170 FERC ¶ 61,075
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Richard Glick and Bernard L. McNamee.

Midcontinent Independent System Operator, Inc. — Docket No. ER20-42-000

ORDER ACCEPTING TARIFF REVISIONS

(Issued January 31, 2020)

1. On October 4, 2019, Midcontinent Independent System Operator, Inc. (MISO) filed proposed revisions to its Open Access Transmission, Energy and Operating Reserve Markets Tariff (Tariff) to implement a 30-minute Short-Term Reserve product in its Day-Ahead and Real-Time Markets. As discussed below, we accept MISO's filing, effective December 7, 2021, as requested.

I. Background

2. MISO states that, as the MISO Balancing Authority, it manages the supply-demand balance within its footprint, maintains scheduled interchange with other balancing authority areas, and helps maintain the frequency of the Eastern Interconnection.[1] MISO explains that, in preparation for different kinds of imbalances between supply and demand, caused by uncertain variables and contingencies that are difficult to forecast or foresee precisely, it currently uses several types of reserves that give MISO the ability and flexibility to resolve such imbalances in accordance with the Applicable Reliability Standards as defined in the MISO Tariff.[2] According to MISO, its

[1] Transmittal at 2.

[2] The MISO Tariff defines Applicable Reliability Standards as:

> Reliability Standards approved by the Federal Energy Regulatory Commission (FERC) under Section 215 of the Federal Power Act relating to operation of the Transmission Provider in carrying out its Reliability Coordinator, Balancing Authority, Market Operator, Transmission

existing reserve products include: (1) Regulating Reserves to address needs where the deployment period is mere seconds in order to raise or lower output of on-line resources as necessary to follow the moment-by-moment changes in demand and frequency in compliance with North American Electric Corporation (NERC) reliability standard BAL-001-2 ("Real Power Balancing Control Performance");[3] (2) Spinning and Supplemental Contingency Reserve requiring ten-minute deployment to address needs arising from "a contingency or other abnormal event" in compliance with NERC reliability standard BAL-002-3 ("Disturbance Control Standard – Contingency Reserve for Recovery from a Balancing Contingency Event");[4] and (3) Up Ramp and Down Ramp resources used to manage near-term load-generation variability related to forecast uncertainty that also must deploy within ten minutes of dispatch instruction in accordance with Good Utility Practice.[5]

3. MISO proposes to use the Short-Term Reserves, provided by resources capable of being deployed within 30 minutes to meet local, sub-regional, and market-wide needs, in place of its current practice of committing certain out-of-market units that must be pre-positioned to provide 30-minute reserves.[6] MISO explains that such out-of-market commitments are inefficient and result in significant Revenue Sufficiency Guarantee Make-Whole Payments that must then be uplifted.

> Service Provider, and Planning Coordinator functions. In addition to FERC approved standards, any regional reliability criteria and/or standards relating to operation of the Transmission Provider in carrying out the functions listed above.

MISO, FERC Electric Tariff, Module A, § 1.A, Applicable Reliability Standards (30.0.0).

[3] Transmittal at 3 (citing MISO, FERC Electric Tariff, Module A, § 1.R, Regulating Reserve (30.0.0)).

[4] *Id.* (citing MISO, FERC Electric Tariff, Module A, § 1.S, Spinning Reserve (30.0.0); MISO, FERC Electric Tariff, Module A, § 1.S, Supplemental Reserve (30.0.0)).

[5] *Id.* at 3-4 (citing MISO, FERC Electric Tariff, Module A, § 1.U, Up Ramp Capability (30.0.0); MISO, FERC Electric Tariff, Module A, § 1.D, Down Ramp Capability (30.0.0)).

[6] *Id.* at 4-5 (citing Testimony of Kevin A. Vannoy at 10-11 (Vannoy Test.); Testimony of David B. Patton at ¶¶ 6, 9-11, 26, 30 (Patton Test.)).

4. Short-Term Reserve is a new reserve product that employs market mechanisms to quantify, procure, and deploy 30-minute operational flexibility to meet reliability needs. Both online and offline resources are eligible to provide the Short-Term Reserves, and reserve requirements are determined dynamically based on transmission constraints. Online Short-Term Reserves are paid at lost opportunity cost, i.e., revenue foregone in the energy market due to holding back their energy output to provide capacity for reserves. Offline Short-Term Reserves are paid a market-clearing price based on their offers.

