MISO Indiana Utilities’ Comments
On FERC Order 2222 Implementation
In Indiana

Duke Energy Indiana, LLC; Indianapolis Power & Light Company d/b/a AES Indiana, Northern Indiana Public Service Company (“NIPSCO”), and Southern Indiana Gas & Electric Company d/b/a Southern Indiana Gas and Electric Company d/b/a CenterPoint Energy Indiana South (collectively the “MISO Indiana Utilities”) jointly submit comments to aid the Indiana Utility Regulatory Commission (“Commission”) in evaluating the implementation of the Federal Energy Regulatory Commission’s Order 2222.¹ The MISO Indiana Utilities have worked jointly to identify issues that the Commission should address to ensure that FERC Order 2222 implementation in Indiana benefits both customers that choose to participate in the aggregation of resources to satisfy MISO needs and those customers who choose not to or are unable to participate. Striking the appropriate balance renders markets more economical. A balance that unfairly allocates benefits will create perverse incentives that will sacrifice the betterment of the entire market over participating customers, industries or ideological objectives.

The MISO Indiana Utilities will collaborate on a presentation to articulate key points in its comments and discuss potential solutions at the March 2, 2023 conference held by the Commission. The MISO Indiana Utilities intend to develop joint comments to minimize repetition at the conference, but individual MISO Indiana Utilities reserve the right to make their own comments on issues that uniquely impact their operations.

Broadly speaking, the MISO Indiana Utilities have identified four primary areas the Commission should be mindful of striking an appropriate balance in FERC Order 2222’s Indiana implementation:

- Interconnection of distributed energy resources (“DER”) and enrollment of DER Aggregations
- Operation, control and oversight of participating customers
- Recovery of costs imposed by FERC Order 2222 implementation on MISO Indiana Utilities
- FERC Order 2222 participation impacts on MISO Indiana Utilities energy efficiency programs

Interconnection and Registration of Participating Customers

Interconnection. If approved by FERC, certain aspects of MISO’s Order 2222 compliance plans make it impossible to predict the nature and extent of DER participation in aggregations. For example, DER Aggregations will not be participating as MISO resources until the 2030/2031 Delivery Years at the earliest. Between now and then,

there might be evolutionary, or even revolutionary, supply-side changes. Moreover, while PJM has proposed a 5-megawatt (“MW”) limit on aggregated DER, MISO has not proposed a limit. The distribution utilities in MISO may receive requests to interconnect very large generators. Also, even though MISO is working to decrease the length of time it takes for Interconnection Customers to proceed through the generator interconnection queues, it is possible that interconnection to distribution systems will wind up being the path of least resistance for prospective generators (if the RTOs fail to shorten their processes to acceptable levels or, to achieve acceptable timelines, add provisions that motivate prospective generators to connect elsewhere). For these reasons, among others, the existing Interconnection-related provisions in 170 IAC 4-4.1 through 170 IAC 4-4.3 may not adequately allow the Indiana distribution utilities to facilitate generator interconnection while protecting the reliability of their systems and other customers from financial impacts.

The MISO Indiana Utilities encourages the Commission to modify the existing, or create additional, interconnection-related regulations that (1) provide the distribution utilities flexibility (or at least don’t prohibit flexibility) in restructuring their Interconnection processes, if it becomes necessary, to facilitate efficient, effective and reliable interconnection of generation while ensuring that all of the costs incurred to ensure the reliable interconnect (including study costs and necessary facilities) are borne by those that cause them. Potential focus areas might include, but shouldn’t be limited to, the following:

- Non-serial application processing (for example, batching of applications for study)
- “Best-efforts” review timelines
- Size limits
- Order 2222 RTO implementation-compliant metering and telemetry requirements (any interconnecting generator is a potential DER Aggregation component)
- Speculative application prevention
- Fee structures

**Operational Oversight and Control of DERs**

Operational oversight and control of DERs will be very important to ensuring the FERC Order 2222 roll out benefits all customers.

