



**Michael Kessler**  
Assistant General Counsel  
Direct Dial: 317-249-5290  
E-mail: mkessler@misoenergy.org

April 14, 2022

**VIA ELECTRONIC FILING**

The Honorable Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

**Re: Midcontinent Independent System Operator, Inc.  
Order No. 2222 Compliance Filing  
Docket No. ER22-\_\_\_-000**

Dear Secretary Bose:

The Midcontinent Independent System Operator, Inc. (“MISO”), through this filing, hereby submits its proposed revisions to its Open Access Transmission, Energy and Operating Reserve Markets Tariff (“Tariff”)<sup>1</sup> in compliance with the Federal Energy Regulatory Commission’s (the “Commission”) Order No. 2222.<sup>2</sup> MISO respectfully requests that the Commission accept this filing in compliance with the requirements of Order No. 2222.

As discussed below, MISO proposes an effective date of October 1, 2029 for the Tariff revisions necessary to implement the requirements of Order No. 2222. Consistent with Order No. 2222’s direction, MISO has evaluated the unique needs of its stakeholders as a whole, along with MISO’s market systems, software, and measures, to address reliability in the MISO Region. Based on this evaluation, MISO has determined that the October 1, 2029 effective date is a reasonable implementation date for the MISO Region.<sup>3</sup>

---

<sup>1</sup> MISO submits these amendments pursuant to Section 205 of the Federal Power Act (“FPA”), 16 U.S.C. § 824d, and Section 35.12 of the Federal Energy Commission’s (“FERC” or “Commission”) regulations, 18 C.F.R. § 35.12 (2018). All capitalized terms in this filing not otherwise defined have the same meaning as they have under the current MISO Open Access Transmission, Energy and Operating Reserve Markets Tariff (“Tariff”).

<sup>2</sup> *Participation of Distributed Energy Resource Aggregations in Markets Operated by Regional Transmission Organizations and Independent System Operators*, 172 FERC ¶ 61,247 (2020) (“Order No. 2222”).

<sup>3</sup> *See* Order No. 2000 at P 361 (“Based on comments submitted about the complexity of changes to RTO/ISO market rules and system, we [FERC] will not require the implementation of the tariff provisions within 12 months from the date of the compliance filing, as proposed in the NOPR. Instead, we will require each RTO/ISO to propose a reasonable implementation date, together with adequate support explaining how the proposal is appropriately tailored for its region and implements this final rule in a timely manner. The Commission will establish on compliance the effective date for each RTO’s/ISO’s compliance filing.”).

Midcontinent Independent  
System Operator, Inc.  
317.249.5400  
www.misoenergy.org

720 City Center Drive  
Carmel, IN 46032

2985 Ames Crossing Road  
Eagan, MN 55121

1700 Centerview Drive  
Little Rock, AR 72211

Given the complexities of this compliance proposal, MISO requests that the Commission extend the standard twenty-one (21) day comment period to June 6, 2022. This extension will provide MISO stakeholders and other interested parties sufficient time to develop responsive pleadings in this matter.

## I. EXECUTIVE SUMMARY

MISO's vision to be the most reliable, value-creating RTO requires careful analysis of the current and future state of the MISO Region, including markets, transmission planning, operations, and software system needs. Through this analysis, MISO has recognized the shared responsibility that MISO, its members, and Relevant Electric Retail Regulatory Authorities ("RERRAs") have to address the urgent and complex challenges to electric system reliability in the MISO Region. Collectively, MISO refers to this shared responsibility as the "Reliability Imperative."<sup>4</sup> In collaboration with stakeholders, MISO has used the Reliability Imperative to identify and prioritize its efforts to address the reliability impacts of significant shifts in the generation fleet in the MISO Region resulting from retirement of baseload resources and increased reliance on intermittent resources, such as wind and solar as well as the system impacts associated with more frequent and extreme weather conditions.

The efforts necessary to respond this Reliability Imperative has been organized into four main areas: (1) Market Redefinition; (2) Long Range Transmission Planning; (3) Operations of the Future; and (4) Market Systems Enhancements ("MSE"). MISO has well documented in other filings with the Commission the need to replace the legacy software and systems currently relied upon to operate the Transmission System and administer its energy and operating reserves markets. This effort is being address through MISO's MSE project. While the MSE project is well underway, the ultimate completion of the new software and systems installation is not expected until the end of 2024.

