

139 FERC ¶ 61,081
FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

April 30, 2012

In Reply Refer To:
Midwest Independent Transmission
System Operator, Inc.
Docket No. ER12-1185-000

Midwest Independent Transmission
System Operator, Inc.
P.O. Box 4202
Carmel, IN 46082-4202

Attention: Arthur W. Iler, Assistant General Counsel

Reference: Regulating and Spinning Reserve Demand Curves

Dear Mr. Iler:

1. On March 1, 2012, pursuant to Section 205 of the Federal Power Act¹ and Part 35 of the Commission's regulations,² the Midwest Independent Transmission System Operator, Inc. (MISO) submitted proposed revisions to its Open Access Transmission, Energy, and Operating Reserve Markets Tariff (Tariff) to establish Regulating and Spinning Reserve Demand Curves that will set prices during reserve shortage periods. In this order, we conditionally accept MISO's proposal subject to compliance, to become effective May 1, 2012.

2. On September 14, 2007, as amended on September 19, 2007, MISO submitted Tariff revisions to establish a co-optimized Energy and Ancillary Services Market within

¹ 16 U.S.C. § 824d (2006).

² 18 C.F.R. Part 35 (2011).

the MISO region. In 2008, the Commission conditionally accepted MISO's filing,³ which included a co-optimized Ancillary Services Market⁴ that uses demand curves to determine prices for Market-Wide and Zonal Regulating Reserves and Operating Reserves with corresponding scarcity pricing.⁵ Following further modifications that were accepted by the Commission, MISO's Ancillary Services Market began operations in January 2009.⁶

3. MISO explains that the Ancillary Services Market employs demand curves to establish the Market Clearing Prices for Regulating and Operating Reserves during periods of supply scarcity.⁷ In order to meet applicable reliability standards, MISO maintains its Market-Wide and Zonal Operating Reserve Requirements, a percentage of which must be synchronized to the grid (Spinning Requirement). This Spinning Requirement is made up of Regulating and Spinning Reserves. When there are insufficient resources available to satisfy the Spinning Requirement, the co-optimized formulations use a constraint relaxation methodology that reduces the Spinning Requirement (Relaxed Spinning Requirement). In that event, pricing is determined by the offers available to clear the Relaxed Spinning Requirement. In addition, the Ancillary Services Market algorithm uses a penalty price for Spinning Reserve procurement, which has been historically set to \$98 per MW, based primarily on the Contingency Reserve Offer Price Cap of \$100 per MW specified in the Tariff.⁸

4. According to MISO, in the 2009 State of the Market Report, the Independent Market Monitor observed instances where the Market Clearing Price for Spinning

³ *Midwest Indep. Transmission Sys. Operator, Inc.*, 122 FERC ¶ 61,172, at PP 191-220, *order on reh'g*, 123 FERC ¶ 61,297 (2008).

⁴ Products offered through MISO's Ancillary Services Market include Regulating, Spinning and Supplemental Reserves.

⁵ Section 1.588 of the Tariff defines the scarcity price as the locational marginal price and market clearing price levels determined by demand curves when insufficient Operating Reserve are cleared to meet the Market-Wide and Zonal Operating Reserve Requirements.

⁶ *See Midwest Indep. Transmission. Sys. Operator, Inc.*, 125 FERC ¶ 61,318 (2008).

⁷ March 1 Filing at 2.

⁸ *Id.* at 2.

Reserves did not reflect shortages.⁹ The Independent Market Monitor recommended: “Allowing the spinning reserve penalty price to set the price in the spinning reserve market (and be reflected in energy prices) during spinning reserve shortages by not relaxing the [Spinning Requirement].”¹⁰ MISO also states that the Independent Market Monitor subsequently recommended eliminating the relaxation algorithm and implementing a reserve demand curve.¹¹

5. In order to address the reserve shortage pricing issue associated with Regulating and Spinning Reserves, MISO proposes to implement a new Regulating and Spinning Reserve Demand Curve in order to set the Regulating and Spinning Reserve constraint shadow price during shortage intervals.¹² MISO states that the proposed demand curve will avoid reserve prices that are too low during shortages and create the proper market incentives for providing such reserves to address shortages. MISO adds that its proposal will balance reliability needs and the value of obtaining reserves as required by system conditions.

6. Under MISO’s proposal, the Regulating and Spinning Reserve Demand Curve will be established based on the level of the Regulating and Spinning Reserve shortage. MISO explains that as a Regulating and Spinning Reserve shortage intensifies, the corresponding Regulating and Spinning Reserve Demand Curve value will increase as well. Specifically, MISO proposes that Regulating and Spinning Reserve levels that are greater than 90 percent but less than 100 percent of the Spinning Requirement will be priced at \$65 per MWh. Where Regulating and Spinning Reserve levels are less than 90 percent of that the Spinning Requirement, they will be priced at \$98 per MWh. MISO witness Mr. Vannoy expects that the proposed two-step curve will result in an average value of \$82 per MWh, the same price as the average Regulating and Spinning Reserve

⁹ *Id.* (citing Potomac Economics, 2009 State of the Market Report for the Midwest ISO (2009), http://www.potomaceconomics.com/uploads/midwest_documents/2009_State_of_the_Market_Report.pdf).

