

Comments of Advanced Energy United Concerning the Indiana Utility Regulatory Commission's Roundtable Meeting on May 29, 2025 regarding the Implementation of FERC Order No. 2222

Introduction:

Advanced Energy United (“United”) respectfully submits these comments in response to the Indiana Utility Regulatory Commission’s (“Commission”) implementation of Federal Energy Regulatory Commission (“FERC”) Order No. 2222 concerning Distributed Energy Resource (“DER”) aggregations and subsequent processes. United appreciates the proactive effort that the Commission and other stakeholders have put towards ensuring that implementing FERC Order No. 2222 in Indiana is a smooth process. United encourages the Commission to strive for an outcome that not only protects Indiana ratepayers but also attracts DER businesses and the grid benefits that they bring.

United is the only national business association representing leaders in the advanced energy industry. Members include front-of-meter and behind-the-meter (“BTM”) renewable energy and battery storage manufacturers and developers, electric vehicle (“EV”) and EV charging equipment suppliers, providers of energy efficiency, demand response (“DR”), and virtual power plants (“VPP”), as well as larger users of energy wanting to ensure that clean energy is available on the grid to facilitate corporate sustainability goals. United members work to enhance the United States’ competitiveness and economic growth through an efficient, high-performing energy system that is clean, secure, affordable, and reliable. United works with decision-makers at the state and national level as well as regulators of energy markets to achieve this goal. In Indiana, United aims to drive the development of advanced energy by identifying growth opportunities, removing policy barriers, encouraging market-based policies, establishing partnerships, and serving as the voice of innovative companies in the advanced energy sector.

On May 29, 2025, the Commission held an in-person public stakeholder meeting to discuss next steps for implementing FERC Order No. 2222 and seek input regarding rules that may be needed for a registration and study process of DER aggregations

participating in wholesale markets via distribution systems in Indiana.¹ Numerous stakeholders including utility participants, DER developers and aggregators, and advocacy organizations attended and engaged in productive conversations around best practices to implement FERC Order No. 2222 in Indiana. Questions presented in the meeting agenda guided the discussion of various topics on which the Commission sought feedback.² United discusses the meeting and agenda topics in further detail below. Following the public stakeholder meeting, the Commission issued a request for written feedback and recommendations on the agenda topics and matters discussed at the meeting. United respectfully provides the following comments and recommendations.

Background:

On September 17, 2020, FERC issued Order No. 2222 which, amongst other things, directed Regional Transmission Operators (“RTO”) and Independent System Operators (“ISO”) to amend their existing tariffs in order to allow DER aggregators the ability to participate in wholesale markets for the purpose of enhancing competition and ensuring just and reasonable rates.³ Order No. 2222 further defined a DER as well as a DER aggregator, and set technical parameters around DERs and aggregations such as minimum size requirements and the participation of heterogeneous DER aggregation.⁴ This Order also explicitly does not preempt a state’s right to regulate safety and reliability of the distribution system and outlines certain areas of responsibility that individual states may want to address to ensure smooth and effective implementation of the order.⁵

Following this Order, the various RTO’s and ISO’s across the U.S. submitted revised tariff language to comply with FERC Order No. 2222. Specifically related to Indiana, the Midcontinent Independent System Operator (“MISO”) has submitted various revised

¹ See the Indiana Utility Regulatory Commission’s Webpage “Implementation re: FERC Order 2222” available here: <https://www.in.gov/iurc/home/implementation-re-ferc-order-2222/>

² See the Indiana Utility Regulatory Commission’s FERC Order 2222 Stakeholder Meeting Agenda here: https://www.in.gov/iurc/files/2025-05-29-Agenda_IURC-2222-stakeholder-mtg.pdf

³ See FERC’s Webpage “FERC Order No. 2222 Explainer: Facilitating Participation in Electricity Markets by Distributed Energy Resources” available here: <https://www.ferc.gov/ferc-order-no-2222-explainer-facilitating-participation-electricity-markets-distributed-energy>

⁴ *Id.*

⁵ *Id.*



tariff pages to FERC for approval.⁶ MISO's revised tariff language established procedures including (but not limited to): the allowance for DER aggregations to participate in RTO/ISO wholesale markets, the allowance of DER aggregations under one or more participation models, the establishment of a 100 kW minimum size requirement for DER aggregations, the establishment of an individual DER maximum size, the allowance for dual participation in retail programs, the ability for DERs to provide multiple wholesale services.⁷ It is important to note that FERC Order No. 2222-A directed that all aspects of the distribution utility's review of the impacts of a DER aggregator on the distribution system shall be conducted within a 60-day time period.⁸ This is further reflected in the RTO and ISO's revised tariff language approved by FERC.⁹

