

PENNSYLVANIA PUBLIC UTILITY COMMISSION
Harrisburg, Pennsylvania 17120

**Distributed Energy Resources
Participation in Wholesale Markets**

**Public Meeting of November 9, 2023
3044115-CMR**

**JOINT MOTION OF CHAIRMAN STEPHEN M. DeFRANK
AND VICE CHAIR KIMBERLY BARROW**

On September 17, 2020, the Federal Energy Regulatory Commission (FERC) issued Order No. 2222, establishing the requirement that Regional Transmission Organizations allow Distributed Energy Resources (DERs) to participate in wholesale markets through aggregations.

Also known as Virtual Power Plants (VPPs), Distributed Energy Resource Aggregations (DERAs) have the potential to deploy a wide range of small distribution-system-interconnected resources to ensure resource adequacy without the need to build out expensive transmission and distribution upgrades. Through DERAs, many different types of technologies could be deployed to increase energy efficiency, use available energy when it is the cheapest, cleanest, and most plentiful, or even inject energy into the distribution and bulk power systems. By way of some examples, small rooftop solar systems could inject energy while managed charging by electric vehicles soak up that plentiful electricity, and at the same time smart thermostats or smart water heaters could shift customer demand to different periods of the day, depending on the needs of the grid.

This is possible even while saving money for consumers. Because DERs all operate close to the load the distribution system needs to serve, sometimes at the same site, resource adequacy can be maintained without building vast transmission and distribution networks to move power from place to place. According to one analysis by the Brattle Group, “a 60 Gigawatt VPP could meet future resource adequacy needs at a net cost that is \$15 billion to \$35 billion lower” than the cost of gas peaker or battery storage deployment for the same reliability benefit.¹ And that figure was not accounting for any valuable resilience or emissions benefits.

PJM is currently engaging in the compliance process at FERC for Order No. 2222, with a target to begin allowing DERA participation in the wholesale markets for the 2026/2027 Delivery Year. In order to accomplish the benefits of deploying VPPs, state rules may need to be updated or created. So that Pennsylvania is not left behind, we believe those rules should be finalized in time for the 2026/2027 PJM Delivery Year. Therefore, we also believe that the Commission should formally initiate an investigative and rulemaking process regarding Order No. 2222. The investigation and rulemaking should address, among other things:

- Changes to distribution DER interconnection rules.
- Changes to metering requirements.

¹ See <https://www.brattle.com/wp-content/uploads/2023/04/Real-Reliability-The-Value-of-Virtual-Power-Full-Report.pdf>.

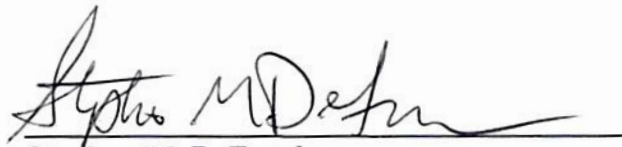
- Cost allocation issues for facilities allowing the interconnection of DERs.
- Adjudication of disputes regarding the registration of DERs.
- Management of distribution utility overrides of DERs to maintain reliability, and disputes arising therefrom.
- Protection of DER owners from unfair trade practices or excessive risk in the wholesale markets.
- Prevention of Double Compensation or Double Counting between retail and wholesale market participation, including rules governing DER owners' ability to switch between retail and wholesale market participation.
- Any necessary electronic data exchange revisions.

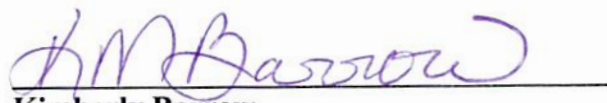
Some of these topics may be appropriately resolved in regulations while others might be appropriate for policy statements, contained in Electric Distribution Company tariffs, or adjudicated on a case-by-case basis. We therefore seek comments on how the Commission should administer each topic.

THEREFORE, WE MOVE THAT:

1. The Law Bureau, in consultation with the Bureau of Technical Utility Services, prepare an Advance Notice of Proposed Rulemaking regarding any changes or additions needed to Commission regulations or Policy Statements in order to align with Federal Energy Regulatory Commission Order No. 2222.
2. The Advance Notice of Proposed Rulemaking be prepared for action at a Commission public meeting on or before February 28, 2024.
3. The Law Bureau is authorized to consult with other state commissions in the PJM region to harmonize, to the extent practicable, potential Order No. 2222 rules and policies of the Pennsylvania Public Utility Commission with those of other states.

November 9, 2023
Date


Stephen M. DeFrank
Chairman


Kimberly Barrow
Vice Chair