123 FERC ¶ 61,296
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Suedeen G. Kelly, Marc Spitzer,
Philip D. Moeller, and Jon Wellinghoff.

Midwest Independent Transmission System Operator, Inc. — Docket Nos. ER07-1372-004, ER07-1372-006

ORDER CONDITIONALLY ACCEPTING COMPLIANCE FILING

(Issued June 23, 2008)

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1. In an order issued February 25, 2008, the Commission accepted the Midwest Independent Transmission System Operator, Inc.'s (Midwest ISO) proposed ancillary services market (ASM), as modified, and ordered compliance filings.[1] For the reasons discussed below, we conditionally accept the Midwest ISO's compliance filing subject to further compliance. We also accept the Midwest ISO's March 21, 2008 request to delay commencement of its ASM from June 1, 2008 to September 9, 2008. In an order issued concurrently with this order, we grant in part and deny in part requests for rehearing of the February 25 Order.

I. Background

A. History

2. The Commission rejected without prejudice the Midwest ISO's initial ASM proposal and provided guidance to better enable the Midwest ISO to prepare and re-file a complete proposal.[2] The Commission explained that the filing did not include (1) a market power analysis supporting the proposed ASM or (2) a readiness plan to ensure reliability during the transition from the current reserve and regulation system, which is managed by individual Balancing Authorities, to a centralized ASM managed by the Midwest ISO.

3. The Midwest ISO filed its revised proposal on September 14, 2007. On September 19, 2007, the Midwest ISO filed proposed amendments to its September 14 filing to correct minor typographical errors and provide inadvertently omitted language in certain definitions and Transmission and Energy Markets Tariff (TEMT or tariff) sections.

4. By order issued on November 19, 2007,[3] the Commission directed the Commission Staff to convene a Technical Conference to explore the issues raised by the Midwest ISO's market power analysis and proposed mitigation plan. Commission Staff held the Technical Conference on December 6, 2007.

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[1] *Midwest Indep. Transmission Sys. Operator, Inc.*, 122 FERC ¶ 61,172 (2008) (February 25 Order).

[2] *Midwest Indep. Transmission Sys. Operator, Inc.*, 119 FERC ¶ 61,311, *reh'g denied*, 120 FERC ¶ 61,202 (2007) (Guidance Order).

[3] *Midwest Indep. Transmission Sys. Operator, Inc.*, 121 FERC ¶ 61,190 (2007).

B. February 25 Order

5. The February 25 Order accepted the Midwest ISO's revised ancillary services market (ASM) proposal, as modified, and ordered compliance filings. Under the proposal, the Midwest ISO will determine operating reserve requirements and procure operating reserves from all qualified resources, in place of the current system of local management and procurement of reserves by the 24 Balancing Authorities. The Midwest ISO will also transfer and consolidate Balancing Authority responsibility in the Midwest ISO so that the Midwest ISO may become the North American Electric Reliability Council (NERC)-certified Balancing Authority for the entire Midwest ISO Balancing Authority Area. The Commission found that this will allow for the centralized and efficient management of ancillary services.

6. In accepting the Midwest ISO's proposal in the February 25 Order, the Commission also praised the proposal's simultaneous co-optimization approach, which seeks to minimize overall production costs in the Midwest ISO markets by coordinating the market-based procurement of energy and operating reserves. The Commission found that the simultaneous co-optimization approach will provide for the efficient acquisition and pricing of operating reserves, noting that variations of this approach are already in use by existing ISOs and regional transmission organizations (RTOs) that provide ancillary services through market-based mechanisms.

7. The February 25 Order also found that the ASM proposal provides for greater participation by demand resources and scarcity pricing through the use of demand curves, as part of the co-optimization process. The Commission stated that the expected increased participation of demand resources will substantially improve efficiency and reliability.

8. To address commenters' market power concerns, the February 25 Order also adopted a comprehensive package of market mitigation measures to ensure that ASM rates are just and reasonable as the region moves from cost-based rates to market-based rates.

C. Filings Addressed in this Order

9. On March 21, 2008, the Midwest ISO submitted a request to delay ASM implementation from June 1, 2008 to September 9, 2008.

10. On March 26, 2008, as amended on March 27, 2008, the Midwest ISO submitted its 30-day compliance filing (referenced in this order as the compliance filing). The Midwest ISO explains that its filing addresses all of the Commission's 30-day directives in the February 25 Order.

II. Notices and Responsive Pleadings

11. Notice of the Midwest ISO's March 21, 2008 filing was published in the *Federal Register*, 73 Fed. Reg. 20,622 (2008), with interventions and protests due on or before April 18, 2008. Calpine Corporation filed a motion to intervene.

12. Notice of the Midwest ISO's March 26, 2008 filing was published in the *Federal Register*, 73 Fed. Reg. 18,523 (2008), with interventions and protests due on or before April 16, 2008. Notice of the Midwest ISO's March 27, 2008 amendment was published in the *Federal Register*, 73 Fed. Reg. 19,201 (2008), with interventions and protests due on or before April 16, 2008. Comments on the compliance filing were filed by the entities identified in Appendix A, and the party abbreviations listed in Appendix A will be used throughout this order. Answers were submitted by Duke, Indianapolis P&L, Hoosier & Southern Illinois, and Midwest ISO.

III. Procedural Matters

13. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2007), the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

14. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2007), prohibits an answer to a protest or an answer unless otherwise ordered by the decisional authority. We will accept the answers of Duke, Indianapolis P&L, Hoosier & Southern Illinois, and Midwest ISO because they have provided information that assisted us in our decision-making process.

IV. Request to Delay Implementation

A. Midwest ISO Request

15. On March 21, 2008, Midwest ISO submitted a request to delay the implementation of the ASM from June 1, 2008 to September 9, 2008. Midwest ISO explains that the delay is necessary because it must engage in further system operations tests and parallel operations tests to ensure market readiness and full tariff compliance prior to ASM launch.

B. Commission Determination

16. Midwest ISO's thorough testing of its ASM operations will ensure that the ASM is reliable and efficient upon launch. For this reason, it is important to allow the Midwest ISO to complete its testing procedures and avoid a premature market launch. We will grant Midwest ISO's request to delay ASM implementation until September 9, 2008.

V. Compliance Filing Discussion

A. Cost Allocation Among Reserve Zones

1. February 25 Order

17. The Commission considered the Midwest ISO's proposal in the February 25 Order, which allocated costs using both market-wide and zonal allocators, to be: (1) inequitable because it requires market participants in zones with low reserve requirements to pay for the costs of their reserves plus an allocation of costs from the higher reserve requirement zones; and (2) not reflective of cost causation, since it allocates costs in high reserve requirement zones to the rest of the Midwest ISO.[4] The Commission required the Midwest ISO to file a revised cost allocation that allocates the costs of reserves in the zone to load in the zone. The Commission stated that such a cost allocation would be reasonable because it would ensure clear price signals, reflect cost causation and avoid inequities among market participants.

2. Midwest ISO Compliance Filing

18. The Midwest ISO submits a revised zonal cost allocation method applicable to Schedules 3, 5 and 6 that allocates net operating reserve procurement costs within Binding Settlement Zones[5] to real-time load[6] within the Binding Settlement Zone and allocates net operating reserve procurement costs within Non-Binding Settlement Zones[7] to real-time load with the Non-Binding Settlement Zones. The Midwest ISO explains that it interprets the Commission's directive in the February 25 Order to implement a zonal allocation to mean that a zonal allocation should only apply to reserve zones in which the minimum operating reserve requirement is binding, thus causing price separation.

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[4] *See* February 25 Order, 122 FERC ¶ 61,172 at P 412-21.

[5] Binding Settlement Zones are reserve zones with market clearing prices for reserves greater than the minimum market clearing price for reserves in all reserve zones in the day-ahead and real-time reserve markets.

[6] All loads used to calculate reserve charges exclude carved-out GFA load.

[7] Non-Binding Settlement Zones are the combination of all reserve zones that are not Binding Reserve Zones.

3. **Comments**

19. Duke asserts that the Midwest ISO's revised proposal fails to trace costs when a constrained zone imports reserves since it assigns all reserve costs to load in the zone where the reserves originate, rather than where they are consumed. Duke argues that the cost of reserves located in the non-constrained area that are imported into the constrained zone are charged to the non-constrained area, rather than the constrained zone, thereby sending false price signals to load inside the constrained zone because this load will receive part of its reserves for free.

20. Duke also notes that it is common for a constrained zone to be a net exporter of reserves, thereby reducing the need to clear reserves in the non-constrained area. Duke contends that it would be unfair and contrary to cost causation principles to require load in the non-constrained area to pay the higher marginal clearing price (MCP) of the constrained zone. To address the conundrum of who pays the revenue shortfall between the MCPs of the constrained zones and the MCP of the non-constrained zones for reserves generated in the constrained zone and consumed by load outside the constrained zone, Duke submits that load within the constrained zone should pay for the shortfall so that load outside the constrained zone pays the same price for reserves as if the constraint did not exist. Duke claims that this method is consistent with cost causation and with the requirements of the February 25 Order.