Following the passage of FERC Order No. 2222, the Commission held various informational roundtable meetings in 2023 to discuss implications and future implementation concerns.¹⁰ These roundtable meetings served as a central hub for receiving feedback and comments on FERC Order No. 2222 and included presentations from numerous parties including FERC and MISO.¹¹ Following the various roundtable meetings throughout 2023, the Commission initiated Cause No. 46043 on April 17, 2024 which commenced an official investigation into how DER aggregations should be regulated in Indiana.¹² This docket specifically focused on the central question of whether or not DER aggregators can be classified as "Public Utilities" under Indiana state law as it pertains to the State's implementation of FERC Order No. 2222. Numerous parties filed testimony and comments in this docket arguing whether DER

⁶ See MISO's Dashboard "Distributed Energy Resources (DER) – FERC Order 2222 Compliance (fka IR070) MSC-2019-2" available here: <https://www.misoenergy.org/engage/MISO-Dashboard/distributed-energy-resources/>

⁷ See MISO's presentation to the Indiana Utility Regulatory Commission at a FERC Order No. 2222 Educational Meeting on December 1, 2022 available here: https://www.in.gov/iurc/files/MISO_IURC-O2222-Overview-12_1_22-4874-8114-9759-v.1.pdf

⁸ See FERC E-1-RM18-9-002 aka "Order No. 2222-A" on March 18, 2021 at paragraph 72 available here: <https://www.ferc.gov/media/e-1-rm18-9-002>

⁹ See MISO's Overview of Changes for FERC Order 2222 on April 18, 2024 at P. 17 available here: [https://cdn.misoenergy.org/20240418%20MSC%20Item%2010%20Distributed%20Energy%20Resources%20-%20FERC%20Order%202222%20Compliance%20\(MSC-2019-2\)632558.pdf](https://cdn.misoenergy.org/20240418%20MSC%20Item%2010%20Distributed%20Energy%20Resources%20-%20FERC%20Order%202222%20Compliance%20(MSC-2019-2)632558.pdf)

¹⁰ See the Indiana Utility Regulatory Commission's Webpage "Implementation re: FERC Order 2222" section on Roundtable Meetings available here: <https://www.in.gov/iurc/home/implementation-re-ferc-order-2222/>

¹¹ *Id.*

¹² See Indiana Utility Regulatory Commission Cause No. 46043 initiated on April 17, 2024 available here: <https://iurc.portal.in.gov/docketed-case-details/?id=f2d954c9-d4f5-ee11-904b-001dd80bfec0>



aggregators should or should not be classified as a “public utility. The Commission ultimately issued an order in Cause No. 46043 which determined that there is a lack of sufficient evidence to determine the “public utility” status of any DER aggregators that conduct business in Indiana, and that it is unnecessary to make a determination of “public utility” status based on the rulemaking authority under Indiana Code §8-1-40.1.¹³

Furthermore, following the roundtable meetings that were held, the Commission initiated Rulemaking #24-01 regarding 170 Indiana Administrative Code (“IAC”) 4-4.3 on December 6, 2024.¹⁴ This rulemaking has a goal of making changes to interconnection procedures which could further facilitate the implementation of DER aggregators in Indiana. To facilitate this rulemaking, the Commission also proposed strawman regulations which made numerous clerical changes including but not limited to increasing the level 1 interconnection maximum size to 25 kilowatts (kW) and specified a “customer-facility” as opposed to a “customer generator”. Parties filed comments on the proposed strawman regulations, and the Commission currently awaits a public hearing to move forward in finalizing the proposed strawman regulations.

In the Spring of 2025, the Commission announced that it would be having an additional in-person roundtable discussion on May 29, 2025 to continue conversations on implementing FERC Order No. 2222 in Indiana.

