# 125 FERC ¶ 61,062 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

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

Midwest Independent Transmission System Operator, Inc.

Docket No. ER08-394-002

### ORDER CONDITIONALLY ACCEPTING COMPLIANCE FILING

(Issued October 20, 2008)

### TABLE OF CONTENTS

	Paragraph Numbers
I. Background	
B. March 26 Order and Compliance Filing	<u>6.</u>
II. Notices and Responsive Pleadings	<u>8.</u>
III. Procedural Matters	<u>12.</u>
IV. Substantive Matters	<u>14.</u>
A. Capacity Resources	<u>14.</u>
B. Deliverability	
C. Specific Contract Issues	
D. Load Modifying Resources	<u>64.</u>
E. Load Forecasting	
F. Price Responsive Demand and Forecast LSE Requirements	
G. LOLE and Planning Reserve Margins	
H. Planning Zones	
I Must-Offer Requirement	1.50

1. On March 26, 2008, the Commission conditionally accepted the Midwest Independent Transmission System Operator, Inc.'s (Midwest ISO) proposed tariff revisions to its Open Access Transmission and Energy Markets Tariff (TEMT)<sup>1</sup> to revise its interim Module E (Resource Adequacy)<sup>2</sup> to comprehensively address long-term resource adequacy requirements and ordered compliance filings.<sup>3</sup> On May 27, 2008, the Midwest ISO submitted a compliance filing in response to 60-day compliance directives in the March 26 Order. As discussed below, we conditionally accept the Midwest ISO's compliance filing subject to further compliance. In an order issued concurrently with this order, we grant in part and deny in part requests for rehearing of the March 26 Order.

# I. Background

# A. <u>History of this Proceeding</u>

- 2. When the Commission conditionally approved the TEMT, on August 6, 2004, it approved the proposed Module E of the TEMT as a "short-term transition mechanism" to help ensure reliability throughout the Midwest ISO footprint, but directed the Midwest ISO to work toward a long-term resource adequacy plan through its stakeholder process.<sup>4</sup>
- 3. On October 5, 2004, the Midwest ISO made a compliance filing proposing to develop a permanent resource adequacy plan by early June 2006. The Commission accepted the Midwest ISO's proposal to file a long-term resource adequacy plan by June 6, 2006, and confirmed that the then-existing Module E was a reasonable and appropriate interim plan, while a long-term approach was still in development.

<sup>&</sup>lt;sup>1</sup> Midwest Independent Transmission System Operator, Inc., FERC Electric Tariff, Third Revised Vol. No. 1.

<sup>&</sup>lt;sup>2</sup> Module E contains the resource adequacy provisions of the TEMT.

<sup>&</sup>lt;sup>3</sup> Midwest Indep. Transmission Sys. Operator, Inc., 122 FERC ¶ 61,283 (2008) (March 26 Order).

<sup>&</sup>lt;sup>4</sup> Midwest Indep. Transmission Sys. Operator, Inc., 108 FERC ¶ 61,163, at P 421, order on reh'g, 109 FERC ¶ 61,157 (2004), order on reh'g, 111 FERC ¶ 61,043, order on reh'g, 112 FERC ¶ 61,086 (2005), aff'd sub nom. Wisc. Pub. Power Inc. v. FERC, 493 F.3d 239 (D.C. Cir. 2007). The Midwest ISO's energy markets commenced on April 1, 2005.

<sup>&</sup>lt;sup>5</sup> Midwest ISO October 5, 2004 Compliance Filing, Docket Nos. ER04-691-007 and EL04-104-006, at 31.

<sup>&</sup>lt;sup>6</sup> Midwest Indep. Transmission Sys. Operator, Inc., 111 FERC ¶ 61,043 at P 107.

- 4. On June 6, 2006, the Midwest ISO submitted a compliance filing to the Commission proposing a two-phased approach to implement a permanent resource adequacy plan. In Phase I, the Midwest ISO proposed to integrate short-term contingency reserves and regulation into the energy markets. In Phase II, the Midwest ISO proposed to undertake a long-term integration of shortage pricing with the energy market. The Commission accepted the Midwest ISO's two-phase approach, accepting the Midwest ISO's commitment to file Phase I in the fall of 2006 and Phase II in 2007, but also required the Midwest ISO to file a detailed timetable for implementation of its plan.<sup>7</sup>
- 5. On February 15, 2007, the Midwest ISO filed Phase I, a proposal for an ancillary services market facilitating the sale and purchase of contingency reserves and regulation. The Commission accepted the Midwest ISO's resource adequacy implementation plan and directed the Midwest ISO to file Phase II, a permanent long-term resource adequacy proposal, by December 2007.

# B. March 26 Order and Compliance Filing

- 6. In the March 26 Order, the Commission conditionally accepted Phase II of the Midwest ISO's permanent resource adequacy program, subject to completion of certain provisions that were still under consideration by stakeholders, and ordered compliance filings. The Commission noted that the proposed long-term resource adequacy provisions were an important step in establishing the framework for efficient and reliable energy and reserves markets in the future. The Commission also recognized that the OMS and stakeholders were actively involved in developing the proposal.
- 7. On May 27, 2008, the Midwest ISO submitted a compliance filing in response to the 60-day compliance directives in the March 26 Order.

# II. Notices and Responsive Pleadings

8. Notice of the Midwest ISO's May 27, 2008 filing was published in the *Federal Register*, 73 Fed. Reg. 33,071 (2008), with interventions and protests due on or before June 17, 2008.

 $<sup>^7</sup>$  Midwest Indep. Transmission Sys. Operator, Inc., 116 FERC  $\P$  61,292, at P 13 (2006).

<sup>&</sup>lt;sup>8</sup> Midwest Indep. Transmission Sys. Operator, Inc., 119 FERC ¶ 61,311, at P 138, order on reh'g, 120 FERC ¶ 61,202 (2007) (Guidance Order).

- 9. Motions to intervene were submitted by Northern Indiana Public Service Company (Northern Indiana), Duke Energy Corporation (Duke), and the Minnesota Municipal Power Agency (Minnesota Municipal).
- 10. Comments and protests on the compliance filing were submitted by: the Ohio Attorney General; Wisconsin Public Service Corporation & Upper Peninsula Power Company (WPSC); Xcel Energy Services, Inc. (Xcel); Manitoba Hydro; Midwest Transmission-Dependent Utilities (Midwest TDUs); Minnesota Municipal; the Dominion Companies (Dominion); Duke; Hoosier Energy Rural Electric Cooperative, Inc. and Southern Illinois Power Cooperative (Hoosier & Southern Illinois); Reliant Energy, Inc. (Reliant); Michigan Public Power Agency (Michigan Public Power); FirstEnergy Service Company (FirstEnergy); Ameren Services Company (Ameren); Dynegy Power Marketing, Inc., Exelon Corporation, Constellation NewEnergy, Inc., and Constellation Energy Commodities Group, Inc. (collectively, Dynegy); the Coalition of Midwest Transmission Customers (CMTC); Integrys Energy Services (Integrys); Northern Indiana; Indianapolis Power & Light Company (IPL); Consumers Energy Company (Consumers Energy); and the Illinois Commerce Commission (Illinois Commission).
- 11. Answers were submitted by Midwest TDUs, the Midwest ISO, Duke, CMTC, WPSC, Hoosier & Southern Illinois, and Reliant.

# III. Procedural Matters

- 12. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2008), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.
- 13. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2008), prohibits an answer to a protest or an answer unless otherwise ordered by the decisional authority. We will accept the answers of Midwest TDUs, the Midwest ISO, Duke, CMTC, WPSC, Hoosier & Southern Illinois, and Reliant because they have provided information that assisted us in our decision-making process.

<sup>&</sup>lt;sup>9</sup> Dominion consists of Dominion Retail, Inc., Dominion Energy Kewaunee, Inc., and Dominion Energy Marketing, Inc.

### **IV.** Substantive Matters

### A. <u>Capacity Resources</u>

### 1. March 26 Order

14. In the March 26 Order, the Commission rejected the Midwest ISO's proposal to include power purchase agreements as Capacity Resources <sup>10</sup> without prejudice to the filing of a revised proposal that includes a verification of resources as a prerequisite to inclusion as a Capacity Resource. The Commission determined that the Network Resource designation in Order Nos. 890 and 890-A had no bearing on whether these resources would qualify as Capacity Resources. <sup>11</sup> The Commission also found that the Midwest ISO had not shown that seller's choice contracts were equivalent to Capacity Resources and required the filing of a revised proposal that includes a verification of resources as a prerequisite to inclusion as a Capacity Resource. Finally, the Commission found that the requirement that Capacity Resources be deliverable based on a Midwest ISO deliverability analysis was reasonable, and that an ongoing analysis of deliverability, after the resource has been initially determined to be deliverable, was also reasonable.

# 2. <u>Midwest ISO Compliance Filing</u>

- 15. In its compliance filing, the Midwest ISO proposes that several categories of power purchase agreements qualify as Capacity Resources, as follows:
  - Internal unit specific Capacity Resources include power purchase agreements that identify a specific generation resource internal to the Midwest ISO system;
  - Internal non-unit specific Capacity Resources include power purchase agreements that do not identify a specific generation resource from which power will be supplied, but rather allow for the power to be supplied

<sup>&</sup>lt;sup>10</sup> Capacity Resources are defined to be resources and external resources that are available to meet demand, including generation resources, power purchase agreements and demand response resources. Midwest ISO FERC Electric Tariff, Third Revised Volume No. 1, Substitute Third Revised Sheet No. 54.

<sup>&</sup>lt;sup>11</sup> See March 26 Order, 122 FERC ¶ 61,283 at P 274-75; Preventing Undue Discrimination and Preference in Transmission Service, Order No. 890, FERC Stats. & Regs. ¶ 31,241, at P 1526 (2007), order on reh'g, Order No. 890-A, 73 Fed. Reg. 2984 (Jan. 16, 2008), FERC Stats. & Regs. ¶ 31,261 (2007).

from a range of potential generation resources (including both system purchases and seller's choice agreements) that are internal to the Midwest ISO system;

- External unit specific Capacity Resources include power purchase agreements that identify a specific generation resource external to the Midwest ISO system; and
- External non-unit specific Capacity Resources include power purchase agreements that do not identify a specific generation resource from which power will be supplied, but rather allow for the power to be supplied from a range of potential generation resources (including both system purchases and seller's choice agreements) that are external to the Midwest ISO system.
- 16. The Midwest ISO proposes to require load-serving entities (LSEs) seeking to designate a power purchase agreement as a Capacity Resource to demonstrate that: (1) they have firm transmission service if they designate internal resources; (2) the generation resource(s) being designated under the power purchase agreement is not otherwise being used as a Capacity Resource by any other entity nor have they been designated as resources meeting external load if they designate internal resources; (3) the external resource(s) being designated under the power purchase agreement as a Capacity Resource is not otherwise being used as a Capacity Resource in any other RTO/ISO or in another state resource adequacy program or fulfilling resource adequacy obligations for other entities (e.g., municipals); and (4) they satisfy all other requirements applicable to Capacity Resources including deliverability requirements, the must-offer requirement and, for external resources, proof of firm transmission service to the Midwest ISO and proof of transmission service acquired to the sink. In its compliance filing, the Midwest ISO also modifies the requirements for external resources that are designated as Capacity Resources to indicate that firm transmission service is required to deliver the designated capacity from the external resource to the transmission provider region and that firm transmission service is needed on the transmission system.
- 17. The Midwest ISO also revises its must-offer requirement such that all Capacity Resources except externally-sourced non-unit specific power purchase agreements are

exempt from the must-offer requirement<sup>12</sup> to the extent that the Capacity Resource is unavailable due to a full or partial forced or scheduled outage. The Midwest ISO explains that the outage exception will not apply to external non-unit specific power purchase agreements since other resources should be able to meet the resource plan requirements if a unit is experiencing an outage. The outage exception is applicable to internally-sourced non-unit specific power purchase agreements since the LSE may only designate the excess Unforced Capacity<sup>13</sup> of the seller's fleet as Capacity Resources, and each unit in the fleet is therefore subject to the must-offer requirement.

# 3. Comments

- 18. Duke expresses concern that the proposed tariff language allows for contracts that are not backed by specific and verifiable resources, as required by the March 26 Order. Duke asserts that requiring contracts that serve as Capacity Resources tied to specific units is the only reasonable means of placing power purchase contracts on an even footing with other forms of Capacity Resources and of ensuring that reserves are not double-counted and are available when needed.
- 19. Duke also argues that if power purchase agreements are not tied to specific resources, the other qualification requirements such as deliverability and accrediting of capacity to contracts are meaningless. Duke contends such a result frustrates the purpose of having a reliable set of deliverable units available to provide resource adequacy. Duke recommends that the Commission direct the Midwest ISO to make clear that all power purchase contracts designated as Capacity Resources are backed by a specific unit or units.
- 20. Duke recognizes that the Midwest ISO may define "non-unit specific" as multiple units, and therefore this term is in compliance with the March 26 Order, and requests that the Commission direct the Midwest ISO to revise its definition accordingly. Duke also recognizes that "slice-of-system" contracts do not specify the exact amount to be obtained from each unit and therefore recommends that the Commission make clear that

<sup>&</sup>lt;sup>12</sup> In the March 26 Order, the Commission accepted a requirement that Capacity Resources must submit a self-schedule or offer in the day-ahead market, the reliability assessment commitment and for each hour during the operating month. The Commission also accepted an exemption from the must-offer requirement for resource outages and the principle that offer requirements will reflect the operational limitations of resources as specified in the business practices manual (BPM) for resource adequacy. *Id.* P 201.

