshop/2018-agenda-ride-through-workshop.ashx?la=en>.

<sup>16</sup> *Inquiry by the Department of Public Utilities on its own Motion into the eligibility of energy storage systems to net meter pursuant to G.L. c. 164, §§ 138-140 and 220 CMR 18.00, and application of the net metering rules and regulations relating to the participation of certain net metering facilities in the Forward Capacity Market pursuant to Net Metering Tariff, D.P.U. 09-03-A (2009). Net Metering, Smart Provision, and the Forward Capacity Market. Massachusetts DPU Docket No. 17-146, Order issued Feb 1, 2019.*

system, and partnering with distribution utilities and RTOs/ISOs to increase the utilities' visibility of DER operations.

### **III. CONCLUSION**

WHEREFORE, AEMA respectfully requests the Commission accept the Supplemental Comments in this proceeding and act to create a framework that affords all DERs the right to non-discriminatory, open access to wholesale market opportunities.

Respectfully submitted,



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March 29, 2019

## CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C., this March 29, 2019.



/s/ Katherine Hamilton

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