Through discussions with stakeholders and internal analysis, MISO has prioritized certain projects for implementation immediately after MSE completion. These projects have been delayed for years pending MSE completion and will have an immediate impact, delivering quantifiable reliability and economic benefits to the MISO Region. In particular, MISO's proposed prioritization of the Multiple Configuration Resources ("MCR") initiative is expected to provide reliability benefits by providing operational flexibility needed to manage the MISO Region's increased reliance on intermittent resources, such as wind and solar, to meet the region's baseload demand needs. In addition, MCR is expected to deliver between \$14 million and \$34 million annually in production cost savings resulting from more efficient management and dispatch of Combined Cycle Gas Turbines ("CCGTs"), which comprise approximately 18.3% of MISO's installed capacity as of the 2022 / 2023 Planning Year. The more efficient management of MCR will also help the MISO Region reach decarbonization goals.

While MISO recognizes the benefits of promoting distributed energy resource participation in its wholesale markets through the addition of distributed energy resource aggregations, the

---

<sup>4</sup> See MISO's Response to the Reliability Imperative, available at <https://cdn.misoenergy.org/MISO%20Response%20to%20the%20Reliability%20Imperative504018.pdf> (last accessed Mar. 15, 2022).

benefits of these aggregations are unknown and relatively limited by the existing retail regulatory construct in many of the states in the MISO Region. Only three states in the MISO Region currently allow for retail demand resource aggregation, which could significantly limit the participation of distributed energy resource aggregations in MISO's markets. Unlike MCR, the potential quantity of distributed energy resource aggregations, both number of aggregations and capacity in megawatts, is unknown.

The Commission was clear in Order No. 2222 that it would not require ISOs / RTOs to implement Order No. 2222's requirements by a date certain. Rather, the Commission stated that it would, "require each RTO/ISO to propose a reasonable implementation date, together with adequate support explaining how the proposal is appropriately tailored for its region and implements this final rule in a timely manner."<sup>5</sup> As discussed below and in the testimonies supporting this filing, MISO proposes an implementation date for its Order No. 2222 compliance proposal that reasonable and appropriately tailored to meet the reliability and economic needs of the MISO Region.

## II. BACKGROUND AND OVERVIEW OF COMPLIANCE PROPOSAL

In Order No. 2222, the Commission required MISO to revise its Tariff to establish market rules that address coordination between MISO, the Distributed Energy Resource aggregator, the distribution utility or electric distribution company (collectively the "EDC"), and the RERRA.<sup>6</sup> Additionally, with respect to operational coordination, the Commission required MISO to: (i) establish a process for ongoing coordination, including operational coordination, that addresses data flows and communications among itself, the DER aggregator, and the distribution utility; (ii) require the DER aggregator to report to MISO any changes to its offered quantity and related distribution factors that result from distribution line faults or outages;<sup>7</sup> (iii) include coordination protocols and processes for the operating day that allow distribution utilities to override MISO's dispatch of a DER aggregation in circumstances where such override is needed to maintain the reliable and safe operation of the distribution system;<sup>8</sup> and (iv) apply any existing non-performance penalties to DER aggregators when they fail to perform as a result of override.<sup>9</sup> The Commission also required that MISO revise its Tariff to incorporate dispute resolution provisions as part of its proposed EDC review process.

The following subsections provide an overview of MISO's compliance proposal as it relates to the Commission's directives of Order No. 2222. Discussion of the specific Tariff revisions submitted in this filing is provided in Section IV below, and additional support for MISO's compliance proposal is provided in the testimonies of Mr. Richard Doying, Mr. Todd Ramey, and Ms. Laura Rauch submitted herewith.

---

<sup>5</sup> Order No. 2222, P 361.

<sup>6</sup> *Id.*, P 278.

<sup>7</sup> *Id.*, P 310.

<sup>8</sup> *Id.*, P 312.

<sup>9</sup> *Id.*, P 312.

**A. DER Aggregator as Market Participant**

1. Commission Directive

In Order No. 2222, the Commission required MISO to have Tariff provisions that allow DER aggregations to participate directly in MISO's markets, and establish DER aggregators as a type of Market Participant.<sup>10</sup>

2. MISO Proposal

A Distributed Energy Resource Aggregator ("DERA") will be a new Market Participant in MISO, able to submit offers in MISO's Energy and Operating Reserve Markets.<sup>11</sup> DERAs will be eligible to register and enroll Distributed Energy Aggregated Resources ("DEAR").<sup>12</sup> DEARs are a new resource type developed to accommodate aggregation of heterogeneous Distributed Energy Resource aggregations, as described further below. As more fully described in the Testimony of Ms. Laura Rauch, MISO's formal process begins with the registration of the DERA as a Market Participant, following which the DERA may begin the process of enrolling their DEAR.<sup>13</sup> The registration process will include a review to ensure there is no wholesale / retail dual compensation, reliability reviews from the EDC, and MISO including the DEAR in the commercial model.<sup>14</sup> DERAs will be required to execute MISO's Market Participant Agreement, Attachment W to the MISO Tariff, to participate in MISO's markets.<sup>15</sup> The relationship with the DERA as a Market Participant will be similar to any other relationship between MISO and Market Participants that represent multiple assets in MISO's markets today in that MISO will not have a direct contractual relationship with the individual assets (DEAR) represented by the DERA.<sup>16</sup>

MISO has revised Module A – 1.D and Tariff Sections 38.3.3, 38.2.5 and 38.7 to address the Commission's directive.