<sup>&</sup>lt;sup>13</sup> Unforced Capacity is the amount of capacity assigned to a Capacity Resource after accounting for its forced outage rate. Midwest ISO FERC Electric Tariff, Third Revised Volume No. 1, Substitute Third Revised Sheet No. 138

each unit specified in the contract must meet the criteria for a Capacity Resource for all of the portion of the contract amount assigned to the unit and that the Capacity Resource amount should be reduced to remove amounts that fail to meet this criteria.

- 21. Joint Commenters also contend that the Midwest ISO should modify its tariff to identify each source unit that backs the power purchase agreement, whether the agreement is unit specific or non-unit specific, and to verify that the subject units cannot be used for capacity by any other entity. Joint Commenters consider these measures necessary to prevent double-counting and to ensure that the correct amount of unforced capacity is credited. Joint Commenters do not consider the proposed requirement that capacity owners submit a letter stating the capacity is not committed to serving third-party load to be sufficient to prevent double-counting.
- 22. FirstEnergy asserts that the Commission should not permit the use of non-unit specific purchase power agreements for meeting the resource adequacy requirements. FirstEnergy argues that the Midwest ISO has not substantiated why these resources are appropriate or how they will be calculated in determining resource adequacy. FirstEnergy asks for clarification on the calculation of Unforced Capacity for these agreements and how market participants with these agreements will meet the demonstration requirements for Capacity Resources.<sup>14</sup>
- 23. Reliant considers the Midwest ISO's Compliance Filing deficient because it does not establish standards that LSEs must meet in order to demonstrate that the generation resources backing the power purchase agreements meet the verification requirements in the tariff. Reliant also faults the compliance filing for failing to detail the mechanics of how verification will be met and measured. Reliant recommends that resources be finite, specific units identified in the power purchase agreement and that there be a certification by an officer of the LSE as to the accuracy of the information. Reliant also asserts that the Midwest ISO must establish procedures to review every power purchase agreement and ensure that the provisions meet the objective standards. For these reasons, Reliant argues that the Commission should reject the provisions pertaining to qualification of non-unit specific power purchase agreements as Capacity Resources without prejudice to the filing of new provisions that establish standards for demonstrating that a non-unit specific power purchase agreement meets the verification requirements and that establish procedures for verification.
- 24. Integrys recommends that the Midwest ISO submit tariff language that requires market participants to identify the range of potential resources in their non-unit specific

<sup>&</sup>lt;sup>14</sup> IPL also requests clarification on whether a provision in the power purchase agreement meets the demonstration requirement that a generation resource is not being designated as a Capacity Resource by any other entity.

power purchase agreement or that requires them to identify the resources chosen to provide capacity at a point in time.

- 25. Consumers Energy recommends that the Commission require the Midwest ISO to make a filing within six months demonstrating that its verification system is preventing double-counting of resources committed to another RTO or non-market area. Ameren asserts that the Midwest ISO should be required to make a filing with the Commission in the event that it determines power purchase agreements cannot function as Capacity Resources or cannot meet resource adequacy requirements.
- 26. Hoosier & Southern Illinois object to the requirement that LSEs must provide a copy of the power purchase agreement to the Midwest ISO for non-unit specific agreements, arguing that such agreements contain pricing information and other sensitive business information. Hoosier & Southern Illinois do not oppose a requirement that LSEs provide copies to the Midwest ISO of portions of these agreements as are necessary to demonstrate that non-performance by the seller is not excused for reasons other than force majeure, that the liquidated damages provision is of the make-whole nature and that the designated generation resources are not otherwise designated as Capacity Resources by any other entity. Integrys recommends that the tariff be revised to state that the demonstration that Capacity Resources are not already designated as a Capacity Resource by any other entity be satisfied by a statement from the seller that the amount of generation resources sold to the LSE as Capacity Resources has not been sold as a Capacity Resource to any other entity.

### 4. Answers

- 27. The Midwest ISO clarifies that LSEs seeking Capacity Resource treatment for non-unit specific power purchase contracts will be required to identify the contract source and sink when demonstrating firm transmission service to the Midwest ISO border and to the LSE load. The Midwest ISO agrees that a power purchase contract can only be designated as a Capacity Resource if the contract identifies one or more specific resources. The Midwest ISO states that it is willing to replace the term "non-unit specific" with "multiple unit specific" to provide clarity.
- 28. The Midwest ISO considers its verification procedures for non-unit specific power purchase agreements to be clear and states that market participants can submit a verified

<sup>&</sup>lt;sup>15</sup> Hoosier & Southern Illinois also note that the Commission has ruled that transmission providers are not entitled to copies of power supply contracts in order to verify compliance with tariff requirements.

statement<sup>16</sup> from the seller that the amount of generation resources sold to the LSE as Capacity Resources have not been sold as Capacity Resources to any other entity or as capacity meeting load obligations in other tariffs. The Midwest ISO indicates that it will provide in the BPMs a detailed list of the required documentation for an LSE application for Capacity Resource treatment and the procedures for determining resource deliverability. The Midwest ISO also notes that its title tracking tool will follow the chain of Capacity Resource transactions, thereby allowing it to oversee and enforce the prohibition against double-counting of Capacity Resources.

- 29. With respect to Hoosier & Southern Illinois' objection to the Midwest ISO review of power purchase agreements, the Midwest ISO reserves the right to request those portions of the agreements to verify and confirm that the contract complies with the Capacity Resource standards. The Midwest ISO indicates it will provide a list of the contract provisions that must be submitted with a market participant's application for Capacity Resource designation.
- 30. Reliant asserts that the verification procedures are unclear and contends that these procedures and their timelines need to be incorporated into the tariff. Reliant argues that it is essential that market participants know in advance how the Midwest ISO will verify compliance and that such verifications be completed prior to the dates LSEs make their demonstrations and prior to the voluntary auction. Reliant also requests that the Midwest ISO confirm that it does not intend to rely on LSE self-certification as part of its verification procedures and that it will audit the resources for compliance with tariff requirements using a specified timetable.
- 31. To ensure that the power purchase agreement seller is not relying on its own resources, Reliant proposes that the tariff be modified to make the demonstration requirement include verification that internal resources are not being relied upon by the seller to meet its own load requirement or, in the case of external resources, that they are not designated as a Network Resource under an applicable open access transmission tariff, nor subject to export curtailment or recall by the seller, the owner of the generation, an RTO, an ISO, or any other entity.

<sup>&</sup>lt;sup>16</sup> In response to Integrys, the Midwest ISO agrees that a statement from the seller that the amount of generation resources sold to the LSE as a Capacity Resource has not been sold as a Capacity Resource to any other entity meets the demonstration requirement, subject to the inclusion of a requirement that the statement from the seller be verified.

<sup>&</sup>lt;sup>17</sup> Midwest ISO June 25, 2008 Compliance Filing (proposing voluntary auction).

### 5. Commission Determination

- 32. We accept the revised proposal of the Midwest ISO to qualify power purchase agreements with verified resources as Capacity Resources to be in compliance with the requirements of the March 26 Order, subject to the modifications discussed below. We consider the verification of resources to be acceptable based on our review of the demonstration requirements for power purchase agreements. These requirements include a demonstration that resources are not committed to other market participants or to load outside the Midwest ISO that should ensure resources are not double-counted, and the Midwest ISO's representation that a resource can only be designated as a Capacity Resource if the contract identifies one or more specific resources. <sup>18</sup>
- 33. We agree with the Midwest ISO and Duke that the term "multiple" is a more accurate description of the contracts currently characterized as "non-unit specific" and we require the Midwest ISO to add language to the tariff stating that resources can only be designated as Capacity Resources if the contract identifies one or more specific resources, as verified by the Midwest ISO. We also agree with Duke that for "slice of system" contracts, each unit specified in the contract must meet the criteria for a Capacity Resource for all of the portion of the contract amount assigned to the unit, and the Capacity Resource amount should be reduced to remove amounts that fail to meet this criteria. We require the Midwest ISO to revise its tariff to reflect these revisions in a compliance filing to be submitted within 30 days of the date of this order.
- 34. We do not see the need to limit eligible power purchase agreements to only those power purchase agreements that specify specific units, as several commenters recommend. Since the Midwest ISO will only designate a resource as a Capacity Resource if the contract identifies one or more specific resources, even for non-unit specific agreements, we expect that the verification procedures will identify the resources backing non-unit specific power purchase agreements and ensure that the resources are not committed to other loads, and we consider these requirements sufficient for resource verification. We will not require additional verification standards or verification procedures for inclusion in the tariff at this time. The Midwest ISO has explained its verification criteria and verification procedures in its answer, and we find that these criteria and procedures are appropriately included in the BPMs.
- 35. We do not consider statements by market participants to constitute verification and therefore we consider it appropriate that the Midwest ISO be given a copy of the power purchase agreement to verify the capacity backing the agreement. Accordingly, we agree with the Midwest ISO's proposal in its answer to reserve the right to request those portions of the agreements to verify and confirm that the contract complies with the

<sup>&</sup>lt;sup>18</sup> Midwest ISO July 2, 2008 Answer at 11.

Capacity Resource standards, and we require the Midwest ISO to incorporate this proposal into its tariff in a compliance filing to be submitted within 30 days of the date of this order. <sup>19</sup> We encourage the Midwest ISO and market participants to develop confidentiality protections to ensure sensitive information is kept confidential.

36. Recognizing that the Midwest ISO will be implementing its verification process for the first time as it registers resources for the 2009 start-up of the resource adequacy program and recognizing our interest in ensuring these agreements are suitable Capacity Resources, we will require the Midwest ISO to submit an informational filing six months after the start of the permanent resource adequacy program addressing the effectiveness of the verification standards and the procedures for determining the eligibility of these agreements to be Capacity Resources. This includes verification that resources committed to other RTOs or non-market areas are not double-counted.

## B. <u>Deliverability</u>

# 1. <u>Midwest ISO Compliance Filing</u>

37. The Midwest ISO proposes in section 69.2.1.3 to establish additional requirements applicable to External Resources designated as Capacity Resources. These requirements include external unit specific and non-unit specific power purchase agreements, such as proof of firm transmission service to the Midwest ISO and proof of transmission service acquired to the sink.

# 2. <u>Comments</u>

38. The Midwest TDUs support the revised requirements that external resources have sufficient firm transmission service to the transmission provider region and to the LSE because, in the Midwest TDUs' view, external resources designated as network resources suffice to qualify that resource as deliverable. However, they consider the tariff requirement that deliverability be determined by system impact studies to put customers at risk of losing the value of the capacity of a previously designated network resource if the study is conducted after acceptance of the resource designation. The Midwest TDUs also consider the filing to be unclear because it does not explain how the new provisions relate to other provisions on deliverability. Accordingly, the Midwest TDUs request clarification that where an external resource is designated as a network resource, it qualifies as meeting any deliverability test for Capacity Resource accreditation. The Midwest TDUs recommend clarification for internal resources as well.

<sup>&</sup>lt;sup>19</sup> For the reasons discussed, we reject Integrys' proposal that the demonstration be allowed to be satisfied by a statement from the seller.

<sup>&</sup>lt;sup>20</sup> Fourth Revised Sheet No. 820.

39. The Midwest TDUs assert that the deliverability requirements in section 69.2.1.4.d are inconsistent with section 217 of the FPA and the Commission's roll-over policies and therefore should be revised. The Midwest TDUs claim that these authorities and principles make the Midwest ISO responsible for ensuring that it will have available transmission capability to accommodate roll-over of existing designations. The Midwest TDUs request that the Commission clarify that a roll-over pursuant to section 2.2 will continue to be deemed deliverable under section 69 and therefore aggregate deliverability testing is not required.

# 3. Answer

40. The Midwest ISO clarifies that an LSE must enter a transmission service request on OASIS to designate the external resource. The Midwest ISO states that the resource then becomes subject to the provisions of Module B of the tariff that require system impact studies and facilities studies to determine that existing reservations and uses of the transmission system are not impaired by the new designation. The Midwest ISO notes that the resource is also eligible for rollover rights if the request meets the timing requirements of the tariff and the eligibility puts the use of the system into the transmission expansion planning process, along with the continued deliverability of Capacity Resources inside the Midwest ISO footprint.

# 4. <u>Commission Determination</u>

- 41. We consider the Midwest ISO answer regarding the need for system impact studies to be responsive to the Midwest TDUs and note that this provision has been in effect since the start of the energy market. We do not find the new deliverability demonstration requirements for external resources in section 69.2.1.3 to be in conflict with other provisions in Module E. The aggregate deliverability requirements in section 69.2.1.2.b (Planning Reserve Requirements) recite the same deliverability requirements specified in section 69.2.1.4.d (Determination of Resource Deliverability), and both provisions apply to all resources, external and internal. These requirements are analyses undertaken by the Midwest ISO and are separate from the demonstration requirements of market participants in the process of qualifying their resources as Capacity Resources in section 69.2.1.3.
- 42. We find the additional requirements established by section 69.2.1.3 to be reasonable and we note that the Midwest TDUs support the provision. We further note that the Midwest TDUs' remaining arguments on deliverability provisions are

simultaneously raised in their rehearing request, and we address those arguments in the companion rehearing order.<sup>21</sup>

## C. Specific Contract Issues

# 1. Midwest ISO's Proposal

43. The Commission did not require compliance on specific contract issues in the March 26 Order. The Midwest ISO proposes no additional provisions pertaining to specific contracts in its tariff. However, certain entities, as discussed below, believe that the Midwest ISO's compliance filing sets forth tariff provisions that affect specific contracts to which these entities are parties.