21. Duke considers the revised proposal to be further removed from cost causation than the original proposal since it rules out the allocation of any portion of reserve payments due to generators in a zone to load outside the zone that consumes such reserves. Duke also objects to the revised proposal since it allocates charges solely on the basis of which LSEs happen to be in the same zones as a generator providing reserves, whether or not the LSEs consume the reserves from that generator, rather than on the basis of the costs they cause. Duke further argues that the revised proposal renders it in the LSE's interest to avoid the creation of any reserves within their zone and instead to import reserves.

22. To remedy these defects, Duke proposes a cost allocation that allocates the load-ratio share of the total market-wide reserve obligation multiplied by the market-wide MCP that would result if the constraint was removed to the non-constrained market and allocates the market-wide reserve obligation multiplied by the locational MCP to the constrained zone, plus an additional allocation of the revenue shortfall to the constrained zone. Duke considers this revised proposal just and reasonable because: (1) each area of the market pays for a quantity of reserves proportional to its load; (2) the non-constrained part of the market pays for reserves at the price that would prevail if there were no constraints; (3) each constrained zone pays for its reserves at its actual MCP; and (4) the revenue shortfall is allocated to constrained zones in proportion to the cost of exporting high-cost reserves to lower-cost non-constrained areas.

23. Indianapolis P&L contends that the Midwest ISO's revised proposal is inconsistent with the Commission's directives in the February 25 Order because it provides for the allocation of costs across the entire Midwest ISO footprint when there are no binding constraints, putting the proposal at odds with cost causation and the Commission's desire to provide for appropriate price signals. Ameren recommends that the Commission require the Midwest ISO to evaluate adopting a two-pass cost allocation, i.e., the market with no constraints in the first pass and with constraints in the second pass, and report to the Commission within 180 days of the commencement of ASM operations. Ameren also notes that certain provisions in the Midwest ISO's proposal require further revisions.

4. Answers

24. The Midwest ISO asserts that its revised proposal is consistent with the Commission's compliance directive in the February 25 Order. The Midwest ISO argues that its approach is necessary to ensure that the total cost of operating reserve procurement is not subsidized by market participants located in reserve zones in which operating reserves clear in excess of reserve zone operating reserve requirements during periods when there is no market clearing price separation. Absent this approach, the Midwest ISO asserts that load in the reserve zone in which operating reserves clear in excess of reserve zone requirements would be wholly responsible for the total cost of those operating reserves, notwithstanding the fact that the market as a whole benefits from the provision of those operating reserves when the constraints affecting that reserve zone are not binding. The Midwest ISO agrees with Ameren that certain section references in Schedules 3, 5 and 6 should be revised, if so directed by the Commission.

25. Duke argues that when there is price separation, the Midwest ISO proposal does not avoid the anomalous result of market participants with load in the reserve zone in which operating reserves clear in excess of reserve zone requirements subsidizing the cost of operating reserves for all other market participants that benefit from those operating reserves. Duke contends that its proposal avoids this result. Duke states that its proposal is responsive to the Commission's directive to develop a methodology that accurately tracks cost causation and should be adopted.

5. Commission Determination

26. We accept the zonal allocation between binding zones and non-binding zones proposed by the Midwest ISO to be in compliance with the February 25 Order. We accept the proposal to allocate costs to binding zones when the constraints are binding and to the non-binding zone when there is no price separation. The absence of price separation indicates that the constraints are not binding and therefore all resources can provide reserves that are deliverable to load in the non-binding zone. As discussed in the February 25 Order, the Midwest ISO designates reserve zones to ensure that resources in the zone can manage reliability for load in the zone. Therefore, binding zones, or zones

that have transmission constraints, cannot import sufficient quantities of reserves from other zones to manage reliability, by definition. Accordingly, we do not consider Duke's concerns regarding the allocation of import costs in binding, or constrained, zones to be a likely or significant occurrence.

27. With respect to exports from constrained zones, the February 25 Order acknowledged that these would occur, but considered that result to be secondary to the primary purpose of the reserves to manage reliability in the constrained zone. We disagree with Duke's assertion that load will pay for operating reserves that *happen* to be located in that zone. Reserves are in a zone specifically to manage local reliability and thus benefit the load in the zone.

28. Moreover, certain parties appear to misunderstand the basis for the Commission's cost causation analysis. The costs of reserves in the zone are allocated to load in the zone because the Midwest ISO locates the reserves in a zone to manage reliability in that zone. Therefore, the zone design undertaken by the Midwest ISO ensures that there are adequate reserves deliverable to load in the zone. When a reserve resource in a constrained zone provides reserve MWs greater than the needs of load in the zone, and therefore provides reserve MWs to adjoining zones, such result is not the cause of the costs of reserves. Rather, it is instead a secondary outcome unrelated to the primary reliability purpose of the reserves in the constrained zone.[8] In other words, the load in the adjoining non-constrained zones may use reserves from the reserve resource in the constrained zone, but such load could just as easily have used reserves from any number of resources in the non-constrained zone. It would therefore be inappropriate to assign the costs of the reserve resource in the constrained zone to load in the non-constrained zone, since load in the non-constrained zone is not the *cause* of the constrained zone reserve costs.[9]

29. Responding to Indianapolis P&L, we find that the allocation of costs across non-binding zones is appropriate because all reserves in a non-binding zone are accessible for

[8] Since reserves in constrained or binding zones are more expensive, we expect that the co-optimization will minimize the amount of reserves from these resources consistent with its cost minimization objective function, thereby reducing the likelihood of excess reserves serving loads outside the constrained zone.

[9] Addressing the several hypothetical examples discussed by Duke, we do not agree with the assumption that the reserve rate for the non-constrained market is lower than it would have been in the absence of the constraint. Reserves can be provided in the non-constrained zone from a variety of sources and are not dependent on reserves from the constrained zone and therefore reliability in the non-constrained zone could be managed without being affected by costs in the constrained zone.

reliability management in the area and load receives a reliability benefit from all these reserves. We interpret the Midwest ISO's statement in its answer that its proposal ensures that the costs of operating reserves in excess of reserve zone requirements are not wholly the responsibility of load in the zone to mean that when there is no price separation and therefore no binding constraint, the costs of reserves in the non-binding zone should be shared by all load in the non-binding zone. We require the Midwest ISO to confirm this interpretation in a compliance filing to be submitted within 30 days of the date of this order.

30. In response to Ameren, we will not require the Midwest ISO to evaluate a two-pass cost allocation. We encourage the Midwest ISO and stakeholders to evaluate cost alternative allocations using the analysis they find appropriate in their stakeholder discussions, but we will not mandate the types of analysis they use in those evaluations. We note that sections 39.3.2.b and 40.3.3.b.iii, iv and v,[10] discussed further in the next section, apply to the compensation of resources and do not implicate the payment for reserves by load, and therefore do not require adjustment for the binding and non-binding settlement zone language in the revised Midwest ISO proposal.

B. Allocation of Ancillary Services Costs to Grandfathered Agreements

1. February 25 Order

31. In the February 25 Order, the Commission required the Midwest ISO to assess the transmission owner providing service under carved-out grandfathered agreements (GFAs)[11] charges for the reserves supplied in real-time through the ASM, to the extent that parties to carved-out GFAs do not schedule sufficient reserves in real-time.

2. Midwest ISO Compliance Filing

32. In the Midwest ISO proposal, carved-out GFAs are charged for any portion of the GFA billing entity's reserve obligation that is not provided through the scheduling of reserves under the carved-out GFA. The reserve obligation is equal to the sum of all load

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[10] Midwest ISO, FERC Electric Tariff, Third Revised Sheet No. 514, First Revised Sheet No. 581A.01, Original Sheet No. 581A.02, 581A.03, and First Revised Sheet No. 581B, respectively.

[11] Carved-out GFAs are agreements held by Midwest ISO market participants that elected not to include these agreements in the Midwest ISO energy market and did not choose one of the settlement options made available by the Commission at the start of the Midwest ISO energy markets. *See Midwest Indep. Transmission Sys. Operator, Inc.*, 108 FERC ¶ 61,236 (2004) (GFA Order).

served by a carved-out GFA billing entity[12] multiplied by the market-wide cleared reserve divided by the sum of all market participant actual energy withdrawals,[13] excluding real-time export schedules.

33. The Midwest ISO explains that the proposed carved-out GFA treatment has the potential to produce revenue inadequacy since reserves may be located in a reserve zone with a lower MCP than the MCP for the reserve zone where the carved-out load is being served. Revenue deficiencies or surpluses are funded or distributed, respectively, *pro rata* to market participants on a load ratio share basis.