5. MISO states that the Short-Term Reserve product will serve to: (1) reduce Revenue Sufficiency Guarantee make-whole payments; (2) improve efficiency compared to existing out-of-market commitment and procurement; (3) ensure the availability of adequate rampable capacity in the needed locations; (4) enable more transparent market prices that reflect the cost of meeting local, sub-regional, and market-wide reliability needs; (5) allocate cost in accordance with cost causation and receipt of benefits; and (6) provide pricing signals that incentivize the building of fast-starting Resources that can meet Voltage and Local Reliability[7] needs at lower cost because they can satisfy the reserve requirement even while offline.[8]

6. MISO states that, for sub-regional issues, it will use Short-Term Reserves to bring excess flows of energy between MISO North/Central and MISO South back to within the Sub-Regional Power Balance Constraint contractual limit, also known as Regional Direct Transfer (RDT) limit,[9] within 30 minutes, as required by a Settlement Agreement[10] between MISO and the Southwest Power Pool, Inc. (SPP) that restricts flows between

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[7] Transmittal at 5-6, and n.28 (citing Independent Market Monitor's (Market Monitor) 2014 State of the Market Report at 87); *see also* Patton Test. at ¶¶ 7, 35-36, 56, 63, 73, 81. MISO also proposes to revise the definition of Voltage and Local Reliability Commitments to allow Voltage and Local Reliability resources to also be committed as Short-Term Reserves to address local needs. Transmittal at 13.

[8] MISO states that, after the Electric Storage Resource-related Tariff revisions are accepted by the Commission, it intends to initiate a filing to make electric storage resources eligible as Short-Term Reserves. Transmittal at 13.

[9] The RDT limit is 3,000 MW in the North to South direction, and 2,500 MW in the South to North direction. A settlement agreement (Settlement Agreement) allows MISO to exceed these thresholds in response to contingencies, but requires MISO to bring flows back within the RDT limits within thirty minutes. Transmittal at 8 (citing Vannoy Test. at 8; Patton Test. at ¶ 25).

[10] *See Midcontinent Indep. Sys. Operator, Inc.*, 154 FERC ¶ 61,021, at P 2 (2016).

MISO North/Central and MISO South.[11] MISO explains that in order to ensure the dispatch engine's ability to bring such flows back under the RDT limits within 30 minutes following a contingency, MISO needs to reserve sufficient flexible capacity to be able to commit and dispatch resources on the constrained side of the RDT constraint.[12] MISO further explains that because MISO South has historically lacked sufficient short-lead resources offered into the Real-Time Market, when flows from MISO North/Central to MISO South are constrained, MISO typically ensures the availability of sufficient flexible generation in MISO South following the worst single contingency generation outage (G1) in that area through out-of-market commitments.[13]

7. MISO states that, for local issues, the proposed 30-minute Short-Term Reserves will provide market solutions to restore reserves in load pockets with binding constraints, which primarily occur in MISO South. MISO states that NERC reliability standards require MISO to recover from operating limit overloads within 30 minutes after a contingency[14] and to restore reserved capacity within ninety minutes following deployment of ten-minute Contingency Reserves in response to a Balancing Contingency Event.[15] According to the Market Monitor's[16] testimony included with MISO's filing, due to a lack of fast-start resources in some MISO South load pockets, MISO's operating guides for these areas require commitment of capacity sufficient to withstand the loss of the most significant transmission line and generator serving each load pocket (N1/G1 contingency).[17]

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[11] Transmittal at 7 (citing *Midcontinent Indep. Sys. Operator, Inc.*, 154 FERC ¶ 61,021 at P 2; *Midcontinent Indep. Sys. Operator, Inc.*, 159 FERC ¶ 62,102 (2017)).

[12] *Id.* at 8.