¹⁰ *Id.* (citing 2009 State of the Market Report at xxiv and 73).

¹¹ *Id.* at 3 (citing Potomac Economics, 2010 State of the Market Report for the MISO Electricity Markets, xi (2010), http://www.potomaceconomics.com/uploads/midwest_reports/2010_State_of_the_Market_Report_Final.pdf).

¹² *Id.*

constraint shadow price during shortages. Mr. Vannoy asserts that its proposal will achieve similar levels of reliability while eliminating unpredictable and counterintuitive pricing outcomes.¹³

7. In order to implement the Regulating and Spinning Reserve Demand Curve, MISO proposes various modifications to Module A, Module C, Schedule 28, and Schedule 29 of the Tariff.¹⁴ MISO proposes to add or modify several definitions to Module A. MISO proposes to add references to the Regulating and Spinning Reserve Demand Curves in the context of the Day-Ahead Energy, Real-Time Energy, and Operating Reserve Markets to Module C. Additionally, MISO proposes add a general description of the mechanics and calculation of the Market-Wide and Zonal Regulating and Spinning Reserve Demand Curves to Schedule 28. Finally, MISO proposes modifying Schedule 29 to define Market-Wide and Zonal Regulating and Spinning Reserve Values, and to include them in the Objective Function for both the day-ahead and real-time markets.

8. MISO explains that its proposal is supported by its stakeholders. Specifically, MISO states that, on January 21, 2012, MISO's Market Subcommittee passed a motion supporting the proposal, with 23 votes in favor, and only one against.¹⁵

9. Notice of the MISO's filing was published in the *Federal Register*, 77 Fed. Reg. 14,358 (2012), with interventions and protests due on or before March 22, 2012. Timely motions to intervene were filed by: The Detroit Edison Company; Exelon Corporation; MidAmerican Energy Company (MidAmerican); Consumers Energy Company; Ameren Services Company; Wisconsin Electric Power Company; NRG Companies; Duke Energy Corporation (Duke); American Municipal Power, Inc.; and Hoosier Energy Rural Electric Cooperative and Southern Illinois Power Cooperative. MidAmerican and Duke filed comments on MISO's proposal. MISO filed an answer in response to MidAmerican's comments.

10. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2011), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2011), prohibits an answer to a protest or an answer unless otherwise ordered by the decisional authority. We will accept MISO's answer because it has provided information that assisted us in our decision-making process.

¹³ Vannoy Test. at 7.

¹⁴ March 1 Filing at 4-6.

¹⁵ *Id.* at 4.

11. Duke supports MISO's proposal. Duke contends that MISO's proposal received "overwhelming support by the Market Subcommittee stakeholder group."¹⁶

12. MidAmerican states that it does not oppose MISO's proposal. However, MidAmerican identifies two typographical errors requiring correction in MISO's proposed Tariff language.¹⁷ In addition, MidAmerican states that "Section 1.710b is titled 'Zonal Regulating Reserve and Spinning Reserve Requirement,' but other locations in the Tariff simply use the term 'Zonal Regulating and Spinning Reserve Requirement.'"¹⁸ MidAmerican asserts that MISO should apply the desired term consistently.¹⁹

13. In its answer, MISO agrees that MidAmerican's suggestions would correct errors and ensure consistency across the Tariff.²⁰ MISO also identifies an additional typographical error and commits to correct all of the aforementioned errors in a compliance filing, if so directed by the Commission.²¹

14. We conditionally accept MISO's proposed Tariff revisions to Modules A and C and Schedules 28 and 29 to become effective on May 1, 2012, subject to compliance. We find that MISO's proposal will establish more accurate price signals for Regulating and Spinning Reserves during periods of reserve shortages and thereby improve the market incentives for providing those reserves. Further, we find that the pricing for Regulating and Spinning Reserves should reflect the degree of shortage with respect to the Market-Wide and Zonal Regulating and Spinning Reserve Requirement. Finally, we note that no party has objected to MISO's proposal.

¹⁶ Duke Comment at 2.

¹⁷ MidAmerican Comment at 3-4.

¹⁸ *Id.* at 3.

¹⁹ *Id.*

²⁰ MISO Answer at 3.

²¹ *Id.*

15. We direct MISO to make the corrections identified by MidAmerican, as well as the additional correction identified by MISO in its answer, in a compliance filing within 30 days of the date of this order.

By direction of the Commission.

Kimberly D. Bose,
Secretary.