IURC Roundtable Discussion:

In announcing the roundtable discussion on May 29, 2025, the Commission also provided an agenda of the various topics that will be discussed at the meeting.¹⁵ The agenda topics on DER aggregation implementation include the following:

1. Update the group regarding interconnection rule (170 IAC 4-4.3) revisions
2. Discussion re: registering a DER aggregation

¹³ See Final Order of the Indiana Utility Regulatory Commission in Cause No. 46043 on December 18, 2024

¹⁴ See The Indiana Utility Regulatory Commission’s webpage Rulemaking #24-01 Regarding 170 IAC 4-4.3 available here: <https://www.in.gov/iurc/rulemakings/rulemakings-pending-and-effective/rm-24-01-regarding-170-iac-4-4.3/>

¹⁵ See the Indiana Utility Regulatory Commission’s FERC Order 2222 Stakeholder Meeting Agenda here: https://www.in.gov/iurc/files/2025-05-29-Agenda_IURC-2222-stakeholder-mtg.pdf



3. Dispute resolution
4. Consumer protections
5. Cybersecurity
6. Existing DR tariffs (43566) and current rulemaking overlap

The roundtable discussion on May 29, 2025 proved to be very useful in generating fruitful conversations regarding how best to establish an effective DER aggregation process in Indiana. The main topic during the meeting was whether or not Indiana should develop a state-specific DER aggregation registration/study process and what a potential registration/study process would entail. Because there is an existing RTO/ISO 60-day study process for DER aggregations, the Commission is interested in whether it should use this existing process to study the impacts of the DER aggregations on Indiana utilities' distribution grids. Additionally, the Commission is interested in knowing what information and data to collect from DER aggregators in a potential registration process.

Recommendations:

1. *Update the group regarding [interconnection rule \(170 IAC 4-4.3\) revisions](#)*
 - a. *Expanding the definition of customer-facility (f/k/a customer-generator)*
 - b. *Incorporating [IEEE 1547-2018](#), updating UL 1741*
 - c. *Raising the Level 1 study threshold from 10 kW to 25 kW*
 - d. *Step-in-the-process update (OMB regulatory analysis review/revisions underway)*

United has filed comments in the Commission's rulemaking #24-01 regarding interconnection rule 170 AIC 4-4.3 and is generally supportive of the Commission's proposed strawman regulations.¹⁶ It is understood that there will be a formal comments process and proceeding in the near future that United may be interested in participating in, however, at this time United does not have any recommendations pertaining to this agenda topic.

2. *Discussion re: registering a DER aggregation*

¹⁶ See Advanced Energy United Comments in Indiana Utility Regulatory Commission's Rulemaking #24-01 Regarding 170 IAC 4-4.3 on January 17, 2025 available here: <https://www.in.gov/iurc/files/2025.01.17-IURC-RM-24-01-United-Strawman-Proposal-Comments-Final.pdf>



- a. *What information is needed at the time that a DER aggregator registers a DER aggregation with an EDC?*
- b. *What is the IURC's role in a DER aggregation registration process?*

The bulk of the discussion at the roundtable meeting focused on whether Indiana should develop a state-specific DER aggregation registration/study process and what a potential registration/study process would entail. The Commission wished to spend time on this topic because it is concerned that if DERs are incentivized to perform on the grid in a certain way by a DER aggregator, then there is a potential to cause adverse impacts on Indiana's distribution grid. The Commission conjectured on having a study or registration process that requires DER aggregators to submit information to the appropriate utility and to the Commission which would allow for the DER aggregators and individual DERs to be studied in order to avoid any unknown consequences that could occur on the distribution system as a result of DER aggregators existence. At the roundtable meeting some of the information that was discussed that could be submitted in a potential study or registration process included (but is not limited to):

1. The DER aggregator business model and operation characteristics (i.e. how the aggregation functions and where the aggregation will function)
2. The list of individual DERs that will be operating in aggregation
3. The total number and type of DERs within the aggregation
4. The total capacity and size of DERs within the aggregation
5. The Unity Power Factor
6. The Volt-Ampere Reactive interaction within the system
7. Distribution circuit usage of DERs within the aggregation

During the roundtable meeting, the utility representatives expressed a strong need for an Indiana-specific DER aggregation study/registration process. This argument was made on the grounds that the individual DERs have been studied by the utility through the General Interconnection Agreement ("GIA") process, however, the DERs have not been studied in a collective capacity regarding their potential aggregate impacts on the distribution grid via a DER aggregator. The utility representatives contended that the GIA process does not currently collect



enough information to study the impacts of an entire DER aggregation. The utility representatives claimed that they may not be able to complete the study contemplated within the RTO and ISO's 60-day study process (as envisioned in FERC Order No. 2222). The utility representatives therefore suggested that there be an Indiana-specific study or registration process prior to the RTO/ISO 60-day study process. Commission Staff responded with hesitancy regarding this concept on the grounds that FERC Order No. 2222 directed states to implement the order, and a lengthy state registration process may conflict with FERC Order No. 2222.¹⁷

United fears that an Indiana-specific registration or study process to assess the distribution grid impacts of a DER aggregator may add little value beyond that provided through the 60-day RTO study process and unnecessarily impede DER aggregation and the benefits thereof. Before the Commission requires or allows any additional state-specific study process, United recommends that the Commission confirm such additional review is actually necessary by clearly identifying the additional information and analysis utilities believe are warranted and evaluating its usefulness. To avoid any additional study process being used to delay or limit aggregator participation and/or discourage aggregators as an overly burdensome set of hoops to navigate through, United believes that it is imperative that the Commission ensure additional requirements are in fact warranted. To be clear, United is not opposed to an additional review process per se; but any additional study process must be legitimately necessary and reasonable.