[13] *Id.*

[14] *Id.* MISO states that this requirement is "[c]onsistent with NERC standard TOP 001-4 for System Operating Limit [], and IRO-009-2 for Interconnection Reliability Operating Limits [] constraints." *Id.*

[15] *Id.* at 3 (citing Patton Test. at ¶ 9).

[16] The Market Monitor for MISO is Potomac Economics, Ltd. (Market Monitor).

[17] Patton Testimony at ¶ 16, n.2. According to the Market Monitor, the specific load pockets are Amite South, Down-Stream of Gypsy, West of the Atchafalaya Basin and Western load pockets. *Id.*

8. MISO explains that, for market-wide issues, it will use Short-Term Reserves to address reserve needs in responding to Non-Reportable Balancing Contingency Events, which have historically been addressed by coal and nuclear units dispatched as baseload units, gas generators that are available while off-line, or gas generators which have been economically dispatched down.[18] MISO also suggests that increased wind and solar generation will increase market-wide short-term capacity reserve needs.[19]

9. MISO estimates net production cost benefits of $5 million annually using Short-Term Reserves and a $1.6 million reduction in Revenue Sufficiency Guarantee make-whole payments paid in MISO South. MISO states that the projection is based on a prototype study that used September 8, 2018 as a sample day (when MISO South was capacity-constrained and the RDT was largely binding) to study the market effects of a Short-Term Reserve product.[20] MISO adds that it "performed simulations to establish Demand Curves and penalty prices that are high enough to reflect the cost of scarcity but not so high that the Short-Term Reserve is prioritized over Energy."[21]

10. MISO asserts that the expected reduction in uplift and corresponding transparency of costs reflected in market prices support its proposal.[22] MISO states that a cleared Short-Term Reserve resource will be paid the market clearing price in the applicable Reserve Zone and costs will be allocated based on load-ratio share. According to MISO, an Asset Owner's load-ratio share within a grouped set of Reserve Zones, identified by a common set of binding constraints impacting the Short-Term Reserve Requirement, will be used to allocate costs of Short-Term Reserve payments to resources in the binding Reserve Zone.[23]

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[18] Transmittal at 9-10 (citing Vannoy Test. at 9).

[19] *Id.* at 10.

[20] *Id.* at 12 (citing Vannoy Test. at 14-15; Patton Testimony at ¶¶ 78-79).

[21] *Id.* at 23. A $100/MWh penalty price for the Market-Wide Short-Term reserve requirement is proposed. For each sub-region and local requirement, a $60/MWh penalty price is proposed.

[22] *Id.* at 12 (citing *Settlement Intervals and Shortage Pricing in Markets Operated by Regional Transmission Organizations and Independent System* Operators, Order No. 825, 155 FERC ¶ 61,276, at P 58, nn.99 and 100 (2016) (Order No. 825)).

[23] *Id.* (citing Vannoy Test. at 28-29).

11. MISO states that it considered two other alternatives to address its 30-minute reserve needs, expanding the use of ten-minute Contingency Reserve and enforcing N1/G1 limits in the market commitment and dispatch engines. MISO explains that it used three criteria – reliability, transparency, and efficiency – to assess Short Term Reserves and the two alternatives.[24] According to MISO, it selected its Short-Term Reserve product because it addresses the identified needs efficiently, by aligning 30-minute lead and ramp time with the 30-minute deployment need, and provides a price signal for Short-Term Reserve needs.[25] MISO asserts that both alternatives constrain the use of less costly unloaded available ramp capacity and the use of the ten-minute Contingency Reserve does not align with the 30-minute need.[26]

12. MISO requests that the proposed Tariff revisions be made effective on December 7, 2021 and seeks waiver of the one hundred and twenty (120) day maximum notice requirement and any other rules the Commission deems otherwise applicable. MISO states that it is submitting the proposed Tariff revisions significantly ahead of time because MISO, the Market Monitor, and market participants require time to budget and devote the necessary resources to develop and test the system and software adjustments required to implement the Short-Term Reserves product.[27]