# 2. Comments

- 44. Manitoba Hydro requests that the Commission direct the Midwest ISO to clarify the must-offer obligation for power purchase agreements in such a manner that respects the energy delivery terms and conditions of these agreements. Manitoba Hydro asserts that this clarification is needed to ensure that power purchase agreements with restrictions on the seller's obligation to supply energy are not disqualified as Capacity Resources. Manitoba Hydro recognizes that this result may not have been the intent of the Midwest ISO, since the must-offer requirement reflects resource operational limitations, but Manitoba Hydro requests clarification on this issue. In the alternative, Manitoba Hydro asserts that such power purchase agreements, which have previously qualified as planning reserves under former regional reliability rules, should be grandfathered to ensure that the value of these agreements is preserved and to relieve the purchasing LSE of the must-offer requirement.
- 45. Manitoba Hydro contends that it may be in the best interests of market participants to create a separate category of Capacity Resources that are sourced from "use limited resources," with separate accreditation rules and limits on the must-offer requirement.<sup>23</sup> As an example, the resource adequacy provisions could specify that capacity and energy

<sup>&</sup>lt;sup>21</sup> Midwest Indep. Trans. System Operator, Inc. 125 FERC  $\P$  61,061, at P 34-35 (2008) (Rehearing Order).

<sup>&</sup>lt;sup>22</sup> Manitoba Hydro explains that the contract terms specify that the buyer and seller agreed to schedule the limited energy in specific time periods as specified in the contracts to maximize resource adequacy and market value, and that these terms may restrict the seller's obligation to supply energy to certain peak days and/or hours.

<sup>&</sup>lt;sup>23</sup> Manitoba Hydro notes that hydro-electric generating units are exempt from the must-offer requirement under the California ISO tariff.

to meet resource adequacy needs can be available from "use limited resources" in any hour, but only up to a specified number of hours. Also, to the extent contractual limitations on energy availability are recognized as resource operational limitations, Manitoba Hydro explains that more specificity in the requirements related to power purchase agreements may be necessary.

- 46. Ameren requests clarification that a seller's choice contract utilizing external resources must satisfy the must-offer requirement. Ameren further requests clarification on both the process for ensuring that external capacity purchases are available as presumed as well as the process for evaluating these contracts with respect to the *force majeure* exception.
- 47. Xcel asserts that the Midwest ISO proposal potentially excludes power purchase agreements from qualifying as Capacity Resources if those agreements allow the resource to be recalled or interrupted for the purpose of allowing the seller to avoid shedding firm system loads on its own system. Xcel requests that either the Midwest ISO clarify that such agreements are acceptable as Capacity Resources or the Commission direct the Midwest ISO to submit revised provisions that recognize that such agreements can be designated as Capacity Resources.
- 48. Integrys and Hoosier & Southern Illinois recommend that the proposed tariff language be revised to make clear that damages must be paid unless service is interrupted due to reasons of *force majeure* in power purchase and sale agreements with liquidated damages provisions.
- 49. The Midwest TDUs contend that the proposed Midwest ISO provisions need to be revised for power purchase agreements backed by system purchases. If the seller is subject to Module E, 100 percent of capacity designated as a Capacity Resource should be subtracted from the buyer's load and that amount should be added to the seller's load. If the seller is not subject to Module E, the amount of the purchase and the associated reserves will be recognized in determining the Capacity Resource adequacy at 100 percent plus the buyer's planning reserve margin (PRM) of its capacity designated as a Capacity Resource. The Midwest TDUs explain that this revision ensures that purchase agreements with reserve-backed, system-wide resources are distinguished from power sales from multiple units that are not reserve-backed and allow for reduction of the energy provided in the event that one of the multiple underlying resources is out of service.

<sup>&</sup>lt;sup>24</sup> Hoosier & Southern Illinois also support this approach for system purchase contracts.

50. The Midwest TDUs assert that the revisions are necessary to make it clear that those who purchase firm system power, backed by seller's reserves should not be deprived of their arrangement and forced to carry a reserve responsibility that they have paid another responsible entity to bear and that without this clarification, firm system power purchasers will be placed in the unreasonable position of being obligated to offer capacity from reserves for which they did not get resource adequacy credit. According to the Midwest TDUs, due recognition of contract rights require that where the contract provides for a purchase quantity backed by the seller's reserves, these reserves need to be recognized *pro rata* in determining the reserve value of the purchase and should not require a further backstopping by more capacity reserves. The Midwest TDUs also consider it inequitable for sellers to retain the resource adequacy credit for their own retail loads for reserves that are contractually dedicated to serving the purchaser. The Midwest TDUs assert that this would be a violation of the discrimination provisions in the Federal Power Act and the long-term contract provisions of EPAct 2005.

# 3. Answers

- 51. The Midwest ISO considers the must-offer tariff provision to be responsive to the concerns of Manitoba Hydro since it specifies that the must-offer requirement will reflect resource operational limitations. The Midwest ISO also indicates it is committed to working with stakeholders to develop accommodations for "use limited resources."
- 52. Regarding Manitoba Hydro's request for grandfathering of power purchase agreements that previously qualified as planning reserves under former regional reliability rules, Duke expresses its concern that an overbroad provision for grandfathering, without any examination of the terms and conditions, or of regional reliability rules under which they are grandfathered, could lead to inappropriate grandfathering. If a large MW amount of contracts are grandfathered as reserves despite lack of linkage to any specific unit, the result will be a shortage of resources for contingencies, according to Duke. Duke asserts that it may be more appropriate to grandfather a limited number of prior contracts, such as Manitoba Hydro's, for a specified transition period based on clearly-defined parameters. Duke contends that Manitoba Hydro has not made a showing sufficient to support grandfathering.
- 53. The Midwest ISO recognizes Xcel's concern regarding power purchase agreements being ineligible to be Capacity Resources if they include provisions to be interrupted as a last resort for purposes of avoiding firm load shedding per NERC reliability standards. The Midwest ISO indicates that it will incorporate clarifying language in the tariff to allow these power purchase agreements to qualify as Capacity Resources, if so ordered by the Commission.
- 54. Seller's choice contracts that source from external resources will be obligated to comply with the must-offer requirement and will be vetted for availability and deliverability in the same manner as other power purchase agreements, according to the

Midwest ISO. In the event that a power purchase agreement is insufficient in meeting resource adequacy requirements, the Midwest ISO indicates it will make a section 205 filing with the Commission to remove the agreement as an eligible resource for Capacity Resource designation.

- 55. The Midwest ISO agrees with the proposed revisions of Hoosier & Southern Illinois and Integrys to clarify that *force majeure* is the only exception allowed for failure to perform by power purchase agreements designated as Capacity Resources.
- 56. The Midwest ISO notes that its tariff already accounts for the power purchase agreements of concern to the Midwest TDUs and Hoosier & Southern Illinois. The Midwest ISO explains that these agreements are designated as Full Responsibility Purchases and Full Responsibility Sales in the tariff and that it will be providing further detail and clarifications in the BPMs.
- 57. Duke disagrees with Hoosier & Southern Illinois to the extent that the latter are arguing that a liquidated damages contract should not have to meet all of the requirements that other power purchase agreements must meet. Reliant recommends that the provision permitting the designation of agreements with liquidated damages provisions as Capacity Resources be revised to clarify that these agreements must be backed by resources that can be verified and that satisfy the other requirements of Module E.
- 58. With respect to Full Responsibility Purchases and Full Responsibility Sales agreements, Hoosier & Southern Illinois answer that the calculation of credit received by the buyer should be included in the tariff, as well as eligibility criteria for such power purchase agreements and the availability of dispute resolution procedures between buyers and sellers. Reliant also considers the proposed treatment of these agreements to be a significant modification to Module E, and therefore asserts that the terms and conditions identifying qualified planning resources for load transfers and provisions for systematic tracking and compliance must be included in the tariff. Reliant notes that the Midwest ISO cannot rely on the representation of the power purchase agreement buyer, and that the Midwest ISO should not be required to assume responsibility for interpreting contractual terms. The Midwest TDUs request that the Commission consider its forthcoming comments on the provisions in the BPMs on these agreements.

### 4. Commission Determination

59. Inasmuch as the must-offer requirement reflects resource operational limitations, as the Midwest ISO notes in its answer, we consider the must-offer provisions to be responsive to the concerns of Manitoba Hydro. We will not make findings on whether the terms of specific provisions in the power purchase agreements make the agreements in question eligible to be classified as Capacity Resources. That task is the responsibility of the Midwest ISO, and the Commission has accepted its procedures and criteria for

making such determinations as part of the resource eligibility process. We note that the Midwest ISO in its answer has committed to discussing the issues raised by Manitoba Hydro and we consider that process to be the appropriate venue to determine the eligibility of the Manitoba Hydro resources to be Capacity Resources. Furthermore, the Midwest ISO has responsibility for the contracts in question and can determine if their terms allow the resources to be eligible to be Capacity Resources. For these reasons, we do not consider it appropriate for the Commission to grandfather certain agreements as Capacity Resources.

- 60. We consider the Midwest ISO's responses that the must-offer provision is applicable to seller's choice contracts and that the procedures for verifying the availability and deliverability of these contracts are the same as for other agreements to be responsive to the concerns of Ameren. We also note that the Midwest ISO has indicated that it will verify the specific resources for all power purchase agreements, and therefore we expect that this process will ensure generation is available.
- 61. We find the clarifying language proposed by the Midwest ISO regarding Capacity Resource eligibility for agreements with provisions that allow for firm load shedding per NERC reliability standards to be reasonable. We require the Midwest ISO to submit the revised language in the compliance filing to be submitted within 30 days of the date of this order.
- 62. We agree with Reliant that the provision addressing agreements with liquidated damages provisions in section 69.2.1.2.3.vii should be revised to state that these agreements can be designated as Capacity Resources, provided they are backed by resources that can be verified and that satisfy the other requirements of Module E. We also find reasonable the proposals by Integrys and Hoosier & Southern Illinois that the Midwest ISO clarify that these agreements provide for compensation when service is interrupted, except or unless the interruption is due to reasons of *force majeure*. We require the Midwest ISO to revise this section accordingly in the compliance filing to be submitted within 30 days of the date of this order.
- 63. While we consider the Midwest ISO's answer regarding the accounting and planning resource requirements for Full Responsibility Purchases and Full Responsibility Sales to be responsive to the concerns of the Midwest TDUs, we require further tariff revisions. First, we agree with commenters that the calculation of the PRM for these agreements should be specified in the tariff since it is a term of service. <sup>26</sup> Second, we

<sup>&</sup>lt;sup>25</sup> We also consider stakeholder discussions to be the appropriate venue for further discussions regarding "use limited resources."

<sup>&</sup>lt;sup>26</sup> Midwest ISO July 2, 2008 Answer at 5 (section 4.2 of the BPM).

agree with Reliant that the tariff must specify the resource adequacy obligations of the sellers and buyers to these agreements. We require the Midwest ISO to include these provisions, as well as tariff revisions regarding eligibility criteria for these agreements as proposed by the Midwest ISO in its answer, <sup>27</sup> in the compliance filing to be submitted within 30 days of the date of this order. As for tracking and compliance procedures, we expect that once the sellers and buyers have defined their responsibilities the Midwest ISO will follow the same verification procedures it uses for other resources and therefore additional tariff provisions are unnecessary.

#### D. **Load Modifying Resources**

#### 1. March 26 Order

- 64. In the March 26 Order, the Commission found that the proposed 12-hour notification requirement could be reasonable for demand response resources providing emergency resources. The Commission placed significant weight on the Midwest ISO's position that the 12-hour notice is required to avoid endangering reliability. The Commission directed the Midwest ISO to further explain why the 12-hour advisory notice period is reasonable and provide support for its assertions that resources that require more than 12-hours advance notice will likely not be available to provide load reductions during emergencies and that the proposal is necessary to avoid endangering reliability. The Commission also required the Midwest ISO to address the apparent conflict between the 12-hour notice and the 24-hour reduction requirement for requested load reductions.
- 65. The Commission directed the Midwest ISO to revise the tariff to specify procedures for accrediting, testing, validating, measuring and verifying load modifying resources (LMRs). 28 With respect to qualifying requirements for LMRs, the Commission directed the Midwest ISO to discuss with stakeholders the requirement that LMRs be available for no less than five interruptions in a peak load season and provide an explanation of the feasibility and impact of a lower minimum interruption requirement.

<sup>&</sup>lt;sup>27</sup> *Id.* at 6.

<sup>&</sup>lt;sup>28</sup> Load-modifying resources are demand resources and behind-the-meter generation that may be used to satisfy resource adequacy requirements even if they do not qualify as network resources. Behind-the-meter generator resources are located with load and do not participate directly in Midwest ISO energy markets. These resources have load located behind a retail customer meter and have an obligation to be available in emergencies.

66. The Commission also required a number of other revisions to the LMR tariff provisions, as well as requiring explanations on how behind-the-meter generation resources are evaluated for resource adequacy and other LMR provisions.

# 2. <u>Midwest ISO Compliance Filing</u>

- 67. The Midwest ISO explains that it shares the concerns of some stakeholders that it would not be aware of an emergency more than 12 hours in advance, and in fact, such notification will generally be less than 12 hours and therefore demand resources that require more than 12 hours of notice would not be able to meaningfully act as LMRs. The Midwest ISO states the 24-hour reduction requirement applies to LMRs that may already be scheduled to reduce load for other reasons and therefore this section does not change the 12-hour advance notice requirement. Rather, it clarifies that an LMR that is requested to reduce load during an emergency must provide a reduction in load that would not have otherwise occurred within the next 24-hour period in order to be treated as an LMR under the tariff.
- 68. In its compliance filing, the Midwest ISO proposes provisions specifying the accreditation, testing, validation, measurement and verification requirements for demand resources and behind-the-meter generation. Pursuant to the filing, the LSE is required to submit information on the amount and type of the demand resource when it initially registers the resource, as well as procedures for reducing load. In the event there are no state accreditation procedures, a third party auditor will accredit the facility. The responsible LSE will be required to submit testing procedures using performance data from past use of the LMR. When performance data is unavailable, a mock test will be conducted. The Midwest ISO will either compare the actual usage of the LMR against its baseline usage or compare the actual usage with its firm service level designation to determine the amount of the LMR load reduction for crediting.
- 69. The Midwest ISO states it will accredit LMRs at 100 percent of an LMR's unforced capacity rating for the initial 2009 planning year and that it will submit an informational filing to describe the performance parameters used to determine this rating for LMRs. The Midwest ISO also states it will provide an opportunity for stakeholder input on performance parameters used to determine an LMR's capacity rating based upon its performance.
- 70. The Midwest ISO states that it has discussed the five interruption minimum requirement for LMRs with stakeholders and re-affirms its preference for the standard. The Midwest ISO states that allowing an LMR to qualify as a planning resource if it is only capable of being interrupted four times per summer season or less could result in the qualification of less useful demand resources to meet emergency conditions.
- 71. The Midwest ISO clarifies that behind-the-meter generation that it is not able to assess will not qualify as an LMR. The Midwest ISO states that behind-the-meter

generation subject to state restrictions creates a class of resources that is not on equal ground with other behind-the-meter generation and that a critical requirement for LMRs is that they be available under emergency conditions.