Any additional study process allowed by the Commission should also be conducted within the 60-day period identified by FERC. FERC itself spoke to this issue in Order No. 2222 – A:

“We [FERC] grant Public Interest Organizations’ request to limit the length of distribution utility review to no more than 60 days. As the Commission stated in Order No. 2222, a lengthy review time or the lack of a deadline could erect a barrier to distributed energy resource participation in the RTO/ISO markets and may unduly delay participation.

¹⁷ See FERC E-1-RM18-9-002 aka “Order No. 2222-A) on March 18, 2021 at paragraph 72 available here: <https://www.ferc.gov/media/e-1-rm18-9-002>



We [FERC] expect that 60 days should be the maximum time needed for most distribution utility reviews.”¹⁸

United therefore recommends that any distribution grid impacts study or review be conducted by the applicable utility during and in conjunction with the existing RTO/ISO study process that already establishes a 60-day time limit for distribution utility review of a DER aggregation. Furthermore, FERC Order No. 2222 – A also states that:

“If an RTO/ISO believes unusual circumstances could give rise to the need for additional distribution utility review time, it may propose provisions for certain exceptional circumstances that may justify additional review time.”¹⁹

Given the language within FERC Order No. 2222 – A, United suggests that the utilities and the Commission express their concerns regarding the need for a separate DER aggregation review process to the relevant RTO/ISOs. The RTO/ISOs are the correct avenues for these concerns, as the RTO/ISOs have the ability to propose provisions to allow additional review time for “exceptional circumstances”.²⁰ United recommends that the utilities and the Commission convey to the RTO/ISOs the information that will be needed to conduct a distribution grid impact study, so that this study can be completed within the 60-day timeframe established by FERC. United broadly urges flexibility regarding all DER aggregation study processes, on the grounds that as DERs and DER aggregators grow in scale in the future, lessons will be learned on the extent to which they impact the greater electrical grid.

3. *Dispute resolution*

- a. *Potential disputes re: reliability impacts or system upgrade costs, etc.*
- b. *Consumer Affairs Division (CAD) process/rules already in place. May be no need to create a separate lane for this.*

¹⁸ See FERC E-1-RM18-9-002 aka “Order No. 2222-A) on March 18, 2021 at paragraph 72 available here: <https://www.ferc.gov/media/e-1-rm18-9-002>

¹⁹ *Id.*

²⁰ *Id.*



During the roundtable meeting, the topic of how to resolve disputes between parties such as aggregators, utilities, and individual DERs was discussed briefly and the process was generally agreed upon by parties at the meeting. Parties stated that, because CAD currently handles interconnection disputes, it is well within their purview to handle any future DER aggregation disputes between parties, so long as explicit direction is given to them from the Commission. Furthermore, if a DER aggregation registration process is set up, the dispute resolution parameters should be established within this process. It is also important to note that FERC Order No. 2222-A specifies how disputes in the distribution utility review process should be resolved stating that:

“Disputes regarding the distribution utility review process—including those between non-host distribution utilities and a host distribution utility or the RTO/ISO—may be resolved through the RTO’s/ISO’s dispute resolution process, the Commission’s Dispute Resolution Service, or complaints filed pursuant to FPA section 206 at any time.”²¹

The dispute resolution process envisioned within FERC Order No. 2222 – A has been implemented in MISO via MISO’s FERC Order No. 2222 compliance filings. MISO’s DER aggregation dispute resolution process covers instances including but not limited to coordination for eligibility or reliability review, review of aggregation participation after settlement disputes, registration/enrollment, data sharing, and dispatch override coordination. United is generally in agreement with the CAD process that was discussed during the roundtable meeting as well as the process specified in FERC Order No. 2222-A, and has no further recommendations on this topic at this time.