II. Notice of Filing and Responsive Pleadings

13. Notice of MISO's filing was published in the *Federal Register*, 84 Fed. Reg. 54,602 (2019), with interventions and protests due on or before October 25, 2019. Alliant Energy Corporate Services, Inc., Ameren Services Company, American Municipal Power, Inc., Association of Businesses Advocating Tariff Equity, Coalition of MISO Transmission Customers, Calpine Corporation, Cooperative Energy, Hoosier Energy Rural Electric Cooperative, Inc., Louisiana Energy Users Group, MidAmerican Energy Company, Exelon Corporation, NRG Power Marketing LLC, Steel Dynamics, Inc., and WEC Energy Group, Inc. each filed timely motions to intervene. The Council of the City of New Orleans, Louisiana (New Orleans Council), the Indiana Office of Utility Consumer Counselor, the Louisiana Public Service Commission and the Mississippi Public Service Commission and Mississippi Public Utilities Staff (Mississippi Commission and Staff), filed notices of intervention. The Arkansas Public Service Commission (Arkansas Commission), Entergy Louisiana Power, LLC (Entergy Louisiana), Entergy Services, LLC (Entergy), the Illinois Commerce Commission

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[24] *Id.* at 14.

[25] *Id.*

[26] *Id.*

[27] *Id.* at 29.

(Illinois Commission), the Market Monitor, and the Public Utility Commission of Texas (Texas Commission) filed late motions to intervene.

14. On October 25, 2019, the MISO South Regulators[28] and Entergy (together, Protestors) filed a protest. On November 25, 2019, MISO filed an answer to Protestors' protest. On December 4, 2019, the Market Monitor filed an answer to Protestors' protest. On December 11, 2019, the MISO South Regulators[29] filed an answer to MISO's and the Market Monitor's answers.

A. **Protest**

15. Protestors argue that the Commission should reject MISO's filing, or set the filing for hearing and settlement procedures, because it is vague and lacks detail required by section 205 of the Federal Power Act and Part 35 of the Commission's regulations,[30] and because it may be unjust, unreasonable, and unduly discriminatory. Protestors argue that the proposal: will increase costs while providing little or no benefit; will shift costs incurred to "firm up" wind resources in MISO North/Central to MISO South ratepayers without justification; will be unlikely to send the necessary price signals to build new generation, given that the vast majority of generation in MISO South is owned and operated by vertically integrated utilities that recover costs in their retail rates; relies unreasonably on data from a single sample day to project annual savings from Short-Term Reserves; will be unlikely to achieve its intended results; and will be likely only to result in the same generators providing the same operating reserves, but under a more expensive pricing model.[31]

16. Protestors assert that MISO's proposal to manage the RDT limits with Short-Term Reserves is not driven by reliability concerns, but rather economic ones.[32] Protestors additionally argue that MISO's single-day study lacks necessary detail to identify which MISO zones will see a net increase or decrease in cost, and that MISO has not provided studies or analysis specific enough to identify which market participants and load pockets

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[28] The MISO South Regulators who jointly filed the protest with Entergy consist of the Arkansas Commission, the Mississippi Commission and Staff, and the New Orleans Council.

[29] The New Orleans Council did not join in the MISO South Regulators Answer.

[30] 16 U.S.C. § 824d (2018); 18 C.F.R. pt. 35 (2019).

[31] Protest at 2.

[32] *Id.* at 8.

in MISO will benefit from the Short-Term Reserve.[33] Protestors assert that, without sufficient cost analysis, MISO has not demonstrated that its proposal reasonably assigns costs to beneficiaries as required by cost causation principles.[34]

17. Protestors argue that MISO's proposal may unduly discriminate against customers in the MISO South region because costs that are locally incurred in the MISO North/Central region (e.g., costs associated with northern-based intermittent resources) would be allocated MISO-wide, while costs for resources that appear more MISO South-centric (e.g., managing RDT limits due to generation outage in MISO South) would be borne solely by southern customers, causing a disparity. Protestors contend that Commission precedent dictates that differences in rates among similarly situated parties are only justified when the record exhibits factual differences to justify classifications among customers and differences among the rates charged to them.[35] Protestors argue that MISO has failed to justify such disparate treatment.[36]

18. Protestors additionally argue that MISO's proposal violates the Commission's "rule of reason" because MISO does not include Tariff provisions that specify the basis for determining the amount of reserves necessary; instead MISO leaves system operators to decide daily, with only general references stated in the proposal.[37] Protestors contend that the Commission has consistently held that rate and tariff filings must not be vague, but instead must be clear, understandable, supported by evidence, and have specificity.[38]

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[33] *Id.* at 3.