3. Comments

34. Ameren considers the Midwest ISO proposed cost allocation for carved-out GFAs to be inconsistent with cost causation principles because it results in revenue inadequacy that is uplifted to other market participants. Accordingly, Ameren recommends that the Commission require the Midwest ISO to amend the cost allocation to make clear that the GFA responsible entity is to pay the procurement rate based on the reserve zone of the party receiving service under the carved-out GFA or, alternatively, to include the load associated with carved-out GFAs in both the denominator and numerator of the rate calculation. Indianapolis P&L also considers the assignment of remaining costs on an overall load ratio share basis to be contrary to the February 25 Order. The Midwest TDUs object to the assignment of revenue deficiencies or surpluses to pseudo-tied load, since that load does not cause the deficiencies or surpluses. Ameren and Duke also express concern that the reserve cost allocation calculation refers to tariff sections that do not exist or that do not address binding and non-binding settlement zones.

35. Duke argues that the tariff should require carved-out GFAs to submit day-ahead market schedules because such a requirement is compatible with reliable, available reserves. Duke asserts that the carved-out GFA should be assessed deficiency charges if it fails to follow Midwest ISO directives for the provision of ancillary services. Noting that the proposed ASM already requires registration of the market characteristics of resources, Duke also recommends that carved-out GFAs be required to publicly disclose their relevant market characteristics. Duke notes that the Commission undertook a full-disclosure approach when the GFAs were initially carved out from the market.

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[12] Total load excludes exports for regulating reserves in Schedule 3 and includes exports for spinning and supplemental reserves in Schedules 5 and 6.

[13] Withdrawals exclude exports for regulating reserves in Schedule 3 and include exports for spinning and supplemental reserves in Schedules 5 and 6.

4. Answers

36. The Midwest ISO considers Ameren's position to be inconsistent with the Commission's ruling in the February 25 Order and a collateral attack on the specific requirements set forth in the February 25 Order. The Midwest ISO acknowledges there is a potential revenue inadequacy due to reserve zone differentials in the market clearing price paid to resources and the resulting rates assessed to load served. However, the Midwest ISO argues that it would not be prudent to impose these costs upon carved-out GFAs, in light of Commission precedent.[14]

37. Responding to requests of Ameren and Duke that load under carved-out GFAs should be required to notify the Midwest ISO of their intent to self-schedule or purchase operating reserves, the Midwest ISO notes that it already includes a non-binding day-ahead schedule requirement for carved-out GFAs. The Midwest ISO concurs with Duke that carved-out GFAs should be assessed deficiency charges, and notes that the currently-effective tariff provisions for carved-out GFAs are subject to deficiency charge settlement provisions. The Midwest ISO notes that it will continue to include relevant information about carved-out GFA scheduling practices and related data in its GFA Quarterly Report. The Midwest ISO addresses the Midwest TDU concerns by confirming that load pseudo-tied out of the Midwest ISO Balancing Authority will not be allocated any costs associated with Schedules 3, 5 and 6.

38. Hoosier & Southern Illinois assert that Ameren's comments are an improper collateral attack on the February 25 Order, noting that the Commission has already found that the public interest does not require that carved-out GFAs be subject to the ASM tariff. Hoosier and Southern Illinois further argue that adoption of Ameren's suggestion would undo the Commission's determination in the February 25 Order that GFAs carved out of the energy markets should also be carved out of the ASM.

5. Commission Determination

39. We agree with Ameren that no purpose is served by designing a rate to result in a revenue deficiency, and that allocating the deficiency based on a load-ratio share defeats the purpose of a zonal cost allocation to ensure that load in the zone pays for reserves in the zone. We also consider elements of the Midwest ISO's proposal, such as a reserve obligation based on market-wide reserves, to be contrary to a zonal allocation of costs to load in the zone. Accordingly, we require the Midwest ISO to revise the design of its rate to ensure that the rate recovers all the reserve costs and that additional amounts do not have to be recovered in a deficiency rate. To ensure consistency with the zonal cost

[14] *See Midwest Indep. Transmission Sys. Operator, Inc.,* 121 FERC ¶ 61,166 (2007).

allocation, we also require that carved-out GFAs pay the costs of the reserves in the zone where their load is located. To address the concerns of Ameren with respect to ensuring that there is no deficiency, we require the following rate formulation: the first step is to identify the reserve costs, for each reserve product (regulating, spinning or supplemental reserves) allocated to carved-out GFAs in each binding zone and in the non-binding zones, and the second step is to subtract the amounts recovered from carved-out GFAs from total reserve procurement costs in each zone and then allocate the remainder to all other market participants in the zone.

40. To ensure that there is no deficiency, we specify the steps more specifically as follows, using elements of the Midwest ISO proposal. In the first step, the amount allocated to carved-out GFAs is derived by determining the reserve zone obligation of the carved-out GFA load and subtracting from this amount the credits and charges received under sections 39.3.2A and 40.3.3.b[15] for reserves scheduled under carved-out GFAs for volumes not to exceed the carved-out GFA load reserve obligation. The reserve zone obligation of the carved-out GFA load is the procurement rate (procurement costs for reserves in the binding reserve zone or non-binding reserve zones divided by the total actual energy withdrawals in the zone including carved-out GFAs) multiplied by the carved-out GFA withdrawals in the zone. The second step takes the remaining reserve costs in the zone and allocates them to other market participants by dividing the remaining procurement costs by the total actual withdrawals in the zone excluding carved-out GFAs. We require the Midwest ISO to submit a compliance filing incorporating this revised cost allocation within 30 days of the date of this order.[16]

41. We will not require carved-out GFAs to submit binding day-ahead schedules. As the Midwest ISO notes in its answer, carved-out GFAs currently provide non-binding day-ahead schedules and the Commission has accepted this reporting requirement previously in the GFA Order.[17] We consider the Midwest ISO answer to be responsive to the deficiency charge and data issues raised by commenters.

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[15] We agree with the Midwest ISO that the references to these sections in Schedules 3, 5 and 6 should be revised to reflect the appropriate sections in the revised tariff and we direct the Midwest ISO to include the correct subsection references in its compliance filing.

[16] The revised rate calculations and cost allocation will ensure that there is no revenue inadequacy and therefore we require the elimination of that provision in the compliance filing.

[17] *See* GFA Order, 108 FERC ¶ 61,236 at P 144.

C. Must Offer and Dispatch Bands

1. February 25 Order

42. In the February 25 Order, the Commission responded to commenters' concerns regarding whether the Midwest ISO could, through the must offer requirement, demand more of generating units than they could physically provide or direct them to operate in a manner that increases their operation and maintenance costs. The Commission concluded that the tariff provisions proposed by the Midwest ISO included sufficient physical operation flexibility through the offer parameters, but directed the Midwest ISO to clarify its intent regarding two provisions in section 40.2.5.d related to dispatch band limits.[18]

43. Dispatch bands are an optional way for resources to specify the real-time capabilities of a particular resource, established during the asset registration process.[19] A market participant may specify up to twelve dispatch bands per resource or one dispatch band per 50 MW of capacity based on the emergency maximum limit specified during the asset registration process.[20] The Midwest ISO clarified that dispatch band limits and ramp rates may be updated for the next hour no less than 30 minutes prior to the hour, and that all updates to limits remain in effect until changed. The Midwest ISO also revised the dispatch band provisions to state that "the minimum of all dispatch band limits must be less than or equal to the hourly emergency minimum limit of the resources and the maximum of all dispatch band limits must be greater than or equal to the hourly emergency limit of the resource."[21] The Midwest ISO further clarified its existing ability to deactivate dispatch bands for reliability purposes, by stating that it may deactivate dispatch bands on a resource-by-resource basis or on a system-wide basis.[22]

2. Comments

44. Wisconsin Electric urges the Commission to reject the Midwest ISO's proposed clarifications to the dispatch bands. Wisconsin Electric argues that it is an unreasonable administrative burden on market participants to require them to maintain dispatch band limits that span the hourly emergency limits of a resource, and that such a requirement is unachievable. Wisconsin Electric also notes that the changes proposed by the Midwest

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[18] *See* February 25 Order, 122 FERC ¶ 61,172 at P 291-93.

[19] *See* Roy Jones Test. at 26.

[20] *Id.* at 27.

[21] *See* Midwest ISO, FERC Electric Tariff, First Revised Sheet No. 555Z.

[22] *Id.* at First Revised Sheet. No. 555Z.01.

ISO in section 40.2.5.d do not align with other sections of the tariff regarding the definitions of dispatch band maximum and minimum limits and the relevant business practices manuals.

45. Wisconsin Electric also asks the Commission to direct the Midwest ISO to specify its criteria for deactivating dispatch bands on a resource-by-resource basis. Wisconsin Electric states that this is the first time the Midwest ISO has proposed language to deactivate dispatch bands on an individual basis instead of on a system-wide basis. Wisconsin Electric states that it sees reliability benefits in the system operator having the ability to deactivate dispatch bands on an individual basis, but that the Midwest ISO should have to specify in the tariff the circumstances, criteria, exemptions and/or financial protections, that the Midwest ISO intends to consider when making its deactivation determinations.

