INDIANA UTILITY REGULATORY COMMISSION

CUSTOMER-GENERATOR FACILITY INTERCONNECTION STANDARDS	))))	**RM #24-01 Regarding 170 IAC 4-4.3**

COMMENTS OF COLLABORATIVE UTILITY SOLUTIONS

COMES NOW Collaborative Utility Solutions, and, in response to the December 9, 2024, request for comments by the Staff of the Indiana Utility Regulatory Commission (IURC), hereby submits the following Comments. In this proceeding, IURC Staff has been developing revisions to existing interconnection standards to expand the definition of "customer-generator facility" to capture a broader range of injectable resources, including batteries. The proposed changes would also increase the nameplate capacity in 170 IAC 4-4.3-6(a)(2) from 10 kW or less to 25kW or less. IURC staff has requested feedback regarding whether 11kW - 25kW customer-facilities can be sufficiently reviewed under Level 1 interconnection reviews (*see* 170 IAC 4-4.3-6) or whether they require Level 2 interconnection reviews (*see* 170 IAC 4-4.3-7). In addition, IURC staff requested input regarding the potential costs and benefits of these changes and the identities of impacted parties.

CUS appreciates IURC Staff's efforts to update interconnection standards to capture a broader range of injectable resources. In these Comments, we focus on the narrow issue of adopting a Registry to facilitate interconnection processes for Distributed Energy Resources (DERs) at the lowest cost to ratepayers. In summary, regardless of the detailed interconnection requirements established by the IURC, interconnection data related to DERs should be entered into a centralized DER Registry to enable the IURC, MISO, 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. Adopting a centralized DER Registry now and requiring the collection of DER information with the implementation of these proposed rules would be the most administratively efficient and cost effective approach as it would allow Indiana 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.

INTRODUCTION

Collaborative Utility Solutions ("CUS") is a 501(c)(6) non-profit entity that was formed to provide a collaborative DER Registry 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.

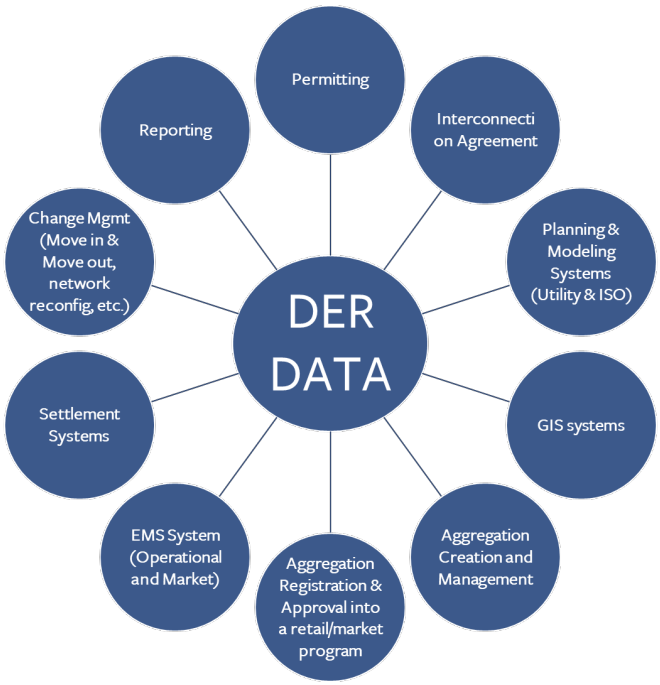
There are two foundational barriers that must be overcome for the electric industry to integrate DERs efficiently and effectively into grid and market operations: lack of information and lack of collaboration. At present, there is no single system that enables the appropriate stakeholders in the energy 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 truth" for a DER. This shortcoming severely limits the electric grid operators' (both Distribution and ISO/Transmission) ability to effectively integrate DERs.

Second, collaboration in the electric industry faces daunting obstacles. The industry has fractured into completely different market structures. It has further fractured utility operations into separated generation, transmission, and distribution entities, thereby creating "silos" of operation that suboptimize decisions based on their structure rather than the overall needs of our national electric system. We must have more effective collaboration in our industry to effectively integrate DERs into the grid and markets and lower the cost of this significant effort for the entire industry. To address these key problems that could

stymie efficient and cost-effective integration of DERs pursuant to FERC Order No. 2222, CUS was created, and our initial focus is to provide a DER Registry for the industry to enable DERs more efficiently and effectively to support and interact with the grid and markets. Please see our website for an overview of the DER Registry.[1]

A "SINGLE SOURCE OF TRUTH" IS ESSENTIAL FOR ACCURATE AND EFFECTIVE DER DATA MANAGEMENT

It is 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

[1] https://cusln.org/resources.

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 aggregator to create aggregations and then allow all appropriate stakeholders to review and approve 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. The Midcontinent Independent System Operator (MISO) 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. CUS notes that at the January 9, 2025 MISO DER Task Force (DERTF) meeting, the Organization of MISO States (OMS) gave a presentation reporting on Order 2222 coordination interviews they conducted to gather information from stakeholders so that OMS could better understand the information flow and processes needed for efficient DER registration and operation.[2] The number one key takeaway from these interviews was 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 IURC, MISO, 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 Indiana 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 IURC and all stakeholders in addressing these issues.

[2] https://cdn.misoenergy.org/20250109%20DERTF%20Item%2004%20OMS%20Order%202222%20Interviews%20Takeaways670268.pdf.

Respectfully submitted,

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