72. The Midwest ISO also made a number of other revisions to LMR tariff provisions, as required by the March 26 Order.

# 3. Comments

- 73. The CMTC asserts that the Midwest ISO has not presented evidence to support its proposed 12-hour notice requirement and notes that the majority of stakeholders supported expanding the required notice to accommodate existing demand response options that provide for day-ahead notice. According to the CMTC, if the Commission approves the 12-hour notice requirement, it would shut out at least 185 MW of existing demand response from participating in the resource adequacy program, based on an analysis of demand response programs providing day-ahead notification by the U.S. Department of Energy. The CMTC notes that the Emergency Demand Response proposal in Docket No. ER08-404 does not have a notice limitation and asserts that the Midwest ISO will likely have advance knowledge of potential emergency conditions by 7:00 PM prior to the operating day, and perhaps sooner. For these reasons, the CMTC recommends that the Commission reject the 12-hour requirement.
- 74. Consumers Energy also recommends that the Commission reject the requirement and replace it with a 24-hour requirement, noting that the Midwest ISO has failed to explain why it should not be aware of an emergency more than 12 hours in advance. Consumers Energy states that this restriction would nullify one of its successful state-commission approved demand response programs. Duke states that it is not just and reasonable for the Midwest ISO to gain six hours of free load reduction for which the LSE is not compensated in the circumstance of a market participant that must respond to a notice within the 12-hour notice for a load reduction that otherwise would have occurred in 18 hours.
- 75. Ameren argues for region-wide accreditation, testing, validation, measurement and verification of demand resources as the best approach to protecting reliability. Ameren asserts that allowing states to adopt significantly more lenient standards can threaten reliability by allowing for a patchwork of uneven and inadequate standards that disadvantages market participants in states with more stringent standards. The CMTC contends that the Midwest ISO proposal amounts to no standard since there is no requirement for accreditation standards to be similar from state to state and there is no

<sup>&</sup>lt;sup>29</sup> The CMTC cites to a vote of 37 for and zero against a motion to modify the notice from 12 hours to 24 hours on December 4, 2007.

requirement that the auditors rely upon the same or similar accreditation standards. For this reason, the CMTC recommends that the Commission direct the Midwest ISO to work with stakeholders to develop reasonable accreditation standards or to recognize that LSEs will bear the risk of paying performance penalties.

- 76. The CMTC notes that the Midwest ISO proposal to conduct mock tests based upon actual metered usage means that the LMR must actually reduce load. The CMTC argues that this requirement violates the Commission instruction to not require physical interruption of LMRs as part of the testing procedures. The CMTC also claims that accrediting the availability of a demand resource through an unforced capacity calculation makes little sense since demand resources do not have forced outages equivalent to generation resources. Accordingly, the CMTC recommends that the accreditation be based on the amount of load reduction that will be available during system peaks.
- 77. Joint Commenters assert that the Midwest ISO plan to accredit each LMR at 100 percent of the resource's unforced capacity rating may lead to reliability problems. Joint Commenters recommend that the LMRs be assigned a system average equivalent forced outage rating for a two-year transition period or the Midwest ISO should develop a system class equivalent forced outage rating until a more extensive performance history is available.
- 78. FirstEnergy asserts that the tariff should be revised to clarify that the five interruption requirement for demand resources is a demonstration of capability and not a limitation on reliability-based interruptions to five events during the peak load season, lest the tariff blur the distinction between economic- and emergency-based interruptions. FirstEnergy also argues that entities failing to respond to Midwest ISO directives should be subject to the penalty provisions regardless of the number of emergency interruptions requested.
- 79. Ameren asserts that the Midwest ISO fails to describe how it will ensure that a non-performing LMR is assessed a penalty that accurately reflects the costs of its non-performance, including the effect on reduced reliability. Ameren also asks for clarification on how the penalty is assessed. Duke requests clarification on when, how and by whom the options can be chosen to either reduce load by a pre-specified amount or to specify a load reduction to a firm service level and how penalties for failure to meet these obligations will be applied. FirstEnergy notes that the penalty provision applies variously to the market participant or the LMR as the party subject to the penalty, and therefore is confusing. FirstEnergy recommends that the tariff assign responsibility to the entity claiming the planning reserve reduction. FirstEnergy also requests clarification on the calculation of the penalty provision.
- 80. IPL asserts that the Commission should direct the Midwest ISO to accept self-certification from LSEs that the LMRs can achieve the necessary load reduction, rather

than requiring those resources used in a state-sanctioned program to provide testing or performance data. IPL expresses concern the resource adequacy program may allow the Midwest ISO to control traditionally retail-level programs, particularly over industrial customers using behind-the-meter generation.

### 4. Answers

- 81. The Midwest ISO believes that LMRs must be available within 12 hours in order to be useful during emergency conditions and that it is unlikely that it would be aware of an emergency more than 12 hours in advance. The Midwest ISO also does not believe that it could respond as necessary in an emergency with a 24-hour advisory notice period. The Midwest ISO notes that ISO New England, the NYISO and PJM have a two-hour response requirement for demand resources.
- 82. The Midwest ISO clarifies that it will assess non-performing LMRs for the product of the amount of load reduction not achieved and the LMP at the commercial price node plus revenue sufficiency guarantee (RSG) charges, as a proxy for the costs that were otherwise incurred to replace the deficient LMR that does not respond to the targeted level of load reduction. The Midwest ISO further explains that it will assess the penalty by determining the number of MWs the LMR was deficient in responding to the targeted level of load reduction or moving to the specified firm service level, the LMP at the commercial price node corresponding to the LMR's expected load reduction, and RSG charges applicable to the market participant. The Midwest ISO will disburse penalty revenues to market participants representing LSEs in the balancing areas that experienced the emergency on a load ratio share basis.
- 83. The Midwest ISO asserts that its procedures properly reflect jurisdictional roles by deferring to any applicable state accreditation procedures. With respect to accrediting, testing, validating, measuring and verifying LMRs, the Midwest ISO clarifies that it will require the LSE to provide written documentation that a state commission with jurisdiction over the LSE has promulgated tests measuring demand response. The Midwest ISO does not believe that self-certification will provide the necessary level of confidence in the ability of demand resources to contribute to reliability for resources located in states without measurement tests and therefore it considers documentation from a third party auditor to be necessary to ensure reliable operations.
- 84. The CMTC disagrees with Joint Commenters' assertion that demand resources cannot be counted on due to a lack of performance history, noting there are six documented periods of load interruption under emergency alert conditions in the Midwest ISO. The CMTC also considers the discounting proposal of the Joint Commenters to be a double penalty on LMRs since they are already subject to non-performance penalties. The CMTC asserts that NERC's Generating Availability Data System (GADS) is available to any generation owner, including behind-the-meter generation, and therefore contends that the Joint Commenters' recommendation that behind-the-meter generation

be accredited at a system average Equivalent Forced Outage Rate is unjust and unreasonable. The CMTC notes that in the event GADS performance data does not exist, the issue should be addressed on a case-by-case basis, consistent with the Midwest ISO's current plans.

# 5. <u>Commission Determination</u>

- 85. The Midwest ISO resource adequacy program provisions require that LMRs must be able to respond to emergencies. We consider this requirement reasonable since the purpose of Capacity Resources is to meet peak demand needs and emergency conditions during the most critical period of peak demand. As the Midwest ISO emergency provisions indicate, emergencies are declared after the Midwest ISO determines there are insufficient resources committed through the Reliability Assessment Commitment (RAC) process to relieve the anticipated shortage condition. While it is possible that the Midwest ISO will know it will be declaring an emergency 24 hours before the load reduction is needed, it is most likely that in typical rapidly-developing emergency conditions the Midwest ISO will not have the information it needs to declare an emergency until late in the day-ahead commitment process and it will not be able to confirm the emergency status until the RAC process that occurs after the day-ahead market closes, or six hours before the start of the operating day. Under these time frames, while we consider a 12-hour advisory notice less than ideal, we consider it more reasonable than a 24-hour requirement since a 12-hour requirement increases the probability that resources designated as LMRs can participate under typical emergency conditions.
- 86. We find no basis to conclude that an LMR will not be compensated for responding to a notice to reduce load earlier than originally planned by the market participant. The shut-down and curtailment costs of type I and II demand response resources (DRR-I and II, respectively) resources are guaranteed in RSG credits<sup>31</sup> and DRR-I and II resources can revise their offers after they receive the start time notice, and therefore their offer should reflect their actual costs. Emergency Demand Resources (EDRs) should also be compensated for accelerated load reduction costs since their compensation is based on the higher of either the real-time LMP or the EDR production costs reflected in their offer for the amount of verifiable demand reduction provided for EDRs.
- 87. We find the Midwest ISO proposal for accrediting LMRs to be reasonable. While it is possible, though not likely, that some states will have significantly more lenient

<sup>&</sup>lt;sup>30</sup> The Midwest ISO's emergency procedures are detailed in section 40.2.20.

<sup>&</sup>lt;sup>31</sup> RSG credits are provided to reserves that do not recover start-up, no-load and incremental energy costs not recovered in energy or reserve markets prices.

accreditation requirements for demand resources, we expect the penalties for non-performance – the cost to replace the deficient resource and disqualification of the resource – and the consequence of paying scarcity prices if resources are inadequate will provide sufficient incentives for LSEs and state agencies with jurisdiction over demand resources to set accreditation standards that ensure performance. With respect to third party auditors, we expect that the Midwest ISO will work closely with them to ensure that the standards used are acceptable to the Midwest ISO.

- 88. We recognize that the Midwest ISO is still developing an appropriate metric for accrediting LMRs and that it will be updating the Commission in an information filing that will describe the performance parameters used to determine the LMR performance rating. At the same time, we recognize that market participants need to know the MW value of their LMRs and whether they need to obtain other resources in order to meet their PRM for the initial 2009 planning year. We also agree with commenters that an unforced capacity standard is not meaningful in the evaluation of LMR performance, and therefore a better definition needs to be developed. To ensure that market participants have adequate notice of how their LMRs will be accredited, we require the Midwest ISO to complete its stakeholder discussions and propose an accreditation standard and, to the extent that performance is based on unforced capacity, to propose the definition of unforced capacity for LMRs, in a compliance filing to be submitted within 30 days of the date of this order. The metric is stakeholder discussions and propose and the propose the definition of unforced capacity for LMRs, in a compliance filing to be submitted within 30 days of the date of this order.
- 89. We find the Midwest ISO discussion of the five interruption minimum requirement for LMRs to be in compliance with the March 26 Order. We do not see any need for revisions based on the concerns of FirstEnergy. Penalties are assessed for any instance of an LMR not responding to an emergency instruction, and therefore the tariff addresses FirstEnergy's recommendation that LSEs should be subject to the penalty provisions regardless of the number of emergency interruptions requested.
- 90. We find that the Midwest ISO explanations and tariff revisions are in compliance with the March 26 Order with respect to calculating the cost impact of a deficient LMR for penalty purposes. We also find that the Midwest ISO answer is responsive to the commenters' concerns on how penalties will be applied. We agree with FirstEnergy that section 69.2.2.3.b should be revised so that the penalty payment is made by the market participant taking credit for the LMR planning resource, rather than applying the penalty to the resource. All LMRs are owned by the market participant under the Midwest ISO

<sup>&</sup>lt;sup>32</sup> In response to CMTC's concern that the mock test will result in a load reduction, we note that the Midwest ISO's proposal indicates that the mock test will employ all systems necessary to initiate a load reduction *short of an actual load reduction*.

proposal and therefore the credits, charges and penalties for LMRs apply to the market participant.

91. We find the Midwest ISO proposals on behind-the-meter generation and other aspects of the process for designating demand resources as LMRs to be in compliance with the requirements of the March 26 Order.

# E. <u>Load Forecasting</u>

### 1. March 26 Order

92. The Commission accepted the Midwest ISO's proposal to make LSEs responsible for load forecasts and it required the Midwest ISO to provide the Commission with an assessment of alternative forecast requirements, particularly for LSEs in retail choice states, and propose potential modifications. The Commission also required an approach for small LSEs. The Commission also required other explanations and tariff revisions with regard to forecasting procedures.