**Dispatch of Aggregated Resources.** In its comments in response to MISO’s FERC Order 2222 compliance filing, the Commission indicated that MISO should defer to the public utility, the DER Aggregator or another entity regarding whose responsibility it is to physically operate and/or dispatch DERs. The MISO Indiana Utilities agree that given MISO’s limited visibility into the distribution system, MISO should not be responsible for physically operating and/or dispatching DERs, but that does not resolve the question. In its comments, the Commission said it has not yet made decisions as to operational control of aggregated DERs in Indiana but anticipates considering this issue in a future
stakeholder process. The MISO Indiana Utilities recognize this as an important consideration.

An independent distribution system operator would likely be best positioned to operate and/or dispatch DERs in the most fair and efficient manner possible; however, in the absence of such an entity that responsibility should fall to the public utilities in Indiana. As the primary operator of the distribution system, public utilities have full control of the distribution system and unique insight into where on their system assets are located. In addition, public utilities know where the trouble spots on its system are at any given moment and can implement the best system configuration to mitigate problems and protect the system. No other entity has such granular visibility into a public utilities’ distribution system, which makes public utilities best positioned to operate and/or dispatch resources connected to their system.

However, there are challenges in both the real-time and planning horizons with public utilities performing in this way. If DERs fully evolve on the system, public utilities would have to operate the distribution system in real-time very similar to the way MISO operates the transmission system today. Think about the way MISO currently uses security constrained economic dispatch to move generators up and down based on system limits. Distribution system operations does not function that way currently, and it is difficult to see how they ever would. For public utilities to manage the dispatch of DERs on the distribution system, public utilities would need significant increases in manpower, data and operational tools. Public utilities’ dispatch order to curtail a resource (especially during a high demand/high-cost situation) would need to be supported by concrete and transparent explanations. If every public utility in Indiana is required to create an organization to manage this process, it would significantly increase costs ultimately born by customers.

Public utilities maintain that aggregations should be allowed to participate in the wholesale market provided the public utilities’ distribution system operates in a normal configuration. Public utilities should have the authority to prevent aggregations from operating if the circuit on which they are located is in an abnormal configuration (switching for project work, storm situations, etc.). Requiring public utilities to perform multiple impact studies based upon different system configurations is inefficient and cost prohibitive. Allowing aggregations to operate and/or be dispatched within an abnormal system configuration without first studying the impacts of the aggregation operating within each distinct abnormal configuration could adversely impact system integrity and reliability. However, identifying every possible configuration and studying the impacts of the aggregation operating within the identified configuration is nearly impossible. Currently, public utilities have wide latitude to configure their system in the most effective and efficient manner possible to ensure reliability and system integrity. Limiting that ability could have disastrous consequences. Determining how the impact studies will be conducted is important and could result in significant investments of time and human resources.
Although public utilities may be best positioned to operate and/or dispatch DERs, there are additional challenges that would need to be addressed. For example, understanding how MISO will treat back feeding the transmission system is important. In addition, most of the equipment in use today was not designed for bi-directional flow. How will the cost of upgrading equipment to monitor bi-directional flow be recovered?

**Metering.** Current utility customers with DER systems participating in Indiana state level programs do not aggregate data of their systems today. This meter level data is only available from the public utility and in some cases the retail customer.

The MISO Indiana Utilities have identified metering concerns for which they have not yet determined a recommended approach.

- How does meter location impact pricing for the wholesale market participant(s)? With the utilization of existing CPNodes, there may be impact when operational changes are made for reliability and normal distribution operation practices.
  - If this impacts the compensation to the DER, how is that addressed?
  - Who has authority to impact this from a compensation standpoint at the wholesale market level?
  - Utility ADMS systems create automated changes when needed and is there an impact if an operator instead of the system makes those changes and does the utility have a need or obligation to the customer to make the impact equitable?
- Will new CPNodes be created or will aggregated resources be priced at the nearest existing CPNode? MISO in its response to FERC questions on October 11, 2022 pg. 18 states “Under MISO’s proposal, all DER are aggregated to one EPNode/CPNode representation at a transmission/distribution interface within the Network and Commercial Models.”