46. In its answer, the Midwest ISO agrees with Wisconsin Electric that revisions to the dispatch band sections are necessary. The Midwest ISO proposes to revise the definitions of dispatch band maximum and minimum limits to add language stating, "or emergency system conditions." Additionally, the Midwest ISO notes that it corrected Exhibit 4-17 of the business practices manual for Energy and Operating Reserve Markets to show that dispatch bands must span the entire operating range of a resource, from emergency minimum limit to emergency maximum limit. The Midwest ISO states that it distributed this correction for market participant review on April 30, 2008. However, the Midwest ISO does not agree with Wisconsin Electric that it is not justified in requiring that dispatch bands span the emergency range. The Midwest ISO maintains that there should be parity between the choice to use dispatch bands and the choice not to use dispatch bands. If a resource does not use dispatch bands, then it must submit offers, limits, and other operating parameters, including emergency minimums and maximums. The Midwest ISO states that it needs this information to reliably plan and operate the system under normal and emergency conditions.

47. The Midwest ISO also states that it does not oppose the addition of language to the tariff stating that any deactivation of the dispatch bands would take place in a non-discriminatory manner. However, the Midwest ISO asserts that it cannot provide an exhaustive list of all the circumstances that may require deactivation of dispatch bands, and an incomplete list could restrict the Midwest ISO's ability to operate the system reliably.

3. Commission Determination

48. We accept, as modified below, the Midwest ISO's proposed clarifications to the dispatch band provisions in sections 1.71b, 1.71c, and 40.2.5.d, subject to further compliance. We agree with the Midwest ISO that there should be an equal range of outputs required from resources using both dispatch bands and/or all other offers. Consistent with our findings in the February 25 Order, we find it acceptable for the

Midwest ISO to specify that dispatch bands cover the emergency range of resources because dispatch bands are optional, may be updated frequently, and the Midwest ISO needs dispatch capabilities in the emergency range of resources to quickly respond to system emergencies.[23]

49. The Midwest ISO's clarifications regarding dispatch bands conform to the Commission's understanding expressed in the February 25 Order.[24] However, while we accept the Midwest ISO's intent with respect to dispatch bands, we conclude that one further edit to the relevant provisions is necessary to ensure reasonable requirements. Specifically, we are unclear how a resource can submit dispatch band limits such that those limits are "*greater than or* equal to the [h]ourly [e]mergency [m]aximum [l]imit of the resource."[25] Moreover, requiring dispatch bands "greater than" the hourly emergency maximum limit would appear to be in conflict with other provisions of the tariff. According to section 1.133 of the TEMT, hourly emergency maximum limit is defined as, "the maximum MW level at which a [g]eneration [r]esource, an [e]xternal [a]synchronous [r]esource or [DRR-II] may operate under [e]mergency conditions that may be submitted to override the default value submitted during the asset registration process."[26] If the hourly emergency maximum limit is truly the maximum MW level at which a resource may operate, even during emergencies, then the revision submitted by the Midwest ISO for First Revised Sheet No. 555Z should be revised further, in a compliance filing to be submitted within 30 days of the date of this order, to strike "greater than or," or the Midwest ISO should further clarify its intent behind this section to clarify the output range of resources needed.[27]

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[23] *See* Roy Jones Test. at 130.

[24] *See* February 25 Order, 122 FERC ¶ 61,172 at P 292 ("A market participant is permitted to update its specific dispatch bands during any commercial model update that occurs eight times per year and the market participant may update ramp rates and resource limits associated with any band hourly, up to thirty minutes prior to the start of the operating hour. These provisions in combination will enable market participants, in coordination with the Midwest ISO, to ensure that their units are dispatched reasonably below physical maximum limits, except in cases of system emergencies.").

[25] Midwest ISO May 7, 2008 Answer at 8.

[26] Midwest ISO, FERC Electric Tariff, Original Sheet No. 83A.

[27] We note that the Commission did not issue a specific clarification directive in regards to this section, but rather stated, "we direct the Midwest ISO to clarify its intent regarding the two provisions in Module C, Sheet 555Z, Section 40.2.5.d, line 12 and line 15 in a compliance filing to be submitted within 30 days of the date of this order." *See*

(continued…)

50. The Midwest ISO is also directed to revise, and submit in the compliance filing, the dispatch band deactivation provisions to specifically state that any dispatch band deactivations on an individual resource basis will be done in a non-discriminatory manner as agreed to in its answer. In the February 25 Order, the Commission accepted tariff language that stated generally, "the transmission provider may deactivate the [d]ispatch [b]and option at any time if the [t]ransmission [p]rovider determines that use of the [d]ispatch [b]and option has an adverse impact on system reliability."[28] Because dispatch bands apply to individual resources, we interpret the language as originally written and accepted by the Commission to implicitly apply to individual resources. The Midwest ISO's additional language in the compliance filing also supports this position. Moreover, as the designated Reliability Coordinator (RC)[29] and independent system operator (ISO), the Midwest ISO has an obligation to operate the system in a non-discriminatory, reliable manner, and it is not reasonable to require the Midwest ISO to forecast and list in its tariff every circumstance where it may need to deactivate optional dispatch bands. All of the technical details of any deactivation of dispatch bands are appropriately included in the business practices manuals.

D. Monitoring and Mitigation Plan

1. Mitigation Thresholds

a. February 25 Order

51. The Commission accepted the Midwest ISO's proposal to use a conduct and impact approach to monitor and mitigate the exercise of market power in the ASM. The monitoring plan establishes that the Independent Market Monitor (IMM) will monitor the markets and services provided by the Midwest ISO, including the proposed ASM. The mitigation plan imposes mitigation in the proposed ASM upon entities in constrained areas (areas in which a constraint is actively binding) that fail conduct and impact tests such that their conduct is significantly inconsistent with competitive outcomes (as indicated by conduct threshold levels) and would result in a substantial change in one or more prices in the energy market, prices in the ASM, or certain make-whole payments (by exceeding impact thresholds). An offer fails the conduct test if any part of the offer exceeds its corresponding reference level by an amount greater than the applicable conduct threshold.

February 25 Order, 122 FERC ¶ 61,172 at P 293.

[28] Midwest ISO, FERC Electric Tariff, Substitute Original Sheet No. 555Z.01.

[29] *See* NERC Transmission Loading Relief Procedure, *available at* http://www.nerc.com/~filez/Logs/relcoors.htm.

52. The Commission directed the Midwest ISO to submit tariff revisions to lower the conduct threshold for economic withholding to $10 per MWh during an initial transitional period, with a ratcheting mechanism to increase the threshold in $10 per MWh increments. Specifically, the Commission required that the threshold be the lower of $10 per MWh or 300 percent of the reference level at market start. Every 90 days thereafter, the threshold will increase by $10 per MWh increments until $50 per MWh is reached unless the IMM finds market behavior that warrants keeping the threshold constant for the next 90 days. The Commission required the IMM to file, 30 days prior to the end of each quarter, a quarterly report indicating whether market power is being appropriately mitigated and whether the next $10 per MWh increase should go into effect as scheduled. In the event that the IMM recommends keeping the threshold constant in its report, the Commission will issue an order that, based on IMM reports and parties' comments, determines whether to reinstate the incremental increases upon the expiration of the following 90-day period. This will delay the increase in the thresholds for a time period to allow the Commission to determine whether a further increase is warranted and to consider the views of all interest parties.[30]

b. Compliance Filing and Comments

53. In its compliance filing, the Midwest ISO proposes new section 64.1.2.a.iii.A that provides for the initial economic withholding threshold of $10 per MWh and the associated ratcheting mechanism for a transitional period. In particular, the section states that the conduct threshold will increase by $10 per MWh each quarter "unless the Commission determines that the increase should be delayed." The section also requires the IMM to submit quarterly reports "indicating whether market power is appropriately mitigated in the affected area" as long as any portion of the Midwest ISO remains subject to a threshold below $50 per MWh.[31]

54. Midwest TDUs request that the Commission require the Midwest ISO to include in the tariff a non-exclusive list of standards that the IMM will apply in assessing whether market power is being appropriately mitigated in its quarterly reports. Without such a clarification, they argue that the IMM would have complete discretion in determining the information that it should include in its quarterly assessments and potentially may not address all relevant gaming concerns. Specifically, Midwest TDUs are concerned that sellers will exercise market power by increasing their offers each quarter as the threshold increases and refraining from submitting offers that exceed their reference levels by the threshold amount that would trigger mitigation. To address this concern, Midwest TDUs

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[30] February 25 Order, 122 FERC ¶ 61,172 at P 122-23.