[34] *Id.* at 3, 4.

[35] *Id.* at 8-9 (citing *St. Michaels Utils. Comm'n v. FPC*, 377 F.2d 912, 915 (4th Cir. 1967); *Pub. Serv. Co. of Ind. v. FERC*, 575 F.2d 1204, 1212 (7th Cir. 1978); *Elec. Consumers Res. Council v. FERC*, 747 F.2d 1511, 1515 (D.C. Cir. 1984)).

[36] *Id*. at 6-7, 8, 9.

[37] *Id.* at 4, 5 (citing *Prior Notice and Filing Requirements Under Part II of the Federal Power Act*, 64 FERC ¶ 61,139, at 61,986, *order on reh'g*, 65 FERC ¶ 61,081 (1993)).

[38] *Id.* at 6.

B. Answers

19. MISO notes that the regulators in MISO South have historically supported development of a Short-Term Reserve product.[39]

20. MISO asserts that various Commission statements on cost causation principles support its proposal, which appropriately allocates reserve costs to the zone(s) whose needs caused the costs to be incurred.[40] MISO further asserts that the proposed Tariff revisions adequately support the benefits and effectiveness of the Short-Term Reserve product, and sufficiently describe how Short-Term Reserve requirements will be determined.[41] MISO cites to statements by the Commission in Order No. 825, recognizing the "benefits offered by market-based approaches that reduce make-whole payment uplifts that result from out-of-market processes" and that, "[i]n addition to greater transparency, reducing uplift is a goal generally."[42] Additionally, MISO notes that the courts have never required a ratemaking agency to allocate costs with exacting precision or to reject any rate mechanism that tracks the cost causation principle less than perfectly.[43]

21. MISO states that "the production simulations were run for each [five]-minute Real-Time market interval on three market days" that were "chosen to represent a range of operating states from constrained operating conditions to normal market days."[44] MISO explains that, "[o]f the three (3) days studied in these simulations, the majority of Short-Term Reserve benefit was realized on a single market day, September 8, 2018, when capacity in the MISO South sub-region was constrained in [the] Real-Time market

[39] MISO Answer at 3, n.11.

[40] *Id.* at 6-7 (citing *Midwest Indep. Transmission Sys. Operator, Inc.*, 123 FERC ¶ 61,297, at P 19 (2008) (affirming that cost of reserves procured to meet needs in a zone should be allocated to that zone, to be "reflective of cost causation")).

[41] *Id*. at 2.

[42] *Id.* at 9 (citing Order No. 825, 155 FERC ¶ 61,276 at P 7, nn.99 and 100).

[43] *Id.* at 8 (citing *Midwest ISO Transmission Owners v. FERC*, 373 F.3d 1361, 1369 (D.C. Cir. 2004)).

[44] *Id.* at 11.

and the RDT was binding during most of the market intervals."[45] MISO notes that estimated annual benefits and actual benefits are dependent on the utilization of the RDT.

22. MISO argues that, contrary to Protestors' portrayal, the RDT framework is not limited to economic considerations and management of the RDT limits involves reliability concerns. In this regard, MISO cites to a Commission order that recognized the potential need to change the Sub-Regional Power Balance Constraint limit to maintain reliability.[46]

23. MISO also disagrees with Protestors' contention that there is no justification for shifting Short-Term Reserve costs to MISO South through local or sub-regional allocation of those costs that are currently allocated market-wide and through market-wide allocation of the costs associated with uncertain forecasts and output of intermittent resources mainly located in MISO North/Central. MISO argues that the Short-Term Reserve product corrects, rather than causes, a cost shift. MISO contends that costs incurred to meet local or sub-regional Short-Term Reserve needs in zones with binding constraints are appropriately allocated locally or sub-regionally and that the current situation of shifting some costs from the binding zones whose needs cause reserve costs to be incurred to the non-binding zones of the rest of the market is less than equitable cost allocation. Regarding intermittent resource forecast errors, MISO argues that Protestors are mistaken and that intermittent resource forecast errors are not the types of occurrence that justify local cost allocation. Further, according to MISO, sub-regional Short-Term Reserve requirements will be enforced not only in MISO South, but also in MISO North/Central meaning that the reserve costs associated with imbalances in a sub-region will be allocated to that sub-region. MISO additionally states that, "where local or sub-regional constraints are not binding, the Short-Term Reserve costs will be appropriately allocated market-wide as customers in all zones benefit from a reliably balanced system."[47]