# 2. Midwest ISO Compliance Filing

- 93. The Midwest ISO and its stakeholders reviewed and discussed various load forecasting processes employed by other RTOs/ISOs that have retail choice states. The Midwest ISO explains that its resource adequacy program requires LSEs to secure capacity the first day of the month before the operating month, in contrast to other RTOs/ISOs that conduct the demand forecast, apply the PRM, and secure the requisite amount of capacity on behalf of LSEs. The Midwest ISO considers it unfairly burdensome to have the RTO or the local electric distribution company impose resource adequacy requirements on LSEs. The Midwest ISO also maintains that LSEs are in the best position to provide information about their forecasted demand, although additional collaboration would be prudent to better assess forecast accuracy and resource plans.
- 94. With regard to small LSEs and LSEs in retail choice states, the Midwest ISO states that the current tariff language provides the necessary flexibility these LSEs require because they can adjust their forecasted demand up until the first day of the month prior to the subject operating month, and because LSEs may work with electric distribution companies or providers of last resort to assist in providing the forecasted demand.
- 95. In its compliance filing, the Midwest ISO revises its load forecasting provisions to specify forecast timeframes, deadlines for submittal of forecasts, and the exclusion of LMRs from demand forecasts. The revised provisions also state that, in retail choice states, the LSE has the option to coordinate its forecasted demand with the applicable electric distribution company or provider of last resort.

### 3. Comments

- 96. FirstEnergy disagrees with the Midwest ISO's conclusion that LSEs are in the best position to provide information on forecasted demand and asserts that the electric distribution company, or the LSE with provider-of-last-resort obligation in states with retail competition, is in the best position to provide the most accurate forecast of demand. FirstEnergy notes that retail competition states account for almost 40 percent of Midwest ISO load and that this significant share warrants a specific load forecasting approach for deregulated markets.
- 97. Relying on competitive retail LSE load forecasts will underestimate load, according to FirstEnergy, since these entities may not know their full contractual load obligation by the compliance date and these entities will reduce the amount of load they decide to serve if they expect market prices are not sufficient to cover new resource costs and risks. For these reasons, and the fact that competitive retail LSEs have the ability to quickly change the amount of load under contract, FirstEnergy expects the electric distribution company will need to make resource investments, placing stress on the resource adequacy process and compromising resource adequacy. FirstEnergy expects long term forecasts to be even less accurate due to pricing and regulatory uncertainties. For these reasons, FirstEnergy recommends that the tariff be revised to specify that electric distribution companies or local balancing authorities in retail choice states submit load forecasts for their total connected load, thereby assuring losses are accounted for, adjustments to peak load coincidence are made, and the appropriate zonal PRMs are applied.
- 98. Dominion faults the Midwest ISO load forecasting process for not including an objective measure for ensuring that resources are committed to cover load and reserve margins. Dominion asserts that reliance on forecasts provided by competitive suppliers could jeopardize reliability. Dominion argues that the more appropriate course would be for the Midwest ISO to do centralized load forecasting or to rely on electric distribution companies and/or balancing authorities that are best positioned to forecast load, while collaborating with LSEs, since they have the information to provide accurate forecasting, including historical load data and their own load serving obligations. In contrast, competitive suppliers do not know what load they will serve in the future and they do not have forecasting models to evaluate the impact of other variables such as weather, according to Dominion, and their forecasts are likely to lead to over- or under-forecasting depending on customer flexibility to move to another competitor. At a minimum, Dominion recommends the Commission direct the Midwest ISO to adopt a flexible approach to forecasting that takes into consideration smaller LSEs and competitive retail suppliers.
- 99. IPL also considers forecasting a challenge for utilities in retail choice states and therefore recommends that each retail choice state select one to three entities that will be certified by the state to act as an interface between the Midwest ISO on state-specific

retail issues. These state-certified entities would perform services under an agency agreement, according to IPL, to forecast load on behalf of retail providers and load, and these entities could also maintain an accounting of who is serving load at specific points in time and assure that resource adequacy requirements are adhered to by the appropriate retail providers and/or load.

- 100. Reliant faults the Midwest ISO for failing to describe alternative load forecasting methods in useful detail or providing any meaningful assessment or explanation as to why it chose not to propose modifications. Reliant asserts that the key objective of the resource adequacy plan to ensure that resources committed to the Midwest ISO are sufficient to cover the regional forecast requirement and PRM will be undermined if the lack of well-defined, nondiscretionary procedures results in an understatement of the actual load in the region and in the corresponding resource adequacy requirement. Reliant notes the validation proposal does not describe how the validation will be done or what happens if a forecast LSE requirement is not validated.<sup>33</sup>
- 101. Reliant states that the Midwest ISO proposal is deficient for not addressing how the forecasting approaches used in the New York ISO and the California ISO might result in more accurate and reliable forecast LSE requirements. Reliant also states that PJM develops an independent forecast of seasonal peak load and thereby avoids the weakness of the Midwest ISO approach where the sum of the individual forecast LSE requirements may be less than what is required to ensure adequate reserve margins for the RTO as a whole. Reliant argues that the Midwest ISO is in the best position to ensure that the forecasting procedures are fairly and consistently administered across the footprint. Reliant also faults the Midwest ISO for stating additional collaboration between itself and utilities would be prudent and then not making any proposals for collaboration. For these reasons, Reliant recommends that the Commission reject the alternatives addressed in the Midwest ISO's compliance filing and order the Midwest ISO and the Independent Market Monitor (IMM) to provide a thorough description and analysis of alternative proposals for more centralized and standardized load forecasts and reasons for not adopting Reliant's and other intervenors' recommendations.
- 102. Ameren considers the Midwest ISO forecasting process deficient since it does not address retail choice providers serving loads for less than one month. These entities cannot provide forecasts on the first day of the month prior to the forecast month, states Ameren, and the Midwest ISO does not address who is responsible for the load forecast if it is uncertain who will be serving the load in the upcoming month. Ameren also asserts that each LSE forecast will not recognize the coincident peak of the system and may result in over-forecasts.

<sup>&</sup>lt;sup>33</sup> Hoosier & Southern Illinois also assert that the meaning of validation is unclear.

- 103. Integrys considers the proposed measure of one standard deviation for statistical significance to be unreasonable, noting that half of all LSEs having under-forecasts would be outside this range for the four summer months. Integrys recommends a two standard deviation standard of statistical significance to be more reasonable, resulting in 9 percent of under-forecasts being outside the range of significance. Integrys asserts that the statistical significance test should be a screening function and not proof of gaming. Accordingly, Integrys recommends that the Midwest ISO revise its tariff to specify that the standard deviation method is for screening purposes only and include a provision ensuring due process for determining whether an under-forecast is a random event or the result of other actions by the LSE. Integrys notes that the revised tariffs do not delete the requirement that load forecast data be reported to state commissions, as directed by the Commission.
- 104. Duke avers that the Midwest ISO's compliance filing is unclear as to whether the retail choice LSE option to coordinate with electric distribution companies or providers of last resort imposes any obligations on these entities and what compensation these entities will receive. Duke argues that the revised tariffs on forecast updates could be interpreted to require an update for each month of the next two planning years and each summer and winter season for an additional eight planning years every time the forecasted demand varies from prior submissions. Duke considers such a requirement burdensome and unreasonable, and recommends an update for the remainder of the planning year only with changes beyond that year to be submitted in the next annual forecast filing. Duke also requests clarification regarding the meaning of the phrases 'RTO accepted normalization' and 'other normalization adjustments' and recommends that the latter phrase include retail load switching in retail choice state since these are occurrences beyond the LSE's control, and they occur after the forecast is submitted for the month ahead compliance.
- 105. The Midwest TDUs contend that the requirement that load forecasts be done on a commercial node basis imposes a forecasting burden on small LSEs with loads in multiple historical control areas as compared to larger LSEs with one commercial node for many MWs of load. For this reason, the Midwest TDUs assert that the Midwest ISO claim that the current tariff language provides sufficient flexibility for small LSEs is unsupported. The Midwest TDUs therefore recommend that the Commission require the Midwest ISO to more fully accommodate the needs of small LSEs.

### 4. Answer

106. The Midwest ISO does not believe that LSEs in retail choice states should be exempt from the obligation to submit good faith estimates of anticipated demand. The

<sup>&</sup>lt;sup>34</sup> Duke also requests clarification that *de minimis* changes need not be reported.

Midwest ISO notes that recent evidence indicates that retail load changes have been modest percentages in a given month and thus it expects most LSEs will have the ability to accurately forecast demand. The Midwest ISO anticipates that states with retail choice programs will tailor their programs to enable LSEs to coordinate with electric distribution companies and local balancing authorities.

107. The Midwest ISO expects that prudent LSEs will implement forward-looking plans as a basis for demand forecasts, and it agrees to work with stakeholders to address load switches that occur after the forecast is submitted on the first day of the prior month. The Midwest ISO states its belief that the LSE, working with the electric distribution company or the provider of last resort, is in the best position to provide a demand forecast. The Midwest ISO indicates that its provisions for small LSEs balance stakeholder concerns and the need to effectively administer the resource adequacy program. The Midwest ISO clarifies that it does not intend to override an LSE forecast, but it will discuss any discrepancies with the LSE.

108. Responding to Integrys, the Midwest ISO concludes that a one standard deviation is the proper metric for statistical significance since it recognizes statistical variations while requiring an appropriate degree of accountability and notes that the underforecast already accounts for all the primary factors that affect changes in load over the short-run. The Midwest ISO expects that the documentation of reasons for the underforecast provided by LSEs will enable it to determine if it is necessary to report the matter to the IMM. The Midwest ISO agrees with Duke that a consistent definition of under-forecast is needed and offers to submit a revised definition in a subsequent compliance filing.

### 5. Commission Determination

109. We agree with parties that electric distribution companies and providers of last resort have knowledge and expertise in load forecasting that would be of benefit in the development of load forecasting for load served by retail choice providers. Accordingly, we find that the Midwest ISO proposal to give LSEs the option to coordinate with these entities in developing their load forecast is reasonable.<sup>36</sup> However, we will not require that these entities, or the Midwest ISO or state agencies, be responsible for the load

<sup>&</sup>lt;sup>35</sup> The under-forecast is defined as the negative difference between the forecasted demand and actual measured demand, after adjustment for actual weather conditions, retail load changes and RTO-accepted normalization due to LSE price elasticity. Midwest ISO FERC Electric Tariff, Third Revised Volume No. 1, Substitute Third Revised Sheet No. 138.

<sup>&</sup>lt;sup>36</sup> Midwest ISO May 27, 2008 Compliance Filing at 7.

- forecast.<sup>37</sup> The LSE is the entity responsible for its resource plan and it is the entity that will be penalized if it does not have sufficient planning resources, and therefore it is appropriate that the LSE, in this case the retail-choice provider LSE, be responsible for the load forecast.
- 110. We consider the most appropriate role for the Midwest ISO to be as a facilitator of forecasts, i.e., by using the stakeholder process for estimation working groups, and to provide an accuracy assessment. We do not see the need for the Midwest ISO to become the central forecasting authority. We expect that the estimation workshop process facilitated by the Midwest ISO will facilitate the development of uniform estimation techniques and forecasting procedures. We also expect the Midwest ISO's ongoing evaluation of forecast accuracy will identify any loads that are missing from the forecast. Responding to Reliant and Hoosier & Southern Illinois, we interpret the validation of load forecasts by the Midwest ISO to mean an evaluation of forecast accuracy, including an evaluation of under-forecasts.
- 111. In light of the importance of load forecasting in determining the planning resource requirements and ultimately resource adequacy, we will require the Midwest ISO and the IMM to submit an informational filing one year after the start of the permanent resource adequacy program that assesses the accuracy of the forecasts, the impact of the load forecasts on the adequacy of resources, and whether a more centralized forecasting process would be more appropriate.<sup>39</sup>
- 112. We find the Midwest ISO proposal to measure statistical significance based on one standard deviation to be reasonable. As the Midwest ISO explains, the statistical significance test of an under-forecast is done after adjustments to the forecast have been made for weather conditions, price elasticity impacts and retail load changes. Therefore, the forecast has already been adjusted for most of the major factors that cause forecast

<sup>&</sup>lt;sup>37</sup> We note that the Supply Adequacy Working Group voted down a recommendation to have the Midwest ISO work with electric distribution companies or balancing authorities to develop a demand forecast. *Id.* at 6.

<sup>&</sup>lt;sup>38</sup> We will not require further evaluation of forecasting approaches of other ISOs, as recommended by Reliant and the Midwest TDUs. The Midwest ISO and its stakeholders have already undertaken an evaluation of the forecasting approaches of other ISOs in the stakeholder discussions, as requested by the Commission, and we do not see the need for further evaluations.

<sup>&</sup>lt;sup>39</sup> We require the Midwest ISO to include an assessment of the impact of load switching on forecast accuracy in this filing.

deviation, and the remaining deviations should be minimal. Accordingly, we consider a one standard deviation test for these remaining deviations to be reasonable.<sup>40</sup>

- 113. Based on the description of the forecast review process in section 69.3.4 and the Midwest ISO answer, we consider the process to be a screening procedure and not a test of gaming, as characterized by Integrys. The sole purpose of the forecast evaluation is for the Midwest ISO and the LSE to share information on forecast results. As noted by Integrys, the Commission required the deletion of the requirement that forecast error be reported to state authorities, and therefore the forecast evaluation is not intended to be a procedure to find deficiencies to be reported to regulatory authorities.
- 114. Responding to the Midwest TDUs, we note that the commercial node issue they raise is not an issue addressed in the compliance requirements of the March 26 Order. The Commission is addressing this issue in the companion rehearing order. 43

# F. Price Responsive Demand and Forecast LSE Requirements

### 1. Midwest ISO Compliance Filing

- 115. The Midwest ISO defines a Forecast LSE Requirement as "the expected [d]emand for an LSE for a [m]onth less the [c]apacity of [l]oad [m]odifying [r]esources for that [m]onth."
- 116. Pursuant to the compliance filing, if an LSE serves load both inside and outside of the Midwest ISO, then the LSE must separately designate Capacity Resources to cover the Forecast LSE Requirement and the appropriate PRM for the load in the Midwest ISO

<sup>&</sup>lt;sup>40</sup> We find that the Midwest ISO proposal to clarify ambiguities in the definition of under-forecast is reasonable and we require that those clarifications be included in the compliance filing. We also direct the Midwest ISO to specify forecast update requirements, in response to the concerns of Duke, in the Midwest ISO's BPM.

