

# MISO Indiana Utilities

AES Indiana, CenterPoint Energy, Duke Energy Indiana, and NIPSCO

IURC FERC 2222 Indiana Implementation Stakeholder Workshop

March 2, 2022

# Agenda (2:45 – 3:30pm)

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- Introduction, Indiana Utilities, & DERs in Indiana Overview
- Planning
- Operations
- Other Topics part of FERC 2222 Implementation
- Other Related Topic

# Introduction to MISO Indiana Utilities & DERs in Indiana\*

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- MISO Indiana Utilities have ~approx. 426 MW of DERs connected to each utility's respective distribution systems
- DERs owned and operated by ~approx. 7,986 customers in Indiana
- A majority of customer-sited DERs are solar resources. Other DER resource types include wind, CHP, etc.

\*as of 12/31/2022

# Planning Time Horizon (1 of 2)

## Generation Interconnection

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- **Unknown Impact on Interest in Distributed Generation**

- Modification of MISO compliance filing
- Supply side developments
- Capacity accreditation
- MISO's Long Range Transmission Planning
- Interconnection path of least resistance

Calls for:

- **Flexibility in Interconnection Regulations**

- 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

# Planning Time Horizon (2 of 2)

## Aggregation Enrollment / Modification

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- Customer Protections

- Lists
- Information
- Rules of engagement

- Reliability Under a 60-Day Clock

- Submission requirements
- Distribution utility-specific standards

- Modification

- Definition of “material”
- Frequency
- Timing

- Double counting

- Aggregator status
- Policing mechanism

# Operations Time Horizon (1 of 2)

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- Operation oversight and control of DERs
  - Necessary FERC 2222 topic to address

# Operations Time Horizon (2 of 2)

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- Operational control of aggregated DERs in Indiana
- Functionality needs for distribution system operations
- System configuration for system reliability and safety
- Override and dispute resolution
- Metering
  - Impact on wholesale dispatch

# Other Topics part of FERC 2222 Implementation

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- **Aggregators as Public Utilities**
  - Customer protection
  - Participation guidelines
  
- **Cost Recovery/Allocation**
  - Implementation
  - Planning time horizon
  - Operations time horizon



# Other Related Topic: Adoption of IEEE 1547-2018 Part of Interconnection Rules Process

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- IEEE 1547-2018 requires DER to be capable of providing support to the bulk power system (BPS)
- IEEE 1547-2018 requires DER to be capable of communicating but leaves the decision to use a local DER communication interface or to deploy a communication to the Area EPS operator (utility)

# Adoption of IEEE 1547-2018

## Part of Interconnection Rules Process (continued)

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- IEEE 1547-2018 standard does not address aggregated behavior of DER at a transmission node or at multiple points of common coupling (PCC)
  - “The performance requirements of this standard apply to interconnection of either a single DER unit based on that unit’s rating or multiple DER units within a single Local EPS (“DER system”), based on the aggregate rating of all the DER units that are within the Local EPS.”
- IEEE 1547-2018 does not apply to all DER as defined by FERC Order 2222 (for example, does not apply to energy efficiency or demand response)

# Questions?

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Mike Gahimer, NIPSCO

Matt Fields, AES Indiana

Nancy Connelly, Duke Energy

# Appendix

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# Topics on IURC Implementation re: FERC Order 2222 website

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1. The appropriate or preferred process or processes to utilize in the development of rules implementing FERC's Order 2222 (informal, formal rulemaking, and/or formal investigation).
2. Interconnection of component DERs to the distribution system.
3. Adjudication of (pre-registration/aggregation registration) disputes.
4. Operational oversight and control of DERs.
5. Distribution utility overrides of DERs to maintain reliability, and disputes arising therefrom.
6. Cost allocations (issues re: technical review costs/upgrades/needed technology/considerations of subsidizations, etc.).
7. Dual participation (retail and wholesale participation) and double-counting concerns or challenges.
8. State vs. Federal jurisdictional issues.
9. DER aggregators as "public utilities".
10. IEEE 1547-2018 standardization.
11. Coordination among RTO/utility/aggregator/IURC.