MISO recognizes this also as one of the biggest challenges as noted in slide decks in 2021 and 2022, including the December 1, 2022, IURC FERC 2222 Workshop presentation, that “the distribution system is designed to be more dynamic than the transmission system, and routine switching operations will make the “path” between the DERs and the Bulk Electric System difficult to ascertain…”

** Overrides and Dispute Resolution.** It is imperative that the Commission have the ability exercise jurisdiction over DER Aggregators participating in DER aggregations in Indiana. Commission authority over DER Aggregators will enable it to resolve disputes between the aggregators and MISO Indiana Utilities, whether those disputes arise in the context of DER registration, as a result of an override by an EDC to protect the distribution system, or pursuant to some other controversy between the two parties. As the entity responsible for regulating and protecting the distribution system in Indiana, the Commission may want to consider promulgating a rule that makes it clear DER Aggregators are subject to the Commission’s Rules as set forth in Title 170 of the Indiana Administrative Code, including the possibility of DER Aggregators being named as a “Respondent” as that term is defined within the rule.
Aggregator Oversight. The Commission must have the ability to exercise jurisdiction over DER Aggregators participating in DER aggregations in Indiana. Such oversight would allow the Commission to adjudicate disputes between EDCs and DER Aggregators, whether those disputes arise in the context of DER Aggregation enrollment, as a result of an override by an EDC to protect the distribution system, or pursuant to some other controversy between the two parties. As the entity responsible for regulating and protecting the distribution system in Indiana, the Commission may want to consider promulgating a rule that makes it clear DER Aggregators are subject to the Commission’s Rules as set forth in Title 170 of the Indiana Administrative Code, including the possibility of DER Aggregators being named as a “Respondent” as that term is defined within the rule.

Communications Protocol. MISO’s implementation of FERC 2222 will necessitate amendments to Indiana state level requirements for communication protocol standards. Specifically, that language should include the specific communication standards that guide the flow of information between the customer, aggregator and utility.

Who is the Aggregator? Are these entities public utilities under FERC rule? Who enforces this question? Does the Commission enforce this?

See paragraph 42 of RM18-9-000; Order No. 2222 - “to the extent a distributed energy resource aggregator makes sales of electric energy in RTO/ISO markets, it will be considered a public utility subject to the Commission’s jurisdiction.” Includes MBR, EQR, etc.

Recovery of costs imposed by FERC Order 2222 implementation on MISO Indiana Utilities

The MISO Indiana Utilities will be required to incur new or incremental costs to effectuate the requirements of FERC Order 2222. While it is too early in the process to identify all the potential cost impacts or to start estimating the total cost, the Commission should focus on the appropriate allocation of those costs among participating and non-participating customers. FERC concludes its reforms in Order 2222 are necessary because “current RTO/ISO market rules present barriers that prevent certain distributed energy resources that are technically capable of participating in the RTO/ISO markets on their own or through aggregation from doing so.” Participation of Distributed Energy Resource Aggregations 172 FERC ¶ 61,247 at ¶ 26. The Commission should be mindful of allocating similar costs to customers participating in aggregation as costs allocated to other generation resources to avoid undue subsidization. As an example, interconnection studies and upgrade costs are typically paid by generator resources upon interconnection and the Commission should not reallocate those costs inconsistent with this approach for aggregators.
Indiana’s regulatory framework permits public utilities to recover reasonable and necessary expenses in providing services. The MISO Indiana Utilities are required to implement FERC Order 2222 and will necessarily incur new costs associated with the implementation. The Commission should take reasonable steps to permit these costs to be appropriately recovered through rates and charges, including approving accounting deferral treatment as necessary to recover reasonable and prudent costs incurred to comply with FERC Order 2222.