<sup>&</sup>lt;sup>41</sup> We note that the Midwest ISO answer indicates that it does not consider an abnormal statistical variation to be proof of gaming. *See* Midwest ISO July 2, 2008 Answer at 21.

<sup>&</sup>lt;sup>42</sup> We direct the Midwest ISO to delete the reporting requirements to state authorities in section 69.3.4, as the Commission directed in the March 26 Order. March 26 Order, 122 FERC ¶ 61,283 at P 140.

<sup>&</sup>lt;sup>43</sup> Rehearing Order ,125 FERC ¶ 61,061, P-90.

<sup>&</sup>lt;sup>44</sup> Sixth Revised Sheet No. 77.

region, and a distinct and separate amount of Capacity Resources to cover the Forecast LSE Requirement and appropriate PRM for the load outside of the Midwest ISO region.<sup>45</sup>

117. The Midwest ISO states that it recognizes the role of price-responsive demand as a Capacity Resource and has provided in section 69.2.1.2.b that demand response resources can qualify as Capacity Resources. The Midwest ISO states that it is important to ensure that price-responsive demand is reflected in a manner that assures system reliability and equitable treatment of all loads.

## 2. <u>Comments</u>

118. The Ohio Commission recommends that the tariff or BPM be amended to add the following provisions:

The state regulatory authority with jurisdiction over the LSE may select a point on the Forecast LSE Requirement Curve to be used in setting the Planning Reserve Margin.

In the event the applicable state regulatory authority has not done so, the Transmission Provider shall use the point on the LSE's Forecast Requirement Curve which minimizes the LSE's total resource requirement.

The highest price point on a Forecast Requirement Curve that may be used to calculate the Planning Reserve Margin would be the price/MW point that reflects the expected energy price during a Level 2(d) Maximum Generation Emergency Event, i.e., when interruptible demand and Demand Response Resources would be curtailed.

- 119. The Ohio Commission also requests that the definition of Forecast LSE Requirement be amended with the following statement: "An LSE, consistent with any State regulatory requirements, may specify its Forecast LSE Requirement as a curve describing the relationship between anticipated integrated hourly peak MWs and price." Finally, the Ohio Commission recommends that the BPM be revised to provide for review of the accuracy of LSE point forecasts and that the Midwest ISO initiate a stakeholder process to define the financial consequences and penalties for under-forecasts of point and curve forecasts.
- 120. The Ohio Commission asserts that these provisions are needed to ensure price-responsive demand is on a level playing field with LMRs and generation. The Ohio

<sup>&</sup>lt;sup>45</sup> Original Sheet No. 816B.

Commission also contends that LSEs should not have to hold capacity and planning reserves for demand that predictably will not occur at prices higher than those assumed in the development of a point load forecast. The Ohio Commission argues that such a requirement to hold additional capacity compromises the business case for investing in advanced metering and the ability of restructured states, such as Ohio, to cost-effectively achieve long-term resource adequacy.

- 121. The Ohio Commission argues that the Midwest ISO is not in a position to communicate dispatch signals to millions of consumers and end-use devices which would respond to real-time price signals, as required for LMRs, and this failure to consider price-responsive demand in the Midwest ISO's resource adequacy requirements is inconsistent with EPAct 2005, the Notice of Proposed Rulemaking on Wholesale Competition in Docket No. RM07-19-000, and other statements by the Commission in support of price-responsive demand.
- 122. The Illinois Commission contends that LSEs should not be required to carry capacity planning reserves for load that would predictably respond to energy and ancillary services market price signals. The Illinois Commission urges the Commission increase its focus on the signals for retail price response being sent by its energy and ancillary services market price rather than non-market mandated capacity reserve concepts.
- 123. FirstEnergy asserts that price-responsive demand should be obligated to respond to Midwest ISO directives in order to qualify under the tariff and to require otherwise would undermine the reliability objectives of the resource adequacy program.

# 3. Answer

124. In its answer, the Midwest ISO commits to continue investigating how price-responsive demand can be better incorporated into the tariff and submits that its proposal already permits many types of demand response resources to participate in achieving resource adequacy goals. The Midwest ISO also states that it will hold stakeholder discussions to determine equitable methods for permitting LSEs to submit a price-responsive demand curve, rather than a specific demand forecast, without adversely impacting reliability.

### 4. Commission Determination

125. We note that the issue raised by the Ohio Commission and the Illinois Commission does not pertain to compliance requirements, and therefore is appropriately addressed in stakeholder discussions. We note that in the compliance filing and in its answer the Midwest ISO commits to work with stakeholders on reflecting price-responsive demand in demand forecasts. The Midwest ISO also states that it will balance the advantages of allowing additional price-responsive demand to meet resource

adequacy needs against the need to reliably operate the grid within the standards imposed by the Commission and the ERO.<sup>46</sup> We will address the reasonableness of such a proposal when it is filed at the Commission.

### G. LOLE and Planning Reserve Margins

### 1. March 26 Order

- 126. In the March 26 Order, the Commission accepted the Midwest ISO's proposal to establish reserve margins, while respecting the rights of states to set reserve margins that may differ, finding that the Midwest ISO's proposal improved upon the status quo.<sup>47</sup> The March 26 Order declined to adopt any proposals or to direct the Midwest ISO to clarify its tariff to provide "blanket rules" to resolve potential conflicts that arise as a result of the new resource adequacy reserve margin structure.<sup>48</sup>
- 127. The March 26 Order also accepted the Midwest ISO's proposal to use a uniform and consistent standard of loss of load no greater than 0.1 day in one year. The Commission directed the Midwest ISO to clarify the methodology by which it would utilize a Loss of Load Expectation (LOLE) study to establish PRMs. The Commission also directed the Midwest ISO to clarify if forecast data is to be provided by the load zone so that the Midwest ISO may complete its LOLE study. Finally, the Commission required the Midwest ISO to clarify how it would coordinate with LSEs to determine appropriate PRMs.

# 2. <u>Midwest ISO Compliance Filing</u>

- 128. The Midwest ISO states that the minimum PRM requirement is determined through use of the LOLE analysis by stressing the system by either adding demand or removing generation capacity until the LOLE reaches 0.1 day in one year (or one day in 10 years). The minimum amount of generation capacity above forecasted demand to meet the reliability criteria establishes the PRM. The Midwest ISO also clarifies that an LSE must designate Capacity Resources greater than or equal to its Forecast LSE Requirement multiplied by one plus the PRM.
- 129. The Midwest ISO states that the applicable PRM for a LSE is determined by the LOLE analysis conducted by the Midwest ISO for the LSEs that are subject to the Tariff.

<sup>&</sup>lt;sup>46</sup> Midwest ISO May 27, 2008 Compliance Filing at 18; Midwest ISO July 2, 2008 Answer at 35.

<sup>&</sup>lt;sup>47</sup> March 26 Order, 122 FERC ¶ 61,283 at P 90.

<sup>&</sup>lt;sup>48</sup> *Id.* P 94.

The Midwest ISO notes that an exception arises when a state regulatory body establishes a PRM that differs from the PRM determined by the Midwest ISO's LOLE study, in which case the state-established PRM will apply. The Midwest ISO also clarifies that it will establish a minimum PRM for all LSEs under the Tariff, and that this minimum will not apply if an LSE is subject to a state-established PRM. The Midwest ISO states that the PRM will be reduced based on the weighted average forced outage rate of all units in the Midwest ISO region.

### 3. <u>Comments</u>

- 130. IPL argues that the Midwest ISO's clarification that it will use the "weighted" average forced outage rate of all generation resources in the transmission provider region needs further clarification, particularly as to the weight being used in these calculations.
- 131. In addition, although IPL states that it supports the March 26 Order's deference to states' ability to set differing reserve margins, it believes further clarification is needed regarding the interaction between the Midwest ISO's PRM and a state's PRM, when applicable. IPL is unclear exactly how states with lower PRMs will not be permitted to lean on Midwest ISO members that are subject to higher PRMs.
- 132. The Midwest TDUs are concerned that Module E will take state-determined installed reserve margin percentages out of context and then apply them as unforced capacity requirements, and that this may create a mismatch that would effectively raise reserve margin requirements above state-determined requirements. For example, the Midwest TDUs cite the 18 percent reserve margin in effect in Wisconsin based on nameplate, rather than unforced capacity ratings. Using unforced capacity ratings, according to the Midwest TDUs, would raise the reserve margin above the statemandated reserve margin. However, the Midwest TDUs acknowledge that the manner in which states set reserve margins in the future may change based on the implementation of the new Module E procedures. The Midwest TDUs suggest changes to the Midwest ISO's calculation of PRMs to adjust downward a higher state-determined PRM based on the weighted average forced outage rate of all units in the Midwest ISO region, except where the applicable state authority states that it was set as an equivalent forced outage margin rather than as a nameplate margin. Where the state-determined margin is lower than the Midwest ISO determined margin, the Midwest TDUs suggest that the procedure be reversed.
- 133. FirstEnergy states that it continues to believe that a state should not be able to set a lower PRM than the PRM set by the Midwest ISO. However, given that Module E, as currently written, allows for the possibility of lower state margins, FirstEnergy believes that Module E should clarify that an LSE outside the state with the lower reserve margin does not have to supply additional capacity to meet the one day in ten years LOLE in that zone. Specifically, FirstEnergy questions the meaning of the words "recognize and incorporate" in the introduction to Module E. FirstEnergy asserts that section 68.1

should be modified to make clear that the Midwest ISO will neither take into account in its calculations the lower PRM set by a state nor require other LSEs to make up any shortfall in Capacity Resources to maintain a PRM that would otherwise be determined through the LOLE analysis.

- 134. FirstEnergy also asserts that PRMs should be set through Equivalent Forced Outage Rates (EFOR) in lieu of the current weighted average forced outage rate of all generation resources to establish the unforced capacity requirement. FirstEnergy states that EFOR is the measure currently intended to be used to adjust the PRM to account for system-wide generating unit availability. In addition, FirstEnergy argues that the phrase "[g]eneration [r]esources in the [t]ransmission [p]rovider [r]egion" in section 68.1 should be modified to include qualifying external resources. FirstEnergy believes that external resources should be included because some of the resources will be located outside the Midwest ISO region and all of the capacity resources of the LSE should be factored into the PRM calculation.
- 135. Ameren asserts that the Midwest ISO should be directed to monitor the impact of lower state-mandated PRMs on reliability and on other LSEs and that the Midwest ISO should be directed to report the results of its monitoring no later than 90 days before the end of the first year. According to Ameren, the Midwest ISO's report will allow LSEs and other stakeholders to evaluate whether state-mandated PRMs are problematic or unfair to other LSEs.
- 136. Duke asks that the Midwest ISO further clarify that the minimum one-month terms for Planning Resources do not alter the minimum terms for Network Resources because the two may not necessarily overlap and the flexibility to designate short-term Network Resources is desirable.

#### 4. Answer

- 137. The Midwest ISO answers that it will respect any state-established PRM. The Midwest ISO also states that it is unaware of any evidence that problems will develop because of differences between state-established PRMs and Midwest ISO-established PRMs. The Midwest ISO believes that all states will act prudently to implement state procedures that harmonize with federal procedures. The Midwest ISO contends that any party that believes their PRM is either too high or too low may file a complaint under FPA section 206. In addition, the Midwest ISO commits to fulfill its responsibilities as the Reliability Coordinator to ensure that no state-established PRM would result in reliability concerns and to resolve any reliability issues that may arise.
- 138. The Midwest ISO disagrees with the Midwest TDUs' suggestion that where the state-established PRM precedes and exceeds the Midwest ISO-established PRM, the state PRM should be adjusted downward based on the weighted average forced outage rate of all units in the Midwest ISO region. The Midwest ISO states that it will work with state

commissions and all affected parties to harmonize the differing reserve margins using an unforced capacity rating.

139. The Midwest ISO also clarifies that in section 68.1 its intent was not to exclude consideration of external resources that have firm transmission service to the Midwest ISO border as part of its LOLE calculations to determine PRMs.

## 5. <u>Commission Determination</u>

- 140. We continue to believe that the resource adequacy paradigm embodied in Module E is reasonable, including the recognition and incorporation of state reserve margins. Also, the language of the introduction to Module E cited by commenters was previously approved by the Commission in the March 26 Order and has not been modified by the Midwest ISO. We have no evidence to support a conclusion that the Midwest ISO, by accommodating reserve margins that may vary within its region, will have to compromise reliability or the requirement for just and reasonable rates, based on the proposed tariff clarifications in the compliance filing.
- 141. Moreover, as the Reliability Coordinator, the Midwest ISO has a responsibility to evaluate and monitor potential events that may harm reliability to ensure a reliable power supply. We expect that the Midwest ISO will vigorously use its responsibility to evaluate and address any potential reliability concerns it has with the confluence of state- and Midwest ISO-established reserve margins. We also expect that the Midwest ISO will report the results of its resource adequacy market as part of its annual state of the market report, as is done in other RTOs.
- 142. The Midwest ISO has outlined a procedure to stress the system by adding demand or reducing capacity until the LOLE reaches 0.1 day in one year. The minimum amount of capacity above demand to meet the applicable reliability criteria will then be used to establish the PRM. The PRM will be based on a weighted forced outage rate of all generation resources to establish the Unforced Capacity requirement. Commenters

<sup>&</sup>lt;sup>49</sup> Substitute Fourth Revised Sheet No. 810.

<sup>&</sup>lt;sup>50</sup> See Midwest ISO July 2, 2008 Answer at 23 ("[T]he Midwest ISO will comply with its responsibilities as the Reliability Coordinator to assess whether any stateestablished PRM may result in reliability concerns…").