[31] Midwest ISO, FERC Electric Tariff, Sixth Revised Sheet No. 768, Original Sheet No. 768A.

request that the tariff require the IMM to examine, among other things, whether sellers increase their offers and their reasons for doing so. If there is no evidence that marginal cost changes justified higher offers, then Midwest TDUs contend that the IMM should recommend that the Commission maintain or reinstate lower thresholds to protect consumers from the exercise of market power. Midwest TDUs contend that the Midwest ISO has corroborated that increased offers may not reflect changing costs and may instead indicate the exercise of market power.[32]

55. Midwest Transmission Customers argue that the Midwest ISO's proposed language in section 64.1.2.a.iii incorrectly states that the economic withholding threshold will automatically increase unless the IMM recommends otherwise and the Commission issues an order rescinding the increase in the offer threshold within thirty days thereafter. Midwest Transmission Customers argue that the February 25 Order did not state that the $10 per MWh incremental increases in the threshold for economic withholding would occur automatically. Instead, they contend that the Commission will make a determination, after considering the facts presented by the IMM and the views of interested parties, as to whether increasing the threshold is appropriate.

56. Furthermore, Midwest Transmission Customers contend that the specific facts and circumstances presented by the IMM's quarterly report may warrant extensive consideration in excess of the 30-day period allotted by proposed section 64.1.2.a.iii. They note that the Commission is not statutorily bound to respond to the quarterly reports by the IMM within thirty days.[33] In the event that the IMM recommends that the threshold should not increase and the Commission does not act within 30 days, Midwest Transmission Customers are concerned that the threshold will still automatically increase, thereby subjecting customers to unjust and unreasonable rates for an indefinite period of time and potentially necessitating complex and difficult refunds.

57. Midwest Transmission Customers conclude that the Commission should require the Midwest ISO to submit proposed tariff modifications through a section 205 filing at the same time that the IMM submits its quarterly reports. Midwest Transmission

[32] Midwest TDUs note that the Midwest ISO has stated that, in contrast to the energy market, the marginal costs of supplying operating reserves generally do not vary over the output range of the unit or with ambient temperatures. They add that this lower level of uncertainty associated with ASM offers undercuts the justification that the permissive $50 per MWh threshold is needed to prevent over-mitigation when higher offers reflect higher costs.

[33] Midwest Transmission Customers are also concerned that, if the Commission were to attempt to respond to an IMM report within 30 days, parties may not have sufficient time to file comments.

Customers state that if the proposal to increase the offer thresholds is supported, then the Commission could act within thirty days to accept the tariff modifications.[34]

58. In its answer, the Midwest ISO disagrees with Midwest TDUs' request to include in the tariff a list of standards that the IMM will apply in assessing market power in its quarterly reports. The Midwest ISO states that it is not clear what benefit would result from incorporating such a list of standards into the tariff, particularly for a transitional reporting requirement. Furthermore, Midwest TDUs do not propose a list of standards, and the Midwest ISO contends that the development of such a list prior to the implementation of the ASM would be difficult and premature. It explains that the IMM regularly monitors market activity to determine whether market participants seek to exploit mitigation thresholds and argues that the proposed tariff changes reflect that the IMM will submit quarterly reports to the Commission during the transition period on whether market power is adequately mitigated.

59. In contrast to Midwest Transmission Customers, the Midwest ISO believes that section 64.1.2.a.iii conforms to the Commission's directive that mitigation thresholds should increase automatically in $10 per MWh increments each quarter, unless the IMM finds market behavior that warrants keeping the threshold constant for the next 90 days.

c. <u>Commission Determination</u>

60. We will not require the Midwest ISO to include a list of standards that the IMM will apply in assessing whether market power is being appropriately mitigated in its quarterly reports. In its quarterly reports, we expect the IMM to determine, among other things and consistent with its previous clarification, whether suppliers have been able to evade the mitigation measures and significantly affect market outcomes by raising their ancillary services offers by an amount that is near to, but does not exceed, the conduct threshold.[35] This information should address Midwest TDUs' specific concerns regarding the IMM's determination of the appropriateness of incremental threshold increases. We find that this clarification is sufficient, and we will not require the Midwest ISO to submit further tariff revisions.

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[34] Midwest Transmission Customers recognize that this approach would require waiver of the Commission's 60-day prior notice requirement for tariff revisions.

[35] Specifically, the IMM stated that it will perform a conduct test on offers at a threshold level that is somewhat lower than the mitigation threshold and a market impact test that estimates the market impacts of mitigating such offers. If the market impacts are material, the IMM will recommend that the threshold should not be increased. *See* February 25 Order, 122 FERC ¶ 61,172 at P 104, n.50.

61. The Midwest ISO proposes in section 64.1.2.a.iii.A that the threshold will automatically increase "unless the Commission determines that the increase should be delayed."[36] However, we agree with Midwest Transmission Customers that, in the event that the IMM submits an adverse quarterly report, this section would either leave the Commission with only 30 days to issue an order addressing such a report or would allow the threshold to increase in spite of the IMM's recommendation that such an increase is inappropriate. In contrast, the Commission explained that, in the event of an adverse IMM report, the threshold should remain constant during the following 90-day period to give the Commission time to determine whether to reinstate the incremental increases upon expiration of the following 90-day period.[37] We will require the Midwest ISO to submit, in a compliance filing due within 30 days of the date of this order, tariff revisions to section 64.1.2.a.iii.A consistent with the February 25 Order's requirement that the threshold will incrementally increase "unless the IMM finds market behavior that warrants keeping the threshold constant for the next 90 days."[38]

62. Contrary to Midwest Transmission Customers, the Commission finds that the economic withholding threshold should automatically increase, unless the IMM submits an adverse quarterly report that recommends against such an increase.[39] While the Midwest ISO may submit proposed tariff modifications under section 205 of the FPA at any time regarding the proposed mitigation thresholds, the Commission did not require the Midwest ISO to submit such proposals to justify incremental threshold increases in its February 25 Order.

2. <u>Physical Withholding & Audits</u>

a. <u>February 25 Order</u>

63. The Commission conditionally accepted the Midwest ISO's proposed process to permit the IMM to audit generation resources to prevent and discern the exercise of market power through physical withholding, subject to further tariff modifications in a

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[36] Midwest ISO, FERC Electric Tariff, Sixth Revised Sheet No. 768.

[37] For example, if the IMM recommends 30 days prior to the end of the first quarter that the $10 per MWh threshold used during the first quarter should not increase, then the $10 per MWh threshold would remain in place during the second quarter. The Commission would then issue an order addressing whether the threshold should increase to $20 per MWh during the third quarter.

[38] February 25 Order, 122 FERC ¶ 61,172 at P 123.

[39] *See id*.

subsequent compliance filing. In particular, the Commission required the Midwest ISO to define the specific types of information that the IMM may request from market participants during an audit, including any information that is not explicitly provided in sections 54.1 and 61.1 of the tariff.[40]

b. Compliance Filing and Comments

64. In its compliance filing, the Midwest ISO proposes revisions to section 53.1A that provide a list of the specific physical offer parameters that the IMM will consider during audits for physical withholding and state that the IMM may request the data given in section 61.1 during an audit. The Midwest ISO also proposes revisions to section 61.1 that provide the data and information that the IMM may request from Demand Response Resources-Type II (DRRs-II).[41]

65. Unless the Midwest ISO can demonstrate that the data and information that the IMM may request under existing section 61.1 is sufficient, Midwest TDUs request that the Commission direct the Midwest ISO to modify section 61.1 so that the IMM may request additional information required to properly audit for physical withholding by generation resources. Specifically, they are concerned that the production and opportunity cost data and generating logs that the Midwest ISO may request under section 61.1 do not appear to include information regarding ramp rates, economic and emergency limits, or temporal parameters.[42]

66. In its answer, the Midwest ISO agrees that it is appropriate to specify in section 61.1 the types of information that a generation resource would be obligated to provide as part of an audit for physical withholding. If so directed by the Commission, the Midwest ISO proposes to add a new section 61.1.f to state as follows:

> f. Physical operating parameters: [d]ata or information relating to the operating characteristics of a [g]eneration [r]esource, including but not limited to: ramp rates,

[40] *See id.* P 152.

[41] DRRs-II are resources hosted by an energy consumer or load serving entity that are capable of supplying a range of energy and/or operating reserve, at the choice of the market participant, to the energy and operating reserve market through behind-the-meter generation and/or controllable load.

[42] In addition, Midwest TDUs request that the Commission direct the Midwest ISO to revise section 53.1A so that the second repetition of “[e]mergency [m]inimum [l]imits” instead reads “[e]mergency [m]aximum [l]imits.”