24. MISO states that its treatment of the implementation details of Short-Term Reserves is similar to how it currently treats operating, contingency, and regulating reserve requirements with the details of the determination of the requirements provided in the Business Practice Manuals. MISO also notes that its proposed language is similar to several market-wide reserve requirement definitions accepted by the Commission

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[45] *Id.* at 12.

[46] *Id.* at 16 (citing *Midcontinent Indep. Sys. Operator, Inc.*, 164 FERC ¶ 61,129, at P 37 (2018) ("[including RDT] limits in the Tariff could hinder MISO's ability to respond to various operational circumstances, such as emergency conditions, that could require changes to those limits to maintain reliability")).

[47] *Id.* at 18.

that state that the requirements will be determined "in accordance with Applicable Reliability Standards."[48]

25. The Market Monitor supports MISO's filing. The Market Monitor argues that the Short-Term Reserve filing is not vague, nor does it lack sufficient detail. The Market Monitor states that the role of the cost savings estimates is an indication, not the essential finding, to support the Commission's acceptance of the proposal. The Market Monitor argues that the Commission's determination of whether a new market-based product is just and reasonable should be based on whether it will improve the efficiency of the market in satisfying the reliability needs of the system. The Market Monitor argues that the Short-Term Reserve proposal, by replacing manual generator commitments made by the system operator outside the market and by improving real-time price formation, will enhance the efficiency and reliability of the system.[49]

26. The Market Monitor asserts that the Short-Term Reserve proposal is not unduly discriminatory or preferential against MISO South. According to the Market Monitor, "[w]hen MISO procures [Short-Term Reserves] market-wide, even if it is partly due to intermittent resource uncertainty, it benefits the entire market because it will prevent the entire market from being short and exposed to potential load shedding."[50] The Market Monitor additionally states that it is unlikely that wind output uncertainty would result in a significant increase in use of market-wide Short-Term Reserves.[51] However, the Market Monitor contends that it is not unreasonable for some of the costs associated with market-wide use of Short-Term Reserves to accommodate wind and solar resources, which generally lower prices throughout the MISO market, to be borne by load in MISO South. The Market Monitor additionally explains that, when the RDT binds due to falling wind output in MISO North/Central, the Short-Term Reserves costs will be borne by MISO North/Central.[52]

27. The Market Monitor argues the Short-Term Reserves will not be ineffective at achieving long-term objectives. The Market Monitor contends that efficient prices govern decisions to incur major maintenance expenses, make capital improvements, retire resources, and invest in new resources or transmission facilities, regardless of

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[48] *See, e.g.*, MISO, FERC Electric Tariff, Module A, § 1.M, Market-Wide Contingency Reserve Requirement (66.0.0); *see also* MISO Answer at 24.

[49] Market Monitor Answer at 2-4.

[50] *Id.* at 4.

[51] *Id.*

[52] *Id.* at 4-5.

whether utilities are vertically integrated. The Market Monitor asserts that, even if it were true that there are fewer incentives to respond to higher prices for vertically integrated utilities, other resources, such as merchant producers, rely on market prices to finance their investment decisions. Finally, the Market Monitor states that efficient energy and ancillary services prices are essential in any market, regardless of the composition of the market participants.[53]

