

125 FERC ¶ 61,319
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Midwest Independent Transmission System
Operator, Inc.

Docket No ER07-1372-007

ORDER ON COMPLIANCE

(Issued December 18, 2008)

1. In an order issued February 25, 2008, the Commission accepted the Midwest Independent Transmission System Operator, Inc.'s (Midwest ISO) proposed ancillary services market (ASM), as modified, and ordered compliance filings.¹ On April 25, 2008, in compliance with the February 25 Order, the Midwest ISO submitted its 60-day compliance filing. For the reasons discussed below, we conditionally accept the Midwest ISO's compliance filing subject to further compliance.

I. Background

A. History of this Proceeding

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

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

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

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

B. February 25 Order

4. In an order issued February 25, 2008, the Commission accepted the Midwest ISO's proposed ASM, as modified, and ordered compliance filings. Under the proposal, the Midwest ISO will determine operating reserve requirements and procure operating reserves from all qualified resources, in place of the current system of local management and procurement of reserves by the 24 local balancing authorities. The Midwest ISO will also transfer and consolidate balancing authority responsibility in the Midwest ISO so that the Midwest ISO may become the North American Electric Reliability Council-certified balancing authority for the entire Midwest ISO balancing authority area. The Commission found that balancing authority consolidation will allow for more centralized and efficient management of ancillary services.

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

6. The Commission also addressed Beacon Power Corporation's (Beacon Power)³ concern regarding the comparable treatment of new technologies and demand response resources in the ASM. The Commission required the Midwest ISO to evaluate, through stakeholder discussions, whether adjustments to operating requirements and ASM procedures are necessary to remove barriers to the comparable treatment of demand response resources and new technologies in the regulating reserve markets.⁴ The Commission also required the Midwest ISO to submit a report and, in the event

³ Beacon Power is a stored energy resource that has developed a non-generation, flywheel-based energy storage technology to provide ancillary services.

⁴ February 25 Order, 122 FERC ¶ 61,172 at P 363-65.

adjustments are proposed, a compliance filing within 60 days of the date of the February 25 Order.⁵

7. In addition, the Commission accepted in the February 25 Order the Midwest ISO's proposal to apply mitigation procedures manually rather than automatically in the ASM.⁶ However, the Commission required the Midwest ISO to implement automated mitigation in the ASM as soon as possible in the 90 days following the start of the ASM and directed the Midwest ISO to submit a plan to implement automated mitigation procedures in a compliance filing to be submitted within 60 days of the date of the February 25 Order.⁷

C. 60-day Compliance Filing

8. On April 25, 2008, the Midwest ISO submitted, in compliance with the February 25 Order, a filing proposing tariff provisions designed to remove barriers to the comparable treatment of demand response resources and new technologies in the regulating reserve markets. The Midwest ISO's compliance filing also includes a plan to implement automated mitigation procedures.

II. Notice and Responsive Pleadings

9. Notice of the Midwest ISO's April 25, 2008 filing was published in the *Federal Register*, 73 Fed. Reg. 27,531 (2008), with interventions and protests due on or before May 16, 2008. Protests were submitted by Beacon Power and Ameren Services Company (Ameren).⁸ On May 30, 2008, Indianapolis Power & Light Company (Indianapolis P&L) submitted an answer to the protests. On June 3, 2008, the Midwest ISO submitted an answer to the protests and to Indianapolis P&L's May 30, 2008 answer. On June 20, 2008, Beacon Power submitted an answer to the Midwest ISO's answer. On

⁵ *Id.*

⁶ *Id.* P 177-78.

⁷ In addition, the Commission required the Independent Market Monitor (IMM) to monitor market behavior and submit a report to the Commission in the event that it determines that manual mitigation is not effectively inhibiting the exercise of market power. *Id.*

⁸ Ameren submitted its filing on behalf of Central Illinois Light Co., Central Illinois Public Service Co., Illinois Power Co., Union Electric Co., Ameren Energy Marketing Co., Ameren Energy Generating Co. and AmerenEnergy Resources Generating Co.

July 7, 2008, Ameren submitted an answer to Beacon Power's June 20, 2008 answer. On July 18, 2008, Indianapolis P&L submitted an answer in support of Ameren's July 7, 2008 answer. On July 31, 2008, Beacon Power submitted an answer to Ameren's July 2, 2008 answer and Indianapolis P&L's July 18, 2008 answer.

III. Discussion

A. Procedural Matters

10. 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 Indianapolis P&L, the Midwest ISO, Beacon Power, and Ameren because they have provided information that assisted us in our decision-making process.

B. Substantive Matters

11. We conditionally accept the Midwest ISO's compliance filing, subject to further compliance filings, as discussed below.