> emergency limits, minimum run times, start times, and other temporal or operating parameters associated with a specified [e]lectric [f]acility.

c. **Commission Determination**

67. We find that the proposed revisions to sections 53.1A and 61.1, as modified below, appropriately clarify the physical offer parameters that the IMM may consider and the types of information and data the IMM may request from market participants during an audit for physical withholding. We will require the Midwest ISO to submit, in a compliance filing due within 30 days of the date of this order, revisions to section 61.1 to include the physical operating parameter data and information that the IMM may request during an audit, as the Midwest ISO set forth in its answer.[43] We will also require the Midwest ISO to submit, in that compliance filing, revisions to section 53.1A to provide that the second repetition of "[e]mergency [m]inimum [l]imits" instead reads "[h]ourly [e]mergency [m]aximum [l]imits.[44]

3. **Mitigation in Reserve Zones**

a. **February 25 Order**

68. The Commission conditionally accepted the Midwest ISO's proposal to apply mitigation in three types of electrical areas: Narrow Constrained Areas (NCAs), Broad Constrained Areas (BCAs), and constrained reserve zones, subject to further clarification and tariff modifications in a subsequent compliance filing. In particular, the Commission requested clarification regarding the relationship between NCAs, BCAs, and reserve zones and tariff revisions to reflect that mitigation will apply in constrained reserve zones. The Commission also required the Midwest ISO to clarify whether mitigation within NCAs, BCAs, and constrained reserve zones may overlap and apply to the same electrical areas. In addition, the Commission directed the Midwest ISO to address and propose any needed tariff revisions regarding whether reference levels need to be adjusted in the event that a generator located in a reserve zone moves to a different reserve zone the following quarter.[45]

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[43] Midwest ISO, FERC Electric Tariff, Fourth Revised Sheet No. 746. We note that the Midwest ISO should name this section "g," rather than "f" because the TEMT already contains a section 61.1.f.

[44] *Id.* at Fourth Revised Sheet No. 716.

[45] February 25 Order, 122 FERC ¶ 61,172 at P 167.

b. Compliance Filing and Comments

69. In its compliance filing, the Midwest ISO explains that a reserve zone constraint may activate a BCA, just as a transmission constraint may activate a BCA, and mitigation measures would then apply according to the mitigation provisions for BCAs. To reflect this clarification, Midwest ISO proposes revisions to the definition of "[b]inding [t]ransmission [c]onstraints" in section 1.23 so that it includes reserve zone constraints.[46] The Midwest ISO adds that it included revisions to section 63.4.2.c to specify the conditions under which resources in BCAs would be tested to determine whether mitigation is warranted due to effects of the resource on operating reserves.

70. Midwest TDUs contend that the proposed tariff revisions are insufficient to reflect the application of mitigation in reserve zones. They explain that the Midwest ISO proposes to provide the conduct thresholds for reserve zones separately for BCAs and NCAs in sections 64.1.2.a and 64.1.2.e, respectively, of the tariff. Midwest TDUs are concerned that squeezing the conduct threshold for reserve zones into the existing BCA and NCA provisions may create confusion because the mitigation measures for reserve zones are not dependent upon whether an area is a BCA or NCA. They also note that having the conduct threshold language in two separate sections is inconsistent with the single section providing the applicable impact thresholds in section 64.2.1.d. To provide greater clarity, they request that the Commission require the Midwest ISO to revise section 64.1.2 to provide the conduct threshold for reserve zones in a single, separate subsection.[47]

71. Midwest Transmission Customers note that the Midwest ISO proposes in section 1.22a to define "[b]inding [s]ettlement [z]one" as a zone that will exist whenever price separation occurs between the zone and other areas of the Midwest ISO and that, according to the Midwest ISO, price separation occurs when a minimum operating reserve constraint is binding. Midwest Transmission Customers note that ASM mitigation measures will be in effect when reserve zones are binding. They request that the Commission direct the Midwest ISO to state that mitigation measures will be applied any time a BCA, NCA, or binding settlement zone exists. Midwest Transmission Customers explain that this revision may be the most direct way to clarify the relationship among reserve zones, BCAs, and NCAs.

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[46] Midwest ISO, FERC Electric Tariff, Seventh Revised Sheet No. 53.

[47] Specifically, Midwest TDUs request that the Midwest ISO transfer the conduct threshold from section 64.1.2.a.iii to the new section 64.1.2.e and eliminate the proposed language in section 64.1.2.e that states that the conduct threshold for operating reserve offers for NCAs will be the same as the threshold for BCAs.

72. Midwest Transmission Customers contend that the Midwest ISO did not include proposed revisions to section 63.4.2.c, as it indicated that it would, and request that the Commission direct the Midwest ISO to submit revisions to this section in a further compliance filing.

73. In its answer, the Midwest ISO reiterates that a reserve zone constitutes a transmission constraint, which activates a BCA when the constraint is binding. When a BCA is activated, whether by a binding reserve zone constraint or a binding transmission constraint, mitigation measures are applied as provided for in the tariff. The Midwest ISO believes that its proposed revision to section 1.23 is sufficient to reflect this clarification. In addition, the Midwest ISO clarifies that its reference to revisions in section 63.4.2.c was in error and no changes to the section are necessary.

c. Commission Determination

74. We find that Midwest ISO has appropriately clarified that its mitigation measures apply in constrained reserve zones and the relationships among NCAs, BCAs, and constrained reserve zones. According to the Midwest ISO, offers for operating reserves may be subject to mitigation in two types of electrical areas: BCAs and NCAs. Constrained reserve zones, along with binding transmission constraints, may activate a BCA, pursuant to existing section 63.4.2.

75. However, we find that the proposed tariff revisions are insufficient to provide that constrained reserve zones may activate a BCA. The Midwest ISO proposes to expand the definition of binding transmission constraint to include both transmission constraints and reserve zone constraints. We find that this revision is insufficient to either define reserve zone constraints or to reflect the relationship between transmission constraints and reserve zones' minimum operating reserve requirements. We will require the Midwest ISO to submit, in a compliance filing due within 30 days of the date of this order, tariff revisions to define "[r]eserve [z]one [c]onstraint" separately from "[b]inding [t]ransmission [c]onstraint."[48]

76. We will not require the Midwest ISO to consolidate the BCA and NCA thresholds applicable to operating reserves into a single section, as Midwest Transmission Customers request, because both types of mitigation will apply to the ASM and the existing tariff lists their respective thresholds in separate sections. Finally, we agree with the Midwest ISO that further revisions to section 63.4.2.c are unnecessary because the

[48] We note the Midwest ISO should revise references to constrained reserve zone to reflect this new definition, including in sections 63.4.1.d and 63.4.2.c.

section already provides that a BCA will include all units that significantly affect the amount of operating reserves scheduled in a constrained reserve zone.[49]

E. <u>Excessive/Deficient Energy Charge</u>

77. In the February 25 Order, the Commission found it reasonable that the Midwest ISO include a disincentive rate or compliance mechanism in the form of the Excessive/Deficient Energy Charge to ensure that dispatch instructions are followed to the extent physical operating restrictions of resources will allow.[50] The Commission also accepted the additional limitation that the charge only applies when the same resource has violated its dispatch instructions beyond the tolerance band in three consecutive dispatch intervals.[51] However, the Commission directed the Midwest ISO to clarify the units used in the calculation of the charge (i.e., MWs or MWhs) in section 40.3.4.b.i and also to provide the calculation of an excessive/deficient energy charge as an example only.[52]

78. We find that the Midwest ISO complied with the Commission's directive to clarify the units specified in the excessive/deficient energy charge as "MWh."[53] We also find that the Midwest ISO complied with the Commission's directive to include an example calculation of the excessive/deficient energy charge.[54] The example provided by the Midwest ISO appropriately clarifies how the charge will be constructed and delineated its two major components: (1) recapture of the regulation reserve credits paid; and (2) charge equal to the actual energy injection of the resource multiplied by the charge rate. The charge rate is equal to the total day-ahead and real-time regulating reserve requirement multiplied by the regulation reserve clearing price in the numerator and the Midwest ISO's Balancing Authority load in the denominator. This example adds clarity and is consistent with the tariff.

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[49] *See* Midwest ISO, FERC Electric Tariff, Fourth Revised Sheet No. 762.

[50] *See* February 25 Order, 122 FERC ¶ 61,172 at P 267.

[51] *Id.*

[52] *Id.* P 269.

[53] *See* Midwest ISO, FERC Electric Tariff, First Revised Sheet No. 585A.

[54] *See* Midwest ISO March 26, 2008 Compliance Filing, Transmittal Letter at 11-12.

F. Self-Scheduling and Self-Supply

79. In the February 25 Order, the Commission encouraged the Midwest ISO to explore refinements to its cost allocation methodology in stakeholder discussions since self-scheduling entities can reduce the amount of operating reserves that the Midwest ISO must procure. Responding to the Commission on the appropriate cost allocation for self-scheduling entities, the Midwest ISO in its compliance filing recognizes the interest in mechanisms that allow for re-assignment of operating reserves between counter-parties and commits to undertaking further stakeholder discussions to determine appropriate mechanisms.

80. The Midwest TDUs and Indianapolis P&L fault the Midwest ISO for failing to follow the Commission's directive in the February 25 Order regarding cost allocation in its compliance filing. The Midwest TDUs assert that this is not a billing-clearinghouse issue, as characterized by the Midwest ISO, and Indianapolis P&L considers the Midwest ISO response to be an improper narrowing of the issue. The Midwest TDUs recommend that the Commission direct the Midwest ISO to expeditiously commence and complete a stakeholder process to consider cost allocation changes designed to allow LSEs to fully hedge their operating reserve charges, by self-scheduling operating reserves. Indianapolis P&L recommends that the Commission require, instead of encourage, the Midwest ISO to engage in a stakeholder process whose goal is to ensure that self-supply constitutes a full hedge for ancillary service costs. In its answer, Indianapolis P&L contends that adoption of Duke's comments[55] on cost allocation plus a self-supply option that places the customer in the same financial position as supplying ancillary services on its own behalf would fully address market participant concerns regarding ASM cost allocation.

