

April 22, 2024

Sherri L. Golden, RMC Secretary of the Board New Jersey Board of Public Utilities 44 South Clinton Ave., 1st Floor PO Box 350 Trenton, NJ 08625 – 0350 Phone: 609-292-1599 Email: board.secretary@bpu.nj.gov

RE: IN THE MATTER OF NEW JERSEY'S DISTRIBUTED ENERGY RESOURCE PARTICIPATION IN REGIONAL WHOLESALE ELECTRICITY MARKETS (BPU Docket No. EO24020116)

Dear Secretary Golden,

Uplight appreciates the opportunity to provide these comments in response to the March 7, 2024 Request for Information as New Jersey looks to ensure that state level rules and regulations do not further block the pathway for wide-scale Distributed Energy Resource (DER) deployment, and seeks to better understand remaining barriers and concerns from stakeholders.

Respectfully submitted,

/s/ Adam Farabaugh

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BEFORE THE BOARD OF PUBLIC UTILITIES

In the Matter of New Jersey's Distributed Energy Resource Participation in Regional Wholesale Markets

Docket No. E024020116

April 19, 2024 Comments in Response to Request for Information

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INTRODUCTION

Uplight is a technology provider to over 80 electric and gas utilities across three continents providing utility customer engagement and grid-edge asset management software solutions to help utilities achieve their energy and carbon reduction goals. Collectively, Uplight manages over 8.5GWs of flexible capacity across multiple device classes enabling entities to effectively manage their DER assets inside and outside of wholesale markets. In New Jersey, Uplight works with PSE&G, New Jersey Natural Gas, Elizabethtown Gas, South Jersey Gas, and Rockland Electric implementing a number of solutions including Behavioral Home Energy Reports, Online Energy Usage Portals, Online Utility Marketplaces, and Electric Vehicle Charging Data Management. Additionally, with other utilities across the country and world, we implement DER management solutions connecting behind the meter resources in homes and businesses all the way to the grid control room and the backend systems relied upon.

SUMMARY OF RECOMMENDATIONS

Opening New Jersey to aggregators of DERs for participation in the PJM market is a crucial step in enabling both resources that are already in the field as well as resources not yet deployed to help deliver power across the PJM footprint in New Jersey at greater economic efficiencies. It also is likely to introduce complexities: DERAs (DER Aggregators) participating in the PJM market will respond to wholesale market price signals by leveraging DER technologies to curtail, shift, and/or modify load, as well as export power to the distribution network without any proactive communication or coordination from distribution utilities. This can be particularly problematic when the Electric Distribution Company (EDC) does not have visibility or input into control of these DERs to prevent or mitigate distribution system constraints. Conversely, these aggregations with the appropriate signals could incrementally provide distribution system value with appropriate structures and compensation. To help alleviate some of these challenges,

Uplight recommends that the NJBPU explore the following topics as part of its review of requirements for Order 2222 participation and compliance in New Jersey:

- Whether the EDCs should develop a DER aggregator participation tracking and monitoring platform to inform where resources are, how they are being called upon, and potentially whether this structure should include control capabilities which would also meet the PJM override requirement.
- 2. Whether EDCs should also compensate the DERs in the platform mentioned above for distribution system benefit.
- 3. Whether the EDCs should develop a parallel program to aggregators that enrolls aggregators that do not desire to directly participate in the PJM market to then facilitate PJM market participation on behalf of those aggregators.
- 4. The process and system that will be used to manage dual enrollment issues or other enrollment conflicts.

In many instances, the use of an "aggregator of aggregators" (AoA) system for each EDC could create efficiencies and alleviate many of the issues associated with these three topics.

RESPONSE TO NJBPU QUESTIONS

13. Do you have any comments or concerns about the classification of certain resources and their operating profiles as eligible for DERAs? Please state any associated control and/or compensation concerns.

Uplight has no comment at this time.

14. Do you believe that it is technically feasible to implement Order No. 2222 requirements by PJM's originally proposed 2026 implementation deadline? If not, please explain in detail why not. Are there any actions that PJM or NJBPU could take to make the implementation more efficient and timely?

Uplight believes that adopting an "aggregator of aggregators" system at each EDC would create a number of efficiencies across the interplays that will need to occur between the customer, EDC, and the third-party aggregator (e.g. DERA). In turn, these efficiencies will increase the likelihood that each EDC will be able to meet the technical requirements necessitated by Order No. 2222 by the 2026 implementation deadline.

An aggregator of aggregators approach would deploy a platform managed by the EDC that is a central administrator having visibility and potentially control capabilities across all DERAs that are participating in the PJM market in a utility's jurisdiction. This program design would introduce multiple roles, defined below:

- DERA (Distributed Energy Resource Aggregator): The provider(s) that enroll customers, aggregate their devices, and make capacity available for visibility and potentially dispatch by the AoA. These providers could include third-party providers, OEMs, or utility-administered vendors. It is expected that DERA Providers sit beneath and are integrated with the EDC AoA platform which can be a Grid DERMS or ADMS system that orchestrates supply across all utility resources.
- Aggregator of Aggregators (AoA): A platform provider that is capable of aggregating DERAs within a single platform. This AoA should serve as a central clearinghouse for all DERAs in a utility's jurisdiction by providing comprehensive forecasting and reporting across all Providers and optimizing Providers to dispatch the most cost-effective DERs available. The AoA may itself be a Provider as well, and should also be prepared to act as the Aggregator of Last Resort. The AoA may also run program marketing at the utility's discretion.
- Aggregator of Last Resort: The AoA could serve as the aggregator of last resort, aggregating devices for the EDC if not enough DERA Providers bid and/or should a Provider stop participating. In this role, the AoA can act as a backstop to aggregate any enrolled devices that are no longer under Provider management. This way, participating customers and assets are not stranded if DERA Providers choose to no longer participate.