28. MISO South Regulators reiterate their argument that MISO's proposal is unduly discriminatory and vague.[54] Additionally, MISO South Regulators reassert their argument that MISO's attempt to justify the Short-Term Reserves proposal with one (1) day's data is inadequate and contrary to the Commission's requirements for justification of new rates.[55] MISO South Regulators argue that the Commission should require MISO to conduct a more comprehensive forecast.[56] MISO South Regulators contend that MISO has not proven that its proposal will result in cost savings for customers, and therefore the cost shift from the MISO regional market to MISO sub-regional and/or local market participants is not justified.[57] MISO South Regulators argue that the Market Monitor has been inconsistent in its claims regarding the RDT and reliability. MISO South Regulators argue that, in connection with its request for reconsideration of the RDT Hurdle Rate, the Market Monitor previously argued that the RDT is not needed to address any legitimate reliability concerns associated with MISO's sub-regional transfers and that the RDT limit is not a physical transmission constraint and is not based on any reasonable notion of reliability or network condition.[58]

III. Discussion

A. Procedural Matters

29. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2019), the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

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[53] *Id.* at 5-6.

[54] MISO South Regulators Answer at 2, 7-8.

[55] *Id.* at 3-4.

[56] *Id.* at 4.

[57] *Id.* at 8-9.

[58] *Id.* at 9-11.

30. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2019), we grant the late-filed motions to intervene of the Arkansas Commission, Entergy, Entergy Louisiana, the Market Monitor, the Illinois Commission, and the Texas Commission, given their interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

31. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2019), prohibits an answer to a protest and/or answer unless otherwise ordered by the decisional authority. We accept the answers because they have provided information that assisted us in our decision-making process.

B. Substantive Matters

32. We find MISO's proposed revisions implementing a 30-minute Short-Term Reserve product in its Day-Ahead and Real-Time Markets to be just and reasonable and therefore accept them, effective December 7, 2021, as requested. We find that MISO has supported its proposed Short-Term Reserve product as representing an efficient, transparent, market-based solution for managing post-contingency reserve needs.

33. In addition, MISO's proposal is consistent with the Commission's stated price formation goals by bringing the 30-minute reserve commitment and dispatch into MISO's market processes. In directing Regional Transmission Organizations (RTO)/Independent System Operators (ISO) reports in the price formation proceedings, the Commission stated that "[e]ach RTO/ISO ideally would not need to commit any additional resources beyond those resources scheduled economically through the market processes and market prices would thus reflect the value of electricity consumption without the need to involuntarily curtail load or increase resource commitments out-of-market."[59] We note that 30-minute reserve products are currently utilized in other RTOs, including New York Independent System Operator, ISO New England Inc., and Electric Reliability Council of Texas, and that PJM Interconnection LLC also has a proposal for 30-minute reserves currently pending before the Commission.[60]

34. We also grant waiver of the one hundred and twenty (120) day prior notice rule. Given the fact that MISO, the Market Monitor, and market participants require time to budget and devote needed resources and develop and test the system prior to implementing the proposed revisions, we find that good cause has been shown to grant

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[59] *Price Formation in Energy and Ancillary Services Markets Operated by Regional Transmission Organizations and Independent System Operators*, 153 FERC ¶ 61,221, at P 2 (2015).

[60] Patton Test. ¶ 12.

MISO's request to waive the requirements of section 35.3(a) of the Commission's regulations.[61]

35. We find that Protestors' argument that MISO's proposal to manage the RDT limits with Short-Term Reserves is driven by economic concerns rather than reliability concerns is misplaced. Whether managing the RDT is a reliability or economic concern is irrelevant since the limit is a binding constraint that needs to be enforced pursuant to MISO's Settlement Agreement with SPP. MISO's Settlement Agreement with SPP requires that MISO restore the RDT to its contractual limit within 30 minutes following a contingency.[62] MISO's proposal provides a market solution to manage the RDT limit, rather than continuing to rely on out-of-market actions. We, therefore, find that MISO sufficiently supports its proposed use of the Short-Term Reserve product to manage RDT limits for contractual requirements, as well as to manage local and market-wide post-contingency reserves for reliability purposes.