81. The Midwest ISO in its answer re-affirms its commitment to further discussions.

82. We consider the Midwest ISO commitment to undertake stakeholder discussions on this issue, as encouraged by the Commission, to be a sufficient indication that the Midwest ISO intends to address the concerns of market participants. We clarify that the discussions should be substantive in nature, and should focus on refinements to the allocation of ASM costs to market participants that self-schedule in recognition of the fact that self-scheduling entities can reduce the amount of operating reserves the Midwest ISO must procure.

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[55] *See* P 20, *supra*, for an explanation of Duke's proposed cost allocation.

G. Pseudo-Ties

83. In the February 25 Order, the Commission required the Midwest ISO to address Otter Tail's concern regarding how Minnkota Power Cooperative, Inc. (Minnkota) would be considered internal to the Midwest ISO. In its compliance filing, the Midwest ISO stated that it recognizes Minnkota is not a Midwest ISO member and that load served by Minnkota will be pseudo-tied out of the Midwest ISO Balancing Authority. As a result, only the portion of Load that Otter Tail serves will be included within the Midwest ISO Balancing Authority Load.

84. Otter Tail argues that the Midwest ISO misunderstands the relationship of Otter Tail and Minnkota in the Otter Tail Local Balancing Authority. Otter Tail explains that Minnkota is party to several integrated transmission agreements with Otter Tail and both entities separately serve their loads using their distinct ownership interests in those transmission facilities. Otter Tail asserts that the compliance filing statement that Minnkota serves a portion of Otter Tail's loads was a misstatement and should not be used to justify assigning Otter Tail responsibility for any of the loads served by Minnkota. Otter Tail requests that the Midwest ISO and Commission make clear that Otter Tail will not be responsible for charges associated with Minnkota load, on cost causation grounds. Finally, Otter Tail contends that the compliance filing does not address either the steps parties will need to undertake to effectuate the pseudo-ties or the compensation for costs incurred in administering a pseudo-tie.

85. In its answer, the Midwest ISO clarifies that it does not intend to assign Otter Tail any responsibility for load served by Minnkota. The Midwest ISO also states that it is holding discussions with Minnkota regarding options for participation in the ASM, including pseudo-ties.

86. To ensure that the Otter Tail and Minnkota operating arrangements can be completed prior to market start, we require the Midwest ISO to meet with Otter Tail and Minnkota to discuss the steps that must be completed for pseudo-tie of the Minnkota load. We also require these parties to discuss compensation for administering the pseudo-tie. We require the Midwest ISO to provide a progress update in a compliance filing to be submitted within 30 days of the date of this order.

H. Other Issues

1. Reserve Limits

a. February 25 Order and Compliance Filing

87. In the February 25 Order the Commission recognized that there is likely a reliability benefit gained by limiting the amount of reserves provided by a specific supplier in a sub-regional area. The Midwest ISO expressed its intent to avoid any

reliability concerns by limiting the amount of reserves carried by one resource to no more than 20 percent of the system-wide requirement. However, the Commission noted that the tariff did not contain provisions to reflect the 20 percent limitation and directed the Midwest ISO to clarify its tariff to explicitly list this limitation.[56] In response to the Commission's compliance directive, the Midwest ISO filed revisions to sections 39.2.1A and 40.2.3 to specifically list a 20 percent limitation on cleared resources in both the day-ahead and real-time energy markets.

b. Comments

88. The Midwest TDUs state that the Midwest ISO's clarification of the 20 percent limitation needs further revision to specifically state that the 20 percent limitation applies to "individual" resources and that they have conferred with the Midwest ISO about clarifications to this effect to be submitted in a future compliance filing or in a future section 205 tariff clean-up filing.

89. In its answer, the Midwest ISO agrees with the Midwest TDUs' suggested revisions and suggests one further minor grammatical revision to align the singular and plural use of the resources subject to this requirement.

c. Commission Determination

90. We accept the Midwest ISO's clarification of the 20 percent limitation as consistent with our prior directive. We also agree with the Midwest TDUs' and the Midwest ISO's suggested further revisions to clarify that the requirement applies to individual resources. Therefore, we direct the Midwest ISO to make further clarification revisions, as agreed to in its answer, in a compliance filing to be submitted within 30 days of the date of this order.

2. Price Volatility Make-Whole Payment

91. According to the Midwest ISO, the Price Volatility Make-Whole Payment (PV MWP) is designed to protect from financial harm generators that provide dispatch flexibility, follow their dispatch instructions, and, in doing so, incur losses due to the differences that arise between the ex ante, five-minute prices used to dispatch units and the ex post, hourly market prices used to settle the markets.[57] In order to address potential gaming to increase their PV MWPs, suppliers must satisfy certain eligibility

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[56] See February 25 Order, 122 FERC ¶ 61,172 at P 242.

[57] The PV MWP is designed to prevent a supplier from receiving both a revenue sufficiency guarantee payment and the PV MWP.

criteria in order to receive the payments. While these payments were accepted by the Commission,[58] the payments have not been made effective in their entirety due to software delays.[59]

a. <u>February 25 Order</u>

92. The Commission conditionally accepted the Midwest ISO's proposal to split the PV MWP into two components: the Real-Time Offer Revenue Sufficiency Guarantee Payment will apply to suppliers dispatched above their day-ahead schedules either economically or through manual redispatch; the Day-Ahead Margin Assurance Payment will apply to affected suppliers dispatched below their day-ahead schedules. In general, the design of the payments (including the applicable eligibility criteria) is similar to the Commission-accepted, but yet to be implemented, PV MWP program. Both payments will be effective September 9, 2008 in the place of the PV MWP.

93. The Midwest ISO did not directly address the Real-Time Offer Revenue Sufficiency Guarantee Payment and Day-Ahead Margin Assurance Payment in its revisions to its market monitoring and mitigation plan. The Commission required the Midwest ISO to clarify its monitoring and mitigation plan for the payments and include any associated tariff revisions in its compliance filing.

b. <u>Compliance Filing</u>

94. The Midwest ISO clarifies that the IMM will monitor for manipulation of physical offer parameters, including ramp capability, to increase the Real-Time Offer Revenue Sufficiency Guarantee Payment or Day-Ahead Margin Assurance Payment. The Midwest ISO explains that manipulation of the payments will generally involve gaming activity to exploit the make-whole payment systems and will not involve attempted use of localized market power. It adds that such gaming is primarily limited by the payments' eligibility criteria and, as such, the Midwest ISO does not intend to apply conduct and impact mitigation to the payments. Instead, the IMM will employ a screen, as described in existing section 55.1, to identify potential gaming of the payments. For this screen, the IMM states that it will initially employ the physical offer parameter thresholds in existing sections 64.1.2.iii and 64.1.2.iv and, as it gains experience with the payment programs,

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[58] *Midwest Indep. Transmission Sys. Operator, Inc.*, 117 FERC ¶ 61,325 (2006) (December 22 Order), *reh'g denied*, 119 FERC ¶ 61,176 (2007).

[59] We note that only the section of the PV MWP that is given to certain generation resources that may be manually redispatched by the Midwest ISO has been made effective. *See Midwest Indep. Transmission Sys. Operator, Inc.*, 122 FERC ¶ 61,198 (2008).

may revise the monitoring thresholds in consultation with market participants as provided in section 55.2.[60] If the IMM has credible reason to believe that a market participant is violating market rules or engaging in manipulative conduct to increase the payments, it will make a referral to the Commission under existing section 53.3. The Midwest ISO does not propose any associated tariff revisions.

c. Commission Determination

95. We find that Midwest ISO's plan to apply the eligibility criteria, monitor for behavior that violates market rules or manipulative conduct to increase the Real-Time Revenue Sufficiency Guarantee Payment and Day-Ahead Margin Assurance Payment, and make any associated Commission referrals will appropriately address the corresponding gaming risks.[61] However, we will require the Midwest ISO to submit, in a compliance filing due within 30 days of the date of this order, tariff revisions to reflect that the IMM will apply the existing thresholds in sections 64.1.2.iii and 64.1.2.iv to screen for gaming of the payments.[62] This revision should help to provide additional transparency and prevent undue IMM discretion regarding its monitoring plan and associated thresholds for the payments.[63] Notwithstanding this requirement, we encourage the IMM to develop, as needed, any additional indices and screens to review payment data and detect gaming activity, with due consideration of market participants' comments and subject to review by the Midwest ISO, in accordance with section 55.

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[60] The Midwest ISO adds that the identification of this monitoring threshold does not prevent the IMM from employing other reviews or evaluations, including other thresholds, as provided under existing section 55.3.