<sup>&</sup>lt;sup>51</sup> Original Sheet No. 810.01.

<sup>&</sup>lt;sup>52</sup> See Module A, section 1.330c (proposing to define Unforced Capacity as "the amount of Capacity assigned to a Capacity Resource after accounting for its forced outage rate").

assert that the EFOR<sup>53</sup> should be used instead of the weighted forced outage rate to establish the Unforced Capacity requirement. We believe that because the Midwest ISO has proposed a resource adequacy structure where it will accommodate the PRMs of multiple regions and states for capacity resources, both internal and external, using a weighted average of the forced outage rates is reasonable. We note that a weighted average calculation is also repeated in the planning reserve zone establishment process that we are also approving as discussed elsewhere herein.<sup>54</sup> We also note that Midwest ISO clarified its use of "weighted average." The Midwest ISO clarified that in the calculation of PRM, "weighted average means that the PRM requirement, which is based on installed capacity, is adjusted down by the weighted average forced outage rate of all units in the [t]ransmission [p]rovider [s]ystem to establish an [u]nforced [c]apacity [r]equirement. This is necessary because [c]apacity [r]esources will be valued at their [u]nforced [c]apacity rating for purposes of [resource adequacy] compliance." We believe that this is logical and reasonably clear, and therefore find that no further clarification is necessary.

- 143. In response to commenters' concerns, the Midwest ISO clarifies that it will consider external resources that have firm transmission service to the Midwest ISO border as part of its LOLE calculations. We accept the Midwest ISO's clarification for section 68.1, but we believe that section 68.1 should be revised to clarify that resources external to the "[t]ransmission [p]rovider [r]egion" will be considered to establish the Unforced Capacity requirement. We direct the Midwest ISO to submit this revision in a compliance filing within 30 days of this order.
- 144. In response to Duke's concern that one month terms for planning resources do not impact network resource terms, the Midwest ISO clarifies that the terms of network resources are independent of the Module E planning resource requirements. The Midwest ISO further clarifies that LSEs that designate planning resources to meet resource adequacy requirements will not impact the ability to designate a short-term network resource.<sup>57</sup> We believe the tariff is sufficiently clear that designations for

<sup>&</sup>lt;sup>53</sup> NERC GADS Data Reporting Instructions Appendix F – Performance Indexes and Equations at page 12 for a standard definition of EFOR, *available at* http://www.nerc.com/files/apd-f\_Performance\_Indexes\_and\_Equations.pdf.

<sup>&</sup>lt;sup>54</sup> See Original Sheet No. 810E ("[T]he resulting PRM for each LSE shall be weighted by a calculation that reflects the share of an LSE's load in each zone.").

<sup>&</sup>lt;sup>55</sup> Midwest ISO July 2, 2008 Answer at 28.

<sup>&</sup>lt;sup>56</sup> *Id.* at 24.

<sup>&</sup>lt;sup>57</sup> *Id.* at 36.

planning resources are not the same as designations for network resources, and therefore find that no further related revisions are needed.

## H. Planning Zones

### 1. March 26 Order

145. In the March 26 Order, the Commission found that the establishment of planning zones impacts rates and thus the method for developing these zones is properly included in the Tariff.<sup>58</sup> The commission directed the Midwest ISO to clarify: the method used to establish additional zones within the Midwest ISO region to address regional issues; how PRMs will be allocated to LSEs operating in multiple zones; and what factors will be considered in determining zones.

# 2. <u>Midwest ISO Compliance Filing</u>

146. The Midwest ISO states that it will use a Security Constrained Economic Dispatch (SCED) locational marginal price simulation, run annually, to develop additional or alter existing planning zones. The Midwest ISO states that in the event an LSE is operating in multiple zones, the PRM for each LSE will be weighted by a calculation that reflects the share of an LSE's Forecast LSE Requirement in each zone.

## 3. <u>Comments</u>

147. Joint Commenters<sup>59</sup> find the Midwest ISO's proposed tariff revisions related to planning zones deficient because they inadequately describe how deliverability will be accounted for in practice. According to the Joint Commenters, the Midwest ISO proposal will allow LSEs to choose any generator within the Midwest ISO to comply with its PRM, without considering the effect of transmission constraints. Joint Commenters believe there is a disconnect between the Midwest ISO's use of a study for LOLE that uses deliverability as part of developing the zones and the use of capacity resources to meet the applicable PRM, which assumes universal generator deliverability. According to Joint Commenters, the disconnect between using deliverability to develop the zones, but ignoring deliverability when designating capacity to meet reserve margins, will detrimentally impact rates and reliability because the value of capacity in constrained areas is greater than that of capacity in unconstrained areas.

148. Therefore, Joint Commenters conclude that the Commission should direct the Midwest ISO to address deliverability by implementing a phased-in LSE PRM

<sup>&</sup>lt;sup>58</sup> March 26 Order, 122 FERC ¶ 61,283 at P 169.

<sup>&</sup>lt;sup>59</sup> Dynegy, Exelon, and Constellation.

procurement approach that values the effect of deliverability on capacity and provides accurate price signals to the market.

- 149. WPSC protests the Midwest ISO's reliance on the SCED simulation to determine zones. WPSC argues that relying on SCED focuses on economics solely and does not focus on reliability. According to WPSC, this is in direct contrast to the purpose of determining PRMs through LOLE – using reliability constraints. WPSC is concerned that Midwest ISO could establish zones where a surplus of generation exists, simply because that generation is more expensive than other generation outside the zone, creating LMP differentials based on congestion. Using SCED creates many problems, according to WPSC. Such problems include small changes in input variables causing large changes in outputs, without any correlation to reliability, lack of distinction between generating sources of capacity and sources of energy, and lack of recognition of historical zones including planning reserve sharing groups. Therefore, WPSC asks the Commission to direct the Midwest ISO to adopt the LOLE zones of the existing Midwest Planned Reserve Sharing Group (MPRSG). If the Commission does not direct the Midwest ISO to adopt the MPRSG zones, then WPSC asks that the Midwest ISO be required to include other reliability-based analyses developed through the stakeholder process in its zonal determinations.
- 150. WPSC also asserts that the Midwest ISO developed its zonal methodology in section 68.1 without properly consulting with stakeholders or considering their suggestions. WPSC notes that the Midwest ISO held a workshop, but that the workshop discussed the Midwest ISO's proposal only, that the Midwest ISO said that it would use SCED as a screening tool only, and that the Midwest ISO did not consider multiple perspectives. WPSC asserts that the Midwest ISO should be directed to clarify several terms that were not presented to stakeholders prior to filing, including: the purpose of the 30,000 value related to MCC values, and all new terms such as "Effective Import Transfer Capability."
- 151. Hoosier & Southern Illinois note that the Midwest ISO has not included a minimum size for additional zones it may create beyond the initial three zones specified in Attachment FF-3. Hoosier & Southern Illinois note that the Midwest ISO, in its draft BPM on resource adequacy, specified a minimum size of 2000 MW of load or generation, which Hoosier & Southern Illinois agree would be reasonable and necessary to avoid unreasonably small zones. Hoosier & Southern Illinois also argue that the creation of additional zones should require Commission approval because of the significant financial effects that could occur after redefining zones, which Hoosier & Southern Illinois argue is similar to the Commission approval required for the creation of new Narrowly Constrained Areas (NCAs).
- 152. Duke requests that the Midwest ISO be prohibited from splitting a single local balancing authority (LBA) when it establishes new planning zones. Duke argues this is necessary for utilities that have planned historically on a single system basis so that those

utilities do not end up with a mismatch of generation to load within a single PRM zone that cannot be effectively hedged. However, Duke asserts that it would be acceptable for the Midwest ISO to establish zones that split a LBA for instances where a load zone is smaller than a LBA at the request of market participants.

- 153. The Midwest TDUs argue that the Commission should review the deliverability requirements for both internal and external resources because those two sets of resources are intertwined and to avoid any discrimination between comparable resources. As part of that review, Midwest TDUs assert that the Commission should clarify that resources which have met the requirements of sections 69.2.1.3b and 69.2.1.3c are deemed deliverable as Capacity Resources. Further, any resources that are granted a network resource designation or properly rolled over pursuant to tariff section 2.2 should be assumed to have passed the deliverability requirements of section 69 within the Midwest ISO region.
- 154. In other words, the Midwest TDUs offer their interpretation of section 69.2.1.3 as an LSE will have met its deliverability test by obtaining Network Integration Transmission Service (NITS) for an external resource along with firm transmission rights to bring the resource to the Midwest ISO border, and is not subject to discrediting of that external resource if transmission system constraints prevent it from being deliverable along with other system deliverability demands. However, the Midwest TDUs assert that other language in section 69.2.1.2b conflicts with this interpretation and could be read to expose transmission customers to the risk of losing the capacity value of an existing network resource if a System Impact Study comes later that finds the capacity to be undeliverable. The Midwest TDUs request that Midwest ISO make these clarifications in its applicable BPM, and if not in the BPM, that the Commission direct them to do so in the tariff.

#### 4. Answers

155. In its answer, the Midwest ISO clarifies the methodology it intends to use to develop planning zones based on LOLE and states that commenters are confusing and mixing concepts together. According to the Midwest ISO, its compliance tariff language clarifies the requirements to designate an external resource, but fundamentally it is the same as it was in the former Module E. To designate an external resource, an LSE must enter a transmission service request on OASIS, which makes the request subject to the provisions of Module B of the tariff. The provisions of Module B require system impact studies, and possible facilities studies, to determine that existing reservations and uses of the transmission system are not impaired by the new designation. Furthermore, Midwest ISO notes, if the request meets the timing requirements of section 2.2 of the tariff, then it is eligible for roll-over rights and this eligibility puts the use of the system into the transmission expansion process, along with the continued deliverability of the capacity resources within the Midwest ISO footprint.

- 156. In general, the Midwest ISO rejects any assertions that it does not take existing transmission constraints into account when evaluating deliverability of resources and/or that it will not continue to evaluate deliverability under the new resource adequacy provisions. The Midwest ISO states that it takes deliverability very seriously because deliverability is a fundamental premise of reliable operations.
- 157. WPSC submitted an answer to the Midwest ISO's answer. WPSC disputes the Midwest ISO's statement that the selection of the additional LOLE zones is not any more economically driven than the contractual dispatch of generation. According to WPSC, the selection of additional LOLE zones will be based solely on SCED simulation of the energy market, without regard to contractual rights of LSEs to generation capacity. SCED, by definition, dispatches generation based on economic constraints, not reliability constraints, according to WPSC. WPSC states that it does not oppose the use of a SCED model to assist the development of the LOLE zones, but does oppose it as the sole method to develop the zones.

# 5. <u>Commission Determination</u>

- 158. In the March 26 Order, the Commission accepted the Midwest ISO's proposal to initially use the transmission planning zones listed in Attachment FF-3. However, the proposal outlined by the Midwest ISO in its compliance filing to potentially create additional zones is a new process that was referenced in the December 28, 2007 filing, but not included in the tariff. Therefore, we clarify that our acceptance in the March 26 Order was for the initial use of the zones in Attachment FF-3 only, with the recognition that additional zones may need to be created in subsequent planning years.
- 159. It is important to note that the Midwest ISO has clarified that it will have a reserve margin in effect for all areas of its transmission region, regardless of the creation of additional zones through its annual analysis. The purpose of creating additional zones, with reserve margins that differ from other parts of the Midwest ISO region, is to ensure through probabilistic analysis that all areas of the Midwest ISO meet the LOLE of 0.1 day in one year. In other words, there is one loss of load standard throughout the Midwest ISO, but some regions may require additional resources to meet that standard due to congestion. Any congestion limits the ability of the system operator to import additional resources and those limitations must be reflected in the creation of additional zones.
- 160. The Midwest ISO has proposed in its compliance filing to use an annual dispatch simulation to create LMPs for the transmission provider region. Based on that simulation, the Midwest ISO may identify a sub-region that is expected to experience a

<sup>&</sup>lt;sup>60</sup> Midwest ISO May 27, 2008 Compliance Filing at transmittal letter, 5.

cluster of congestion based on positive and negative Marginal Congestion Components (MCCs). The Midwest ISO will form a contiguous zone by grouping adjacent clusters along with neutral busses. These candidate zones qualify as zones to model in the LOLE study provided that other conditions, such as the ability to transfer MWs between zones, are met. We find this method reasonable. We also find that the Midwest ISO has sufficiently clarified the process it intends to use to establish additional zones, with the added clarifications directed herein.

- 161. We disagree with commenters that the Midwest ISO has inappropriately relied on economics over reliability in its proposal. The evaluation of system constraints and congestion implicates both reliability and economics. Reliability is evaluated because SCED factors security constraints into its model and economics is reflected through the marginal pricing differentials. We note that the Midwest ISO will also evaluate what reserve level is necessary for the zone to meet reliability criteria, including the ability of the system to use transfer MWs into areas with positive MCC values and out of areas with negative MCC values. We also disagree that deliverability has not been accounted for in the steps outlined in section 68.1.1. We find that deliverability has been evaluated for the creation of planning reserve zones based on the steps included in the tariff.
- 162. However, we share the concerns of commenters that there may be a disconnect between the deliverability analysis used in the creation of planning reserve zones and the deliverability analysis used to evaluate designated capacity resources. While we appreciate the Midwest ISO's response in regard to external resources, we believe it does not fully address the concern that delivery constraints on capacity may not be mirrored in the planning reserve zone determinations. <sup>62</sup> As noted in the corresponding order on rehearing, there may be some existing resources from the start of the energy markets that are deliverable to local loads only that are eligible to be Capacity Resources. Also, while the Midwest ISO is obligated to facilitate generation interconnection and expansion planning, it cannot force utilities to build capacity and therefore it cannot assure deliverability for all projects' useful lives. 63 We are unclear how this will work in practice if the capacity is nominated, as it has been historically, and entities other than the Midwest ISO are approving capacity additions while the planning reserve zones can potentially change from year-to-year. In particular, we are concerned with clarification for purposes of future iterations of the reserve zones. In addition, there are the questions of how existing bilateral contracts are treated assuming universal deliverability and how differing state reserve margins will impact deliverability, if state boundaries sub-divide

<sup>&</sup>lt;sup>61</sup> Original Sheet No. 810D.