36. We also disagree with Protestors' contention that MISO has not demonstrated that its proposal reasonably assigns costs to beneficiaries as required by cost causation principles. We find that MISO's proposal reasonably allocates costs based on load-ratio share in grouped zones where constraints result in the need for Short-Term Reserves. Further, MISO's Short-Term Reserves cost allocation is similar to how MISO allocates costs of operating reserves.[63] We also find that MISO's proposal to allocate the cost of Short-Term Reserves used to improve system reliability and benefit customers in all zones (i.e., where local or sub-regional constraints are not binding) is just and reasonable, including the accommodation of wind forecasting errors, given that these reserves can be used to address a potential contingency and avoid possible load shedding. We additionally note that, as the Market Monitor explains, when the RDT binds due to falling

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[61] 18 C.F.R. § 35.3(a)(1) (2019) provides:

> All rate schedules or tariffs or any part thereof shall be tendered for filing with the Commission and posted not less than sixty (60) days nor more than one hundred-twenty (120) days prior to the date on which the electric service is to commence and become effective under an initial rate schedule or tariff or the date on which the filing party proposes to make any change . . . in rate schedule or tariff . . . .

[62] Patton Test. ¶ 25.

[63] *See* MISO Answer at 6-7 (citing *Midwest Indep. Transmission Sys. Operator, Inc.*, 122 FERC ¶ 61,172, at PP 418-421, *order on reh'g*, 123 FERC ¶ 61,297 (2008)).

wind output in MISO North/Central, the Short-Term Reserves costs will be borne by MISO North/Central.[64]

37. We also disagree with arguments raised by protestors regarding the design of MISO's Short-Term Reserve product. We are not persuaded by protestors' contention that MISO must model the load pockets under various scenarios to ensure that the proposed Short-Term Reserve product will decrease cost, reduce out-of-market commitments, and increase reliability during differing system conditions. MISO has demonstrated that its proposal is just and reasonable without the expanded modeling that Protestors request. MISO need not ensure reduced costs, or that out-of-market commitments will be reduced, under all system conditions. We also find that MISO has sufficiently demonstrated the existing reliability-based need for managing post-contingency reserves at local load pockets in MISO South and managing reserves market-wide, as well as an ongoing need to manage flows within contractual limits at the RDT. We also reject Protestors' contention that the Short-Term Reserve product will be unlikely to send the necessary price signals to build new generation because the vertically-integrated utilities in MISO South recover costs in their retail rates as unsupported. We do not agree that just because the Entergy companies are vertically integrated that they do not have incentives to respond to price signals in their operating and investment decisions. We further believe price signals, such as those that would result from MISO's Short-Term Reserve product proposal, can incentivize merchant producers to build new generation.

38. Finally, we disagree with Protestors' argument that the Commission's "rule of reason" requires additional Tariff language to detail the calculation that MISO will use to determine the needed amount of Short-Term Reserves.[65] MISO's proposed Tariff language states that the Short-Term Reserve requirement "will be derived from rampable Capacity needs, Energy schedules, and contractual constraints, such as the Sub-Regional Power Balance Constraints, to ensure deliverability."[66] Additionally, Section II.B of MISO's proposed Short-Term Reserve Schedule 51 similarly references certain "factors" that will drive the local and sub-regional requirements, such as thermal limits, stability limits, and contractual requirements. We find that including such details in the Business

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[64] Market Monitor Answer at 4-5.

[65] Protest at 4, 5 (citing *Prior Notice and Filing Requirements Under Part II of the Federal Power Act*, 64 FERC ¶ 61,139, at 61,986, *order on reh'g*, 65 FERC ¶ 61,081 (1993)).

[66] MISO Answer at 21, 23 (citing MISO, FERC Electric Tariff, Module C, § 39.2.1A.h.ii (39.0.0) (proposed revision)).

Practice Manuals is consistent with the rule of reason.[67] Moreover, requiring MISO to include this information in the Tariff could curb needed operational flexibility.

The Commission orders:

MISO's filing is hereby accepted, as discussed in the body of this order, effective December 7, 2021, as requested.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

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[67] *See Midcontinent Indep. Sys. Operator, Inc.*, 169 FERC ¶ 61,221, at P 67 (2019) ("Decisions as to whether an item should be included in a tariff or in a business practice manual are guided by the Commission's rule of reason policy, under which provisions that 'significantly affect rates, terms, and conditions' of service, are readily susceptible of specification, and are not generally understood in a contractual agreement must be included in a tariff.") (citations omitted).