[61] We note that the Commission previously required the Midwest ISO to submit a report due 12 months from the payments' effective date discussing the effectiveness of the payment programs, identifying any problems, and addressing other issues, including alternative methods of addressing gaming concerns. *See Midwest Indep. Transmission Sys. Operator, Inc.*, 122 FERC ¶ 61,198 at P 57 (*citing* December 22 Order, 117 FERC ¶ 61,325 at P 41-42).

[62] In order for previously accepted tariff sheets regarding the payment programs to be made effective on September 9, 2008, we remind the Midwest ISO that it must notify the Commission on or before August 29, 2008 that the necessary software and other systems are in place. *See* December 22 Order, 117 FERC ¶ 61,325 at Ordering Paragraph A.

[63] As it gains experience with the payment programs, the Midwest ISO may propose any needed changes to these monitoring thresholds under section 205 of the FPA.

96. In addition, we note that, in contrast to the Midwest ISO's proposal, several sections of the Midwest ISO's mitigation plan apply to the Real-Time Revenue Sufficiency Guarantee Payment. To address this discrepancy, we will require the Midwest ISO to correct, in its compliance filing, typographical errors throughout its monitoring and mitigation plan, including in sections 64.2, 64.3, and 67, to refer to "[r]evenue [s]ufficiency [g]uarantee [c]redit" instead of "[r]evenue [s]ufficiency [g]uarantee [p]ayment." We will also require the Midwest ISO to address, in its compliance filing, whether it has inadvertently deleted the market impact thresholds for revenue sufficiency guarantee credits from section 64.2.1 and, if so, to include associated tariff revisions.

3. <u>Ex-Post Pricing</u>

97. As required by the February 25 Order, the Midwest ISO revises its tariff in section 40.2.17 to indicate that the ex post pricing calculation algorithm would be defined in the business practices manual. Hoosier & Southern Illinois claim that there was no requirement in the February 25 Order for this revision and that such a revision properly belongs in the tariff per the requirements of section 205 of the FPA. In its answer, the Midwest ISO clarifies that the revision was submitted in compliance with item 10 in Appendix B of the February 25 Order. We agree with the Midwest ISO that the revision is in compliance with the February 25 Order. We do not find that the ex post pricing calculation algorithm needs to be incorporated in the tariff. This algorithm is a performance-monitoring process that determines resource eligibility in setting ex post prices and incorporates analysis of state estimator results. We find this information informs market participants of the Midwest ISO's practices and the information provides greater detail that supplements the tariff and does not override the tariff, and therefore does not significantly affect rates, consistent with the Commission's "rule of reason."[64]

4. <u>Definition of Midwest ISO Balancing Authority Area</u>

98. The Midwest TDUs assert that the definition of the Midwest ISO Balancing Authority Area should be revised to reference demand that *has* been pseudo-tied through the Local Balancing Authority, in place of the current reference to demand that *had* been pseudo-tied. The Midwest ISO in its answer agrees to the Midwest TDU proposed change. This revision accurately describes pseudo-tie arrangements that are still in effect, and therefore we require the Midwest ISO to make this revision in a compliance filing to be submitted within 30 days of the date of this order.

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[64] *See id.* P 489-90 (*citing Cal. Indep. Sys. Operator Corp.,* 116 FERC ¶ 61,274, at P 1358 (2006)).

5. **Forecasts**

99. Responding to the Commission's request for an explanation of its purpose,[65] the Midwest ISO proposes to eliminate the limitation on five-minute forecasts to one-twelfth of the highest demand in the compliance filing. We accept this revision and its replacement with a demand forecast cap, as proposed by the Midwest ISO. Such a revision will ensure that monitoring for dispatch accuracy will account for seasonal variations in load and load growth.

6. **Non-compliance with NERC Standards**

100. In the February 25 Order, the Commission required the Midwest ISO to propose provisions for non-compliance with NERC performance standards for Balancing Authorities. The Midwest ISO, in its compliance filing, proposes to make a section 205 filing, per the requirements of Commission's guidance,[66] to assign the costs of reliability-related penalties. We accept the Midwest ISO proposal to be in compliance with the requirements of the February 25 Order.

7. **Miscellaneous**

101. The Commission also required the Midwest ISO to revise its proposal with respect to emergency energy purchases, physical capabilities in offers, the definition of applicable reliability standards and miscellaneous minor tariff revisions. The Midwest ISO also corrected a number of typographical errors in the proposal. We accept the revisions and corrections made by the Midwest ISO as consistent with the requirements of the February 25 Order.

102. We will require the Midwest ISO to submit, in a compliance filing to be submitted within 30 days of the date of this order, further tariff revisions to address the following issues:

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[65] *Id.* P 333.

[66] *Reliability Standard Compliance and Enforcement in Regions with Regional Transmission Organizations or Independent System Operators*, Order Providing Guidance on Recovery of Reliability Penalty Costs by Regional Transmission Organizations and Independent System Operators, 122 FERC ¶ 61,247 (2008).

- **Section 52.3.a.ii, Responsibilities of the IMM:** We will require the Midwest ISO to remove the reference to "reliability" in section 52.3.a.ii. We note that the Commission previously directed the Midwest ISO to remove this reference.[67]

- **Section 53.1, Conditions, Functions or Actions Monitored:** We will require the Midwest ISO to remove both repetitions of the phrase "including, but not limited to, [o]ffers resulting in any [r]evenue [s]ufficiency [g]uarantee payments, [p]rice [v]olatility [m]ake-[w]hole [p]ayments, and other similar payments."[68] We note that the Commission previously rejected this language.[69]

- **Section 53.1A, Auditing for Physical Withholding:** We will require the Midwest ISO to either define "[s]tart [u]p times" or replace it with a term defined in the tariff, such as "[s]tart-[u]p [o]ffer" or "[s]tart [t]ime." We will also direct the Midwest ISO to insert "[h]ourly" prior to "[e]mergency [m]inimum [l]imits," "[e]conomic [m]inimum limits," and "[e]conomic maximum [l]imits," to indicate their respective definitions.[70]

- **Section 53.3.d, Referral of Anti-Competitive Behavior and Rules Violations to the Commission:** We will require the Midwest ISO to correct a typographical error, such that "$10 per MWh with a [l]ocal [b]alancing [a]uthority" instead reads "$10 per MWh within a [l]ocal [b]alancing [a]uthority [a]rea."

- **Section 54.1.a, Access to [the Midwest ISO's] Data and Information:** We will require the Midwest ISO make revisions reflecting that the IMM should have access to information regarding demand response resources.[71]

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[67] February 25 Order, 122 FERC ¶ 61,172 at P 555 (*citing Midwest Indep. Transmission Sys. Operator, Inc.*, 119 FERC ¶ 61,196, at P 21 (2007)).

[68] The pagination of Sheet No. 713 should reflect that it supersedes the "Second Revised Sheet" rather than the previously rejected "Second Substitute Third Revised Sheet."

[69] *Midwest Indep. Transmission Sys. Operator, Inc.*, 122 FERC ¶ 61,198 at P 53.

[70] We note that proposed "Original" Sheet No. 716.01 is improperly paginated because an Original Sheet No. 716.01 was already accepted by the February 25 Order. Midwest ISO should revise the pagination to reflect that it is instead a "Substitute" sheet.

[71] The Midwest ISO indicates that it proposes to revise section 54.1.a in this manner, but does not include the corresponding tariff revisions.

- **Section 63.3.a.iv, Uneconomic Market Participant Bids or Virtual Transactions:** We will require the Midwest ISO to correct a typographical error so that this section refers to "[o]perating [r]eserve [m]arket" rather than "[o]perating [r]eserve."

- **Section 64.1.2.e, Thresholds for Identifying Economic Withholding:** We will require the Midwest ISO to move this section so that it occurs after section 64.1.2.d. As proposed, this section has been improperly placed in the middle of section 64.1.2.d such that it separates a mitigation threshold from its corresponding formula.

<u>The Commission orders</u>:

(A) The Midwest ISO's compliance filing is hereby conditionally accepted, subject to a further compliance filing.

(B) The Midwest ISO is hereby directed to file a further compliance filing within 30 days of the date of this order.

(C) The Midwest ISO's request to delay implementation of the ASM is hereby granted.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

Appendix A

Parties who submitted protests:

- Otter Tail Power Company (Otter Tail)
- Duke Energy Shared Services, Inc. (Duke)
- Ameren Services Company (Ameren)
- Indianapolis Power & Light Company (Indianapolis P&L)
- Wisconsin Electric Power Company (Wisconsin Electric)
- Hoosier Energy Rural Electric Cooperative, Inc. & Southern Illinois Power Cooperative (Hoosier & Southern Illinois)
- Coalition of Midwest Transmission Customers (Midwest Transmission Customers)
- Midwest Transmission Dependent Utilities (Midwest TDUs)

Parties who submitted answers:

- Indianapolis P&L
- Hoosier & Southern Illinois
- Midwest ISO
- Duke