**B. The Distributed Energy Resource Aggregation Participation Model**

1. Commission Directive

In Order No. 2222, the Commission required MISO to allow DER aggregators to register DER aggregations under one or more participation models in MISO's Tariff that accommodate the physical and operational characteristics of the DER aggregation.<sup>17</sup> The Commission explained that MISO may comply with this requirement by: (i) modifying its existing participation models to facilitate the participation of DER aggregations; (ii) establishing one or more new participation models for DER aggregations; or (iii) adopting a combination of those two approaches.<sup>18</sup>

---

<sup>10</sup> Order No. 2222 at PP 129-130.

<sup>11</sup> Proposed Tariff Section 38.3.

<sup>12</sup> Proposed Tariff Section 38.7.

<sup>13</sup> Rauch Testimony at 28. Also as noted in the Testimony of Ms. Rauch, the registration and enrollment processes are referred to collectively as "registration" for purposes of this filing. *Id.* at 26-27.

<sup>14</sup> *Id.*

<sup>15</sup> *Id.* at 45.

<sup>16</sup> *Id.* at 45.

<sup>17</sup> Order No. 2222 at PP 129-130.

<sup>18</sup> *Id.*

## 2. MISO Proposal

MISO's Order No. 2222 compliance proposal establishes a new participation model for Distributed Energy Resource aggregations. To facilitate the new participation model, MISO has developed a number of new definitions, including: (1) Distributed Energy Resource ("DER"), which are the individual resources that comprise aggregations; (2) Distributed Energy Aggregated Resources ("DEARs"), which represent one or more Distributed Energy Resources and participate in an aggregation as a single Resource in MISO's markets; and (3) Distributed Energy Resource Aggregators ("DERAs"), which are the Market Participants that represent Distributed Energy Aggregated Resources in MISO's markets.<sup>19</sup>

As described in detail in the Testimony of Ms. Laura Rauch, MISO's proposed DER participation model will allow DERAs to participate in applicable MISO markets based on the services that the DEAR(s) represented by a DERA are technically capable of providing.<sup>20</sup> DEARs will be able to participate in MISO's Energy and Operating Reserve Markets through a single Elemental Pricing Node ("EP Node") utilizing self-commitment under normal conditions while having the potential to be called on by MISO during emergency conditions.<sup>21</sup> In addition, DEARs may participate as a Capacity Resource in MISO's annual Planning Resource Auction ("PRA"). Ms. Rauch's Testimony provides further detail on the manner in which a DEAR may participate in MISO's Resource Adequacy construct, including the manner in which such resource will be accredited and applicable deliverability and replacement requirements.<sup>22</sup>

MISO has revised Module A – 1.D and Tariff Sections 38.7, 38.2.2, 39.1.2, 39.2.1A, 39.2.5E, 40.2.3, 40.2.7C to address the Commission's directive.

### **C. MISO's proposal does not prohibit any particular type of DER technology from participating in DER aggregations and allows for heterogeneous DER aggregations.**

#### 1. Commission Directive

In Order No. 2222, the Commission required that MISO's rules not prohibit any particular type of DER technology from participating in DER aggregations, and that MISO revise its Tariff to allow different types of DER technologies to participate in a single DER aggregation (i.e., allow heterogeneous DER aggregations).<sup>23</sup>

#### 2. MISO Proposal

MISO's DERA participation model allows for heterogenous aggregations and does not limit aggregations to a particular technology. As such, MISO's proposal is consistent with Order No. 2222's requirement that MISO's rules not prohibit any particular type of DER technology from participating in DER aggregations, and that MISO revise its Tariff to allow different types

---

<sup>19</sup> Proposed Tariff Module A – 1.D.

<sup>20</sup> Rauch Testimony at 4-5.

<sup>21</sup> *Id.* at 4-6. MISO's support for limiting DEAR market participation to a single EP Node is further described in Section II. H. of this transmittal letter.

<sup>22</sup> *Id.* at 23-26.

<sup>23</sup> Order No. 2222 at PP 141-142.

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.