4. *Consumer protection(s)*

- a. *In light of recent [FERC investigations](#) re: [scraped data](#), etc., are there any concerns re: the fraudulent registration of resources?*
- b. *Whose bailiwick is this?*

Discussions at the roundtable meeting on consumer protections largely revolved around recent examples of fraudulent activity that has occurred within the DER

²¹ *Id.* At paragraph 70



industry space such as activities surrounding Ketchup Caddy, LLC. In the instance of Ketchup Caddy, LLC., FERC recently issued a \$25 million civil penalty for engaging in a scheme to register demand response resources within MISO's territory without the resource owner's knowledge or consent.²² Commission Staff is largely concerned with how to protect against potential instances of fraud in the DER aggregation space, and whose responsibility this should be. Participants at the roundtable meeting noted that, in response to the Ketchup Caddy LLC instance, MISO recently proposed to FERC various changes to their DER aggregation tariff rules to further enhance consumer protections and avoid fraudulent behavior by DER aggregators.²³ These rule changes are scheduled to be implemented on July 19, 2025 pending any alternative FERC decision on the matter. United is supportive of MISO's efforts to improve customer protections. To the extent that a state utility commission feels compelled to address consumer protection, United encourages commissions to review existing state consumer protection laws before establishing potentially duplicative regulations that may confuse consumers. Care should also be taken to ensure that any new consumer protections are not overly burdensome on DER aggregators' ability to effectively participate in the market.

5. Cybersecurity

- a. *Are risks adequately addressed via our interconnection rules?*
- b. *How to prevent the creation of cybersecurity back doors via residential inverters?*

At the roundtable meeting, stakeholders discussed DER cybersecurity in-depth in relation to a recent discovery of DERs that contained Chinese sourced inverters with malware risks associated with them.²⁴ Parties discussed specific DER cybersecurity guidelines that already exist or are being developed such as the Institute of Electrical and Electronics Engineers ("IEEE") standards,

²² See 189 FERC 61,176 "Order Assessing Civil Penalties" in Docket No. IN23-14-000 on December 5, 2024 available here: <https://cms.ferc.gov/media/20241205-189ferc61176-in23-14-000-ketchup-caddy-llc-et-al-ord-accessing-civil-penalties>

²³ See MISO's March 21, 2025 tariff filing per 35.13(a)(2)(iii) Demand Response Participation Rules Enhancements to be effective July 19, 2025 under ER25-1729 available here: https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20250321-5146&optimized=false

²⁴ See <https://www.reuters.com/sustainability/climate-energy/ghost-machine-rogue-communication-devices-found-chinese-inverters-2025-05-14/>



Underwriters Laboratories (“UL”) guidelines, North American Electric Reliability Corporation (“NERC”) guidelines, and the National Association of Regulatory Utility Commissioners (“NARUC”) guidelines. Commission Staff specifically noted that there is currently a NARUC Critical Infrastructure Committee that is developing DER cybersecurity rules and standards pertaining to DERs and this work was directed by the Department of Energy.²⁵ Understanding that there are already standards that exist or are currently under development pertaining to DER cybersecurity, United recommends that the Commission either incorporate the existing NERC DER cybersecurity guidelines, or (when finalized) the NARUC DER cybersecurity standards into any DER aggregation registration process that is developed.

6. Existing DR tariffs (43566) and current rulemaking overlap

- a. Homogenous DR aggregations under existing construct in Indiana.*
- b. Should/can this rulemaking replace the existing DR aggregation construct, or should the current DR aggregation order/tariffs be left intact and designed around?*

DR aggregations already exist within Indiana and have an established tariff and process overseen by the Commission and utilities. During the roundtable meeting, there were brief discussions about how to incorporate any best practices or lessons learned from implementing DR aggregations to the future implementation of DER aggregations. United recommends that the Commission consider harmonizing the existing DR aggregation rules with any registration or study process that is established for DER aggregation, while understanding that FERC Order No. 2222 specifically requires that DER aggregations cannot be solely demand response resources.

Conclusion and Future Considerations:

United respectfully submits these comments and recommendations regarding the Indiana Utility Regulatory Commission’s implementation of FERC Order No. 2222

²⁵ See NARUC’s webpage “Cybersecurity Baselines for Electric Distribution Systems and DER” available here: <https://www.naruc.org/core-sectors/critical-infrastructure-and-cybersecurity/cybersecurity-for-utility-regulators/cybersecurity-baselines/>



pertaining to DER aggregations. As DERs and DER aggregators participate in greater numbers in electricity markets, it is important to remain flexible and encouraging to their impacts to both better understand how these projects interact with the electric system while also ensuring that there is a suitable business construct for them to participate in. United appreciates the Commission's proactivity on this matter and looks forward to participating in future discussions on this topic.

Respectfully,

A handwritten signature in black ink, appearing to read "Brett Sproul".

Brett Sproul

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