To further explore through a BPU-convened process, an aggregator of aggregators could also serve as the initial interface customers experience at the EDC website when seeking to enroll in a third-party program. Through this interface, customers could:

- 1. Signify enrollment in the third-party program
- 2. Cross-check whether the customer is already enrolled in a third-party program and resolve enrollment conflicts
- 3. Confirm whether the customer is a Net-Energy Metered customer

- 4. Register the customer or its assets as necessary to satisfy the override requirement
- 5. Authorize any data access and data sharing

Taking an Aggregator of Aggregators approach would allow the DERA to participate directly in the PJM market or to participate through the EDC. However, visibility and control signals would flow through the EDC's platform which is connected to all DERAs allowing for effective management across DERAs ensuring distribution system benefits are also maximized. Also, this approach would allow for communication across the distribution entity, transmission entity, and the aggregators including things such as operating constraints to inform DER scheduling or dispatch.

15. Do you have any comments or questions about dispute resolution processes between DERAs and utilities?

Any dispute resolution process can be managed at the EDC, who will have visibility as to whether that customer is currently enrolled in a conflicting EDC program.

16. How should DER Aggregator performance be monitored/tracked/reported to the public?

DERA performance should not be monitored, tracked, or reported to the public on an individual basis. Performance tracking is the obligation of PJM and simply, given a lack of performance, the DERA will not be compensated. This is not information that should be required to be in the public domain. However, aggregated performance at the regional level as well as average kW/kWh delivered per customer (or similar metrics) should be reported to the BPU and be publicly available. This type of information will help customers decide which aggregator they may want to choose as they could obtain more revenue for their resource.

17. Should each EDC be required to formally establish pilot programs demonstrating their procedures and performance for DERA integration? Should these pilots be identical/consistent/unique across EDCs?

Uplight recommends that the NJBPU explore a pilot structure that tests the feasibility and benefits of the EDC serving as an optional aggregator of aggregators. Under this structure, aggregators could choose to enroll customers in an EDC program that would then be responsible for market-integrating those customers. The EDC could also allow the aggregator to

choose certain bidding parameters. The role of the EDC would then be to pass through any dispatch instructions from PJM to the aggregator. The benefit of this optional approach is that it opens an additional participation pathway for aggregators that want to enroll their technology or customers in a PJM resource without needing to invest in the technology or services to directly enable market participation. One example of this model is the Capacity Bidding Program in California.¹

The aggregator of aggregators approach also supports stacking programs that provide different services together. In particular, the NJBPU could explore distribution-level programs that would provide incremental value to the capacity and energy products that the aggregator would be providing to PJM. Under this paradigm, a customer may feasibly be able to participate in both the distribution-level program and with a third-party aggregator directly in the PJM market. However, facilitating this will require an EDC system that can manage these dual enrollments. One example of this model is the Commercial System Relief Program and the Distribution Load Relief Program in New York State.²

18. As part of NJBPU's efforts to help implement Order No. 2222 how much technical support from the NJBPU, separate from NJBPU's current Grid Modernization Forum working groups, is desired? Would a statewide stakeholder engagement process, working group, technical conference, or public platform for stakeholder engagement be beneficial?

Uplight recommends opening a separate working group to address these Order No. 2222 issues identified in this docket.

19. Are there any specific questions that you have for NJBPU that has not been addressed yet in the FERC Order, PJM's Compliance Filings, or NJBPU's Order No. 2222 outreach efforts?

Uplight has no comment at this time.

https://www.coned.com/-/media/files/coned/documents/save-energy-money/rebates-incentives-tax-credits/smart-usage-rewards/smart-usage-program-guidelines.pdf



¹ More information about the programs can be found at

https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/demand-response/de mand-response-workshops/2023-load-impact-protocol-workshops/drmec-py2022-cbp_aeg-04252023_fin al_v2.pdf.

² An example tariff can be found at:

20. Which of the following categories best describes the stakeholder perspective your comments provide?

DER Aggregator

CONCLUSION

Uplight appreciates this opportunity to provide comment on FERC Order No. 2222 implementation in New Jersey. Opening a specific workgroup to further address some of the topics raised will allow a productive sharing of experiences and viewpoints to arrive at an efficient approach to implementing DER participation in the PJM wholesale market in New Jersey. Further, considering an aggregator of aggregators approach will allow for EDCs to better manage their distribution systems while also enabling the appropriate compensation mechanisms for benefits delivered by third party aggregators. Uplight looks forward to a continued dialogue on this matter.