



January 24, 2022

PJM Board of Managers
c/o Mark Takahashi, Chairman
c/o Mr. Manu Asthana, PJM President and CEO
PJM Interconnection, L.L.C.
2750 Monroe Blvd
Audubon, PA 19403-2497

Dear Mr. Takahashi and Mr. Asthana,

Advanced Energy Economy (AEE), on behalf of itself and Advanced Energy Management Alliance (AEMA), writes to express concern regarding PJM's proposed treatment of net energy metered distributed energy resources (DERs) in its upcoming Order No. 2222 compliance filing at the Federal Energy Regulatory Commission (FERC).¹ AEE and AEMA appreciate that PJM Staff and stakeholders in the Distributed and Inverter-Based Resources Subcommittee have committed significant time and resources to the Order No. 2222 compliance process. While we may raise concerns regarding other aspects of PJM's proposal to comply with the requirements of Order No. 2222 when it is filed at FERC, we are especially concerned that the current proposal will effectively exclude most residential and many commercial & industrial customer DERs from participating in the PJM capacity market, resulting in increased costs, the loss of reliability benefits for PJM customers, and the loss of visibility of DERs for PJM operators.

Specifically, our understanding is that PJM plans to set forth overly broad restrictions on dual participation by a Component DER (defined as all of the controllable loads and generation located behind a single retail meter) in both a retail program and the PJM wholesale markets through an aggregation, particularly for Component DERs that include an asset that participates in a retail net metering program. Under PJM's proposed framework as we understand it, any Component DER that includes an asset that is part of a retail net-metering program would be ineligible to provide capacity in the PJM market. In many cases this includes both a rooftop solar resource and an associated storage device, or solar combined with controllable load, even though only the solar resource is included in the retail net-metering program.

This blanket exclusion of net energy metered DERs from the capacity market would create unjust and unreasonable barriers to the ability of customers to participate in aggregations of DERs in the PJM market and would be in direct conflict with Order No. 2222, which requires that any restrictions on DER participation in both retail programs and the wholesale markets be "narrowly designed to avoid counting more than once the services provided by [DERs]

¹ This letter represents the collective consensus of AEE and AEMA as organizations, although it does not necessarily represent the individual positions of the full diversity of AEE and AEMA's member companies.

in RTO/ISO markets.”² Such a prohibition is unnecessarily broad, considering that the DERs most likely to be paired with solar are often not monetized through net metering programs, especially for capacity purposes. In creating this prohibition, PJM has failed to provide evidence that net metering programs already compensate these DERs for capacity.

Net energy metered resources represent a substantial number of DERs within PJM states. PJM estimates approximately 7,000 MW of non-wholesale DER in the region and predicts that power from rooftop solar installations will reach nearly 12,000 MW over the next 15 years.³ This is a significant resource that can provide real value to PJM, especially when paired with batteries and electric vehicles. AEE and AEMA are concerned that the proposed blanket restriction on the participation of net energy metered DERs in the PJM capacity market will exclude a broad swath of customers from the PJM market (especially residential but also many commercial and industrial customers), leading to substantial out-of-market activity with no visibility for PJM grid operators. This would result in the loss of the reliability and market efficiency contributions of numerous resources in existence or under development in the PJM region in response to state policy and customer preferences, such as rooftop solar, energy storage, bidirectional electric vehicles and charging equipment, and demand response enabled by smart thermostats and home devices.

As we understand it, PJM is concerned that the existence of net energy metering compensation would act as a barrier to an aggregated DER meeting its obligations as a capacity resource. To the contrary, as demonstrated in other markets (in particular, ISO New England), it is entirely possible for the host customer of a net metered solar resource to be compensated by its electric utility under the net energy metering rules, and for the utility to be paid for the energy injections into the wholesale market, while operating in conformance with capacity market rules regarding energy market participation as they apply to intermittent generation. For locations that also include storage, a blanket prohibition on capacity market participation is doubly problematic. As noted above, only the solar resource is included in the net energy metering program, and the battery storage provides a degree of control over the site’s energy output that enhances its ability to contribute to reliable and efficient system operations.

In conclusion, our organizations respectfully ask that PJM avoid overly broad restrictions on dual participation of DERs in both retail programs and the PJM markets and ensure that DERs can provide all of the services they are capable of providing through aggregation in PJM.

² *Participation of Distributed Energy Resource Aggregations in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Order No. 2222, 172 FERC ¶ 61,247 at P 160 (2020), *order on reh’g*, Order No. 2222-A, 174 FERC ¶ 61,197 (2021), *order on reh’g*, Order No. 2222-B, 175 FERC ¶ 61,227 (2021).

³ PJM Distributed Energy Resources, <https://www.pjm.com/-/media/about-pjm/newsroom/fact-sheets/distributed-energy-resources.ashx?la=en>; PJM Inside Lines – Growth of Solar on PJM’s Horizon, <https://insidelines.pjm.com/growth-of-solar-on-pjms-horizon/>

Sincerely,

Handwritten signature of Jeff Dennis in black ink.

Jeff Dennis
General Counsel and Managing Director
Advanced Energy Economy
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Handwritten signature of Katherine Hamilton in black ink.

Katherine Hamilton
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