BEFORE THE BOARD OF PUBLIC UTILITIES OF THE STATE OF NEW JERSEY

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IN THE MATTER OF NEW JERSEY'S DISTRIBUTED ENERGY RESOURCE PARTICIPATION IN REGIONAL WHOLESALE ELECTRICITY MARKETS

Docket No. EO24020116

COMMENTS OF COLLABORATIVE UTILITY SOLUTIONS FOLLOWING THE TECHNICAL CONFERENCE HELD ON JANUARY 17, 2025

COMES NOW Collaborative Utility Solutions, and, in response to the Updated Notice of Technical Conference dated January 7, 2025, hereby submits the following Comments following the Technical Conference held on January 17, 2025.

Collaborative Utility Solutions ("CUS") is a 501(c)(6) non-profit entity that was formed to provide a collaborative <u>DER Registry¹</u> to the utility industry to save both significant time and money in the administrative process of enabling DERs to participate in both retail and wholesale market programs. Adoption of a centralized DER Registry will be critical to the successful integration of DERs at the lowest possible cost to ratepayers and market participants.

INTRODUCTION

At present, there is no single system that enables the appropriate stakeholders in the energy value chain visibility into the necessary set of information to know where DERs are, what they are, what they can do, or who owns them. While a distribution utility interconnection process may expose this information to the utility and consumer, it does not provide this information to independent system operators (ISOs), aggregators, regulators, or other stakeholders. Consumers are purchasing DERs, providers are installing them, distribution utilities are interconnecting them, and then grid operators are forced to deal with resources they cannot control, monitor, or even know where they are, and yet they are expected to continue to reliably operate the grid. In short, no one in the energy value chain is operating with a "single point of

¹ https://cusln.org/resources.

truth" for a DER. This shortcoming severely limits the electric grid operators' (both Distribution and ISO/Transmission) ability to effectively integrate DERs.

These themes were discussed extensively during the January 17th Technical Conference. For example, the DER Registration Panel discussed the opportunity for resources to provide more than one service in wholesale markets, or both retail and wholesale services from the same DERA. To avoid doublecounting and maximize the value of DERs, a DER Registry will ensure that relevant stakeholders have the information necessary to manage these complexities. Further, a DER Registry will facilitate processes to resolve disputes (and avoid disputes altogether) by providing clarity regarding who owns and controls which assets and so on. Panel 2, focusing on DER aggregation technical and infrastructure issues, elaborated further on how "business as usual" processes will fail as DERs and DER aggregations proliferate. The panel provided some examples of the status quo that result in major process gaps, such as: a lack of customer or aggregator access to key parameters necessary for qualification, manual rather than automated processes, disconnects between interconnection and DERA data reviews, and use of different metering data (leading to disputes). All of these issues point to the need for a "single source of truth," i.e., a DER Registry. Finally, the last panel focused on costs. We note that a single registry with shared costs will cost less to each user over time as the number of participants increases, thereby delivering the lowest cost solution to New Jersey ratepayers.

<u>A "SINGLE SOURCE OF TRUTH" IS ESSENTIAL FOR ACCURATE AND EFFECTIVE</u> <u>DER DATA MANAGEMENT</u>

As highlighted by the panel discussions at the Technical Conference held on January 17th, it will be critical to incorporate a comprehensive and holistic data collection and secure sharing strategy for accurate and effective DER data management. The following diagram illustrates this need for multiple entities to access a common source of DER data:



Starting at the top of the chart, DER data is created for the first time in the permitting process. Proceeding clockwise, a portion of this data is then needed in the interconnection process. Utilities and ISOs use the submitted data for planning and modeling in their systems to approve or reject the interconnection request. If approved, Geographic Information Systems (GIS) systems need the DER data to show where these resources are both geographically and electrically on their system. Once a utility and/or the RTO/ISO establishes a DER program or market, an aggregator (utility or competitive entity) needs the data to create their aggregations and submit them for review and approval to a retail program or wholesale market. At this point, each retail program or market will have established rules for the appropriate stakeholders to review and approve the aggregation. This process will include the DER owner, aggregator, Distribution System Operator (DSO), competitive retail supplier, scheduling coordinator, Transmission System Operator (TSO), and RTO/ISO, all with appropriate regulatory oversight. All of these stakeholders will need access to appropriate portions of the DER data. Customers that agree to participate in a retail program or market will need to assign the DER to an aggregator to allow the aggregation. Once approved, the EMS operational and market systems will require access to DER, Distributed Energy

Aggregated Resource (DEAR) and DERA data. Utilities will need to be able to present planned and unplanned outages on their system via a "distribution oasis" like currently exists for the transmission system as the distribution system will now have market resources embedded within it. And along the way, people will move in and out of houses with DERs installed on them, people will add batteries to their solar arrays, people will buy (add) and sell (delete) EVs, people will want to change aggregators or programs, new programs and market products will be created, grid operators will reconfigure their networks or market zones/nodes/regions, aggregators will go out of business, utilities will change names, and so on. These changes need to be updated for all interested stakeholders simultaneously rather than uncoordinated updates to multiple unrelated databases. In addition, operational systems will need to verify performance. Settlement systems will need access to the DER data for billing and payment. And, finally, regulatory and government agencies will require reporting on all of this. Attempting to consider any aspect of this process in isolation is very problematic and costly.

Further, having each utility forge its own unique path, such as through creating separate utility DER information databases, would be a highly inefficient and costly way to address the problem of data-sharing among the numerous stakeholders who need a "single source of truth" data set for DER management under FERC Order No. 2222, and could result in wasted effort and substantial implementation delays beyond 2026. PJM will need access to DER data for a variety of purposes to support wholesale market products and settlement, while utilities and DER providers also will need access to DER data.

A key takeaway from the Technical Conference is that there is a critical need for a centralized, standardized method to share DER information across stakeholders. While each state regulatory agency has the opportunity to develop interconnection requirements and other state-specific rules pertaining to DERs, interconnection and registration data related to DERs should be entered into a centralized DER Registry to enable the NJBPU, PJM, utilities, and DER providers to have a shared understanding of where these resources are in the system, what their capabilities are, and who owns them. A single source of truth will avoid duplicative, redundant, or conflicting efforts, resulting in the lowest cost solution for the benefit of ratepayers. Further, adopting a centralized DER Registry now would be the most administratively efficient

and cost effective as it would allow New Jersey to get a platform and process in place before there is a problem, rather than waiting until data management and communications issues arise from rapid proliferation of DERs.

CONCLUSION

CUS appreciates the opportunity to provide these comments and looks forward to supporting the work of the NJBPU and all stakeholders in addressing these issues. CUS filed more extensive comments² previously in response to the Board's March 7, 2024, Request for Information, and we encourage NJBPU Staff and stakeholders to review those comments for more details regarding the functionality of the DER Registry. In summary, adopting a centralized DER Registry now would be the most administratively efficient and cost effective approach as it would allow NJBPU to get a platform and processes in place before there is a problem, rather than waiting until data management and communications issues arise from rapid proliferation of DERs, and magnitude of data that ultimately will need to be collected retroactively escalates dramatically.

Respectfully submitted,

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Michael J. Jewell General Counsel Collaborative Utility Solutions 8404 Lakewood Ridge Cove Austin, TX 78738 Telephone: (512) 423-4065 Facsimile: (512) 236-5170 <u>Michael.Jewell@cusln.org</u>

ATTORNEY FOR COLLABORATIVE UTILITY SOLUTIONS

² <u>https://publicaccess.bpu.state.nj.us/DocumentHandler.ashx?document_id=1339552</u>