<sup>&</sup>lt;sup>62</sup> Midwest ISO July 2, 2008 Answer at 33-34.

<sup>&</sup>lt;sup>63</sup> Rehearing Order, 125 FERC ¶ 61,061, at P 34 (2008).

planning reserve zones.<sup>64</sup> Therefore, we direct the Midwest ISO to clarify these issues and/or align the deliverability requirements of planning reserve zones and capacity resources in its compliance filing within 30 days of the date of this order.

- 163. We will not, at this time, direct the Midwest ISO to avoid splitting LBA areas as it analyzes potential planning reserve zones. As noted herein, we have approved the initial use of the reserve zones from Attachment FF-3 in the March 26 Order. In this order, we find that the process the Midwest ISO has outlined in Module E to evaluate additional planning reserve zones is reasonable. It would be inconsistent with the finding of reasonableness and premature to pre-judge the results of the Midwest ISO's zonal analysis. Also, the Midwest ISO acknowledges that its planning reserve zone studies may result in splitting LBAs, but that it believes load could be identified to particular zones. We accept the Midwest ISO's assertion, conditioned on the level of granularity in the data being present so that identified load will be able to be attributable to a zone. We also note that the Midwest ISO has Load Zone provisions and that some commenters are amenable to splitting LBAs provided they can preserve their Load Zone designations.
- 164. We agree with commenters that other clarifications are required. We direct the Midwest ISO to correct a typographical error where it referenced Effective Import *Transfer* Capability (EITC) when it intended to use the defined term Effective Import Tie Capability (EITC). We direct the Midwest ISO to clarify the rationale behind 30,000 positive and negative busses as a precursor to the candidate zones in "step two" of the process. We also direct the Midwest ISO to clarify whether it intends to use any type of minimum reserve zone size, as originally directed in the March 26 Order. It appears

<sup>&</sup>lt;sup>64</sup> We note that "Step 8" provides details about using a weighted average calculation of the load in each zone respectively where PRMs differ, but the clarification we are directing is about ensuring deliverability of the resources backing the reserve margin. Original Sheet No. 810E.

<sup>&</sup>lt;sup>65</sup> Midwest ISO July 2, 2008 Answer at 27.

<sup>&</sup>lt;sup>66</sup> Midwest ISO FERC Electric Tariff, Third Revised Vol. 1, section 1.173, "Load Zone," Substitute Fourth Revised Sheet No. 93.

<sup>&</sup>lt;sup>67</sup> Duke Comments at 2.

<sup>&</sup>lt;sup>68</sup> Third Revised Vol. 1, section 1.75f, eighth revised sheet no. 68. The Midwest ISO acknowledged the error in its answer; Midwest ISO July 2, 2008 Answer at 26.

<sup>&</sup>lt;sup>69</sup> Original Sheet No. 810C.

<sup>&</sup>lt;sup>70</sup> March 26 Order, 122 FERC ¶ 61,283 at P 170.

that the 30,000 bus cut-off could act as a de facto minimum reserve zone size, but we direct the Midwest ISO to clearly state its intent. We understand that the Midwest ISO may not know if a minimum reserve zone size will be needed until it completes its initial planning reserve zone studies, but stakeholders need to understand as soon as possible if the Midwest ISO intends to formally establish a minimum reserve zone size in its tariff. There is also the potential need for a minimum reserve zone size in subsequent planning years and we find it is unreasonable for the tariff not to state this possibility directly.

- 165. Because we accept the Midwest ISO's proposal to use an annual simulation process to determine the need for creating additional reserve zones, we will not direct the Midwest ISO to simply adopt the zones created by the MPRSG. The zones defined by the Midwest ISO are the zones in effect, unless superseded by a differing state reserve margin which creates a new boundary. We note that the Midwest ISO states that its work to date suggests that the PRMs will not differ greatly from those of the MPRSG.<sup>72</sup>
- 166. We are encouraged that the Midwest ISO has a new LOLE working group (LOLEWG) to promote greater understanding of the LOLE process. In addition to the LOLEWG, the Midwest ISO also has a long-standing Supply Adequacy Working Group (SAWG) for the Midwest ISO to vet its proposal through its stakeholder process. We expect that, especially prior to the start of the first planning year in June 2009, the Midwest ISO will communicate frequently with its stakeholders through its various groups to help to clarify all aspects of the new resource adequacy processes. We also acknowledge the Midwest ISO's clarification that it will take deliverability into account when evaluating resources under the new resource adequacy requirements.<sup>73</sup> Because it is impractical to have every procedural detail listed in the tariff, we direct the Midwest ISO to continue to work with stakeholders to eliminate confusion as it expands its BPMs.
- 167. At this time we do not have evidence that would lead us to direct the Midwest ISO to seek Commission approval for new planning reserve zones similar to the process for designation of new NCAs. Planning reserve margin zones are substantially different from NCAs because NCAs are concerned with market power and are primarily backward-looking based on the number of constrained hours and at least one pivotal

<sup>&</sup>lt;sup>71</sup> The Midwest ISO asks the Commission to defer making a determination on the need for a minimum reserve zone size and in relation the potential to split an existing Local Balancing Authority until it knows if these issues are relevant. Midwest ISO July 2, 2008 Answer at 27.

<sup>&</sup>lt;sup>72</sup> *Id.* at 25.

<sup>&</sup>lt;sup>73</sup> *Id.* at 34.

supplier.<sup>74</sup> In contrast, a planning reserve margin zone is a forward-looking probabilistic projection to avoid the loss of load. We do not find their purposes to be substantially similar and we do not have any evidence that Commission approval of prospective new planning reserve zones is warranted at this time. The Commission may re-evaluate this procedure in the future based on evidentiary support after the initial use of the zones listed in Attachment FF-3.

## I. Must-Offer Requirement

### 1. March 26 Order

168. In the March 26 Order, the Commission accepted the Midwest ISO's proposal to use a must-offer requirement to compel Capacity Resources to offer in the pre-day-ahead and day-ahead markets and the first Reliability Assessment Commitment. The Commission also accepted the Midwest ISO's proposal to impose a must-offer on Load Modifying Resources only during emergencies.

169. The Commission directed the Midwest ISO to clarify that the "offer" required of Capacity Resources applies to their Unforced Capacity and not their Installed Capacity. The Commission also required the Midwest ISO to clarify that it is not counting forced outages twice in the setting of PRMs. <sup>76</sup>

## 2. Midwest ISO Compliance Filing

170. The Midwest ISO states that it has modified section 69.2.3 to clarify that the must-offer requirement applies to the full amount of Unforced Capacity credits used by an LSE towards meeting its resource adequacy requirements. Section 69.2.3 provides that self-schedules or offers must be submitted for Capacity Resources, except to the extent that the Capacity Resource is unavailable due to a full or partial forced or scheduled outage. However, the section, pursuant to the Compliance Filing, provides that this exception shall not apply to an external non-unit specific power purchase agreement being utilized as a Capacity Resource.

 $<sup>^{74}</sup>$  Midwest Indep. Transmission Serv. Operator, Inc., 118 FERC ¶ 61,020, at P 3-8 (2007) (explaining the Midwest ISO's recent request to designate a new constrained area).

<sup>&</sup>lt;sup>75</sup> March 26 Order, 122 FERC ¶ 61,283 at P 202.

<sup>&</sup>lt;sup>76</sup> *Id.* P 203.

<sup>&</sup>lt;sup>77</sup> Substitute Original Sheet No. 833.

171. The Midwest ISO also clarifies that it will not count forced outages more than once in setting PRMs.

### 3. Comments

- 172. Integrys asserts that the must-offer requirement is deficient in both clarity and definition. Integrys argues, consistent with the request for clarification of the Midwest ISO, that the offer requirements should apply to a capacity resource's installed capacity and not its unforced capacity as directed by the Commission in the March 26 Order. Integrys also notes that because the Commission has not yet acted on the Midwest ISO's April 25, 2008, request for clarification, 78 that the Midwest ISO complied with the original directive of the March 26 Order, which was to set forth an offer requirement based on unforced capacity.
- Manitoba Hydro asserts that the must-offer requirement for power purchase 173. agreements sourced from external resources should not be more stringent than the requirements for power purchase agreements sourced from internal resources. Manitoba Hydro notes that section 69.2.3 provides an exception to the must-offer requirement for Capacity Resources that are "unavailable due to a full or partial forced or scheduled outage consistent with this [t]ariff." However, section 69.2.3 states that the exception does not apply to "external non-unit specific power purchase [agreements] being utilized as a Capacity Resource pursuant to [s]ection 69.2.1.2 of this [t]ariff." Manitoba Hydro protests stricter must-offer requirements for external non-unit specific power purchase agreements. In the MAPP region, where Manitoba Hydro historically has power purchase agreements, the obligation to carry reserves, which would normally be deployed in a forced outage, is on the buyer, not the seller, regardless of the source. Manitoba Hydro also disagrees with the Midwest ISO's assertion that if one resource is experiencing an outage, another resource will be available to take its place. WPSC also supports Manitoba Hydro's comments that the must-offer requirement should be consistent in its application to both external and internal resources.

#### 4. Answer

174. The Midwest ISO disagrees with Manitoba Hydro that the must-offer exemption for forced outages in section 69.2.3 should apply to external non-unit specific power purchase agreements. According to the Midwest ISO, excluding LSE's external non-unit specific power purchase agreements from the must-offer exemption for forced outages is appropriate because the LSE using these power purchase agreements will have a variety

<sup>&</sup>lt;sup>78</sup> Midwest ISO April 25, 2008, Request for Clarification, Docket No. ER08-394-000.

of resources to call upon to meet the LSE's load, so no single forced outage should make them unable to provide the requested service.

#### 5. Commission Determination

175. As an initial matter, we note that the Commission is granting the Midwest ISO's request to clarify that Capacity Resources must offer at their Installed Capacity level, i.e., the full capacity of the resource, and is requiring further compliance in the companion order on rehearing. We find the proposed revision to the must-offer requirement in section 69.2.3, that the must-offer requirement applies to the full amount of Unforced Capacity credits used by an LSE towards meeting their resource adequacy requirements, to be confusing in light of the Midwest ISO clarification. We consider it contradictory to base the must-offer requirement on Installed Capacity and then indicate in the same section that the must-offer requirement applies to Unforced Capacity. Further, we do not see the purpose of including a PRM requirement in the must-offer section of the tariff. For these reasons, we require the Midwest ISO to delete this sentence a compliance filing to be submitted within 30 days of the date of this order.

176. We also do not understand the exclusion of external capacity resources from the outage exemption, in light of the clarification. Based on the Midwest ISO's clarification, we understand the must-offer requirement to apply to the Installed Capacity of each Capacity Resource, including each resource in the multiple resources for non-unit specific power purchase agreements. Therefore, entities with non-unit specific power purchase agreements must offer the entire Installed Capacity of all their Capacity Resources into the Midwest ISO market on every day. If one of the resources has a full or partial or scheduled outage, then the entity must offer the entire Installed Capacity of all its Capacity Resources minus the outage amount. We would expect that this process would apply to both internal and external non-unit specific power purchase agreements in the same way, and we can find no basis to differentiate them. We also base this conclusion on the Midwest ISO's explanation that non-unit specific power purchase agreements are essentially multiple unit agreements, as discussed in the Capacity Resource section of this order, for both internal and external power purchase agreements.

177. In the context of these statements, we do not understand the Midwest ISO's answer that if one resource in a non-unit specific power purchase agreement is experiencing an outage, another resource will be available and therefore external non-unit specific power purchase agreements should not be eligible for the outage exemption. 80 We interpret this statement to mean that the must-offer requirement does not apply to the

<sup>&</sup>lt;sup>79</sup> Rehearing Order, 125 FERC ¶ 61,061, at P 119. (2008).

<sup>&</sup>lt;sup>80</sup> Midwest ISO July 2, 2008 Answer at 7-8.

full Installed Capacity of the power purchase agreement, and instead applies to an outage-adjusted capacity, which is contrary to the Midwest ISO's clarification on Installed Capacity.

- 178. For the reasons discussed above, we will require the Midwest ISO to delete the outage treatment for non-unit specific power purchase agreements with external resources and to revise its tariff sheets accordingly in a compliance filing to be submitted within 30 days of the date of this order.
- 179. In response to commenters' concerns, section 69.2.3 does require an offer or self-schedule for Capacity Resources for each hour of the operating month. However, we do not believe that existing power purchase agreements would have to be modified as a result of this requirement, consistent with our discussion of power purchase agreements herein. Our interpretation of the must-offer requirement is that it is primarily a day-ahead requirement and that data requests for the operating month are for the Midwest ISO to gather information on resource availability to maintain reserve margins. LSEs should be able to schedule their Capacity Resources, including external resources, in a manner similar to their historical use while also complying with the monthly load forecasting provisions of Module E.

#### The Commission orders:

- (A) The Midwest ISO's compliance filing is hereby conditionally accepted, subject to a further compliance filing, as discussed in the body of this order.
- (B) The Midwest ISO is hereby directed to file a further compliance filing within 30 days of the date of this order, as discussed in the body of this order.

By the Commission. Commissioner Moeller not participating.

(SEAL)

Kimberly D. Bose, Secretary.

<sup>&</sup>lt;sup>81</sup> See supra P32-36.