1. Eligibility of Stored Energy Resources to Provide All Operating Reserve Products and Operational Issues

a. 60-day Compliance Filing

12. The Midwest ISO proposes to use stored energy resources⁹ to fulfill the function of all operating reserve products, i.e., regulating, spinning and supplemental reserves.¹⁰ The Midwest ISO explains that stored energy resources do not need to meet the requirement imposed on other resources of deploying operating reserves for a continuous period of 60 minutes. However, the Midwest ISO states that stored energy resources must be available to supply regulating reserves for a continuous period of 60 minutes,

⁹ A stored energy resource is a resource capable of supplying one or more types of operating reserve, but not energy, through the short-term storage and discharge of electrical energy in response to set-point instructions. Midwest ISO April 25, 2008 Filing, Docket No. ER07-1372-007, FERC Electric Tariff, Third Revised Vol. No. 1, First Revised Sheet No. 125B.

¹⁰ Spinning and supplemental reserves represent comparable substitutes and, therefore, are collectively referred to as contingency reserves. Regulating and contingency reserves are collectively referred to as operating reserves.

subject to the energy storage limitations that may be caused by unbalanced regulating reserve deployment within the hour.

13. The Midwest ISO also requires that the maximum amount of operating reserves that may be supplied by stored energy resources be limited to a MW level equal to the regulating reserve requirement for that hour. The Midwest ISO notes that the 60-minute requirement on other resources plays a key role in addressing contingencies by ensuring that energy from reserve capacity can continue to be used to displace capacity lost due to a contingency. The Midwest ISO states that the proposed limitation ensures that an amount of operating reserves greater than or equal to the contingency reserve requirement will be provided by resources with the capability to provide reserve deployment for a sustained 60-minute period.

14. The Midwest ISO proposes that stored energy resources be subject to tolerance bands, excessive/deficient energy deployment charges, contingency reserve deployment failure charges and Revenue Sufficiency Guarantee charges on the same basis as other resources.

b. Protests

15. Ameren recommends limiting stored energy resources to providing regulating reserves only, in light of the operational concerns raised by stored energy resources providing other reserves. Ameren notes that the Midwest ISO does not explain how the simultaneous co-optimization algorithm for the ASM would operate or how it would need to be adjusted to ensure that adequate amounts of long-term, or 60-minute duration, contingency reserves will be acquired. Ameren also asserts that the Midwest ISO's proposal does not address how it will handle market participants that self-schedule operating reserves that exceed the regulating reserve requirement. Ameren claims that the quick injection and withdrawal of stored energy resources may go beyond the Midwest ISO's tracking capabilities and therefore may necessitate system modifications. Ameren further notes that stored energy resources may be able to game or avoid tolerance band limits in light of their quick injection and withdrawal capability.

16. Ameren expresses concern with how stored energy resources would be incorporated into the must-offer requirement and integrated into zonal contingency reserve requirements, in light of the limits on the amount of energy discharge and the duration of stored energy resource dispatch. Ameren also expresses concerns regarding system reliability in the event that multiple offers from stored energy resources for contingency reserves clear in a constrained zone.

17. Ameren argues that stored energy resources should be paid less for contingency reserves than other resources. This is because, Ameren contends, stored energy resources could create additional costs to consumers through increased uplift charges, such as would occur with repeated five-minute deployments of stored energy resources that

create transaction costs and force the Midwest ISO to deploy additional resources to replace depleted stored energy resources, resulting in Revenue Sufficiency Guarantee uplift costs.

c. Answers

18. Indianapolis P&L submits its answer in support of Ameren recommending that the Commission reject the provisions expanding the ability of stored energy resources to provide contingency reserves. First, Indianapolis P&L asserts that the proposed treatment of stored energy resources in the Midwest ISO's compliance filing goes beyond the scope of the February 25 Order's compliance requirements. Second, Indianapolis P&L argues that the Midwest ISO's compliance filing fails to explain how it addresses the need for 60-minute contingency reserves and thereby prevents cascading series or calls over five-minute increments to re-stabilize the system. Finally, Indianapolis P&L asserts that the compliance filing fails to address the need to continuously follow dispatch instructions over an entire hour, as recognized by the Northeast Power Coordinating Council.¹¹

19. The Midwest ISO responds to Indianapolis P&L that it has restricted the total amount of operating reserves that stored energy resources can supply to an amount not to exceed the regulating reserve requirement, thereby ensuring that an amount of operating reserves equal to or greater than the contingency reserve requirements will be cleared on resources that are capable of energy deployment for a period of 60 minutes or greater. The Midwest ISO explains that its proposed treatment of stored energy resources is the better approach to address the sustainability requirement since it ensures that higher prices are paid to the superior reserve product: regulating reserves.

20. The Midwest ISO notes that the market clearing prices paid to resources other than stored energy resources for regulating reserves, spinning reserves and supplemental reserves will include a premium to reflect the fact that these resources offer sustainability in the event that the constraint is binding and that stored energy resources cannot exceed the regulating reserve requirement.

21. Regarding self-schedules, the Midwest ISO answers that it would support establishing restrictions on self-schedules submitted by stored energy resources such that the operating reserves self-scheduled by all stored energy resources cannot exceed the regulating reserve requirement. In cases where the total operating reserve self-scheduled by all stored energy resources exceeds the regulating reserve requirement, the Midwest ISO would reduce the operating reserve self-schedules on each stored energy resource

¹¹ *New York Indep. Sys. Operator, Inc.*, 123 FERC ¶ 61,203, at P 35 (2008) (May 23 Order).

pro rata consistent with the tariff provisions established for other market participant self-scheduled resources until the total operating reserves self-scheduled on all stored energy resources equaled the Midwest ISO regulating reserve requirement.

22. The Midwest ISO also asserts that the tolerance band applied to stored energy resources will be as restrictive and effective as the tolerance band applied to other resources. The Midwest ISO states that it does not believe that the ability of stored energy resources to both inject and withdraw energy will enable stored energy resources to more easily game or circumvent the effectiveness of the tolerance bands. The Midwest ISO provides an illustrative analysis showing that the tolerance bandwidth for a stored energy resource would be less than the bandwidth for a generation resource.

23. The Midwest ISO shares the concerns of Ameren with respect to must-offer requirements, stating that stored energy resources are not capable of supplying energy on a sustainable basis and therefore should not be eligible to be Capacity Resources.¹² The Midwest ISO proposes to add a tariff provision clarifying that these resources are not eligible to be Capacity Resources and do not have must-offer requirements.

24. With respect to zonal contingency reserve requirements, the Midwest ISO proposes to revise its proposal to prohibit stored energy resources from satisfying reserve zone operating reserve requirements. The Midwest ISO states that this would ensure the deliverability of operating reserve deployments for supply contingencies beyond the initial disturbance recovery period.

25. Beacon Power requests that the Commission allow for the provision of regulating reserves by stored energy resources in accordance with the timeline¹³ set forth by the Midwest ISO if the Commission does not approve the tariff revisions in their entirety. Beacon Power notes that this determination is justified in light of the lack of opposition to stored energy resources providing regulating reserves, the benefits of stored energy resources providing regulating reserves and the need for the Midwest ISO to implement tariffs in compliance with Commission directives.

¹² 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.

¹³ The Midwest ISO proposes that its tariff revisions with respect to the treatment of stored energy resources become effective on June 1, 2009.

d. Commission Determination

26. We accept the Midwest ISO's proposal to use stored energy resources for contingency reserves, as well as regulating reserves, as consistent with the requirements of the February 25 Order. We agree with the Midwest ISO that, to the extent stored energy resources meet the eligibility requirements for regulating reserves, they should meet the requirements for providing contingency reserves. As the Midwest ISO explains, the use of stored energy resources for contingency reserves will ensure that there are sufficient sustainable reserves over the entire hour. We do not find any basis to conclude that stored energy resources cannot follow dispatch instructions over the five-minute dispatch intervals, and therefore we do not find this allegation to be a reason for not allowing stored energy resources to be contingency reserves. We note that if stored energy resources could not follow dispatch instructions, they should also be ineligible to be regulating reserves. However, the record in this proceeding on stored energy resources does not indicate that stored energy resources cannot follow dispatch instructions and are therefore unqualified to be reserves.¹⁴

27. We find the proposals by the Midwest ISO in its answer to limit self-scheduling of stored energy resources to the regulating reserve requirement, to not allow stored energy resources to be Capacity Resources, and to prohibit stored energy resources from satisfying zonal operating reserve requirements to be reasonable and beneficial measures for reliability management and consistent with the requirements of the February 25 Order. We require the Midwest ISO to submit these provisions in a compliance filing to be submitted within 30 days of the date of this order. We also require the Midwest ISO to submit, within 180 days of the implementation date for stored energy resources, June 1, 2009, an informational report discussing any reliability issues that arise from the use of stored energy resources for contingency reserves as well as regulating reserves.

2. Ability of Stored Energy Resources To Set the Market Clearing Price

a. Protests

28. Ameren and Indianapolis P&L assert that offers from stored energy resources should not be allowed to set the market clearing price because stored energy resources are not fully dispatchable. Ameren notes that allowing stored energy resources to set the market clearing price without the restrictions that apply to other limited and intermittent

¹⁴ Contrary to the claim of Indianapolis P&L, the Commission did not reject stored energy resources from being contingency reserves in the New York ISO – this issue was not before the Commission in that proceeding. See May 23 Order, 123 FERC ¶ 61,203 (2008).

resources may allow gaming and would not constitute comparable treatment of resources. Ameren contends that by allowing stored energy resources to set the market clearing price and under-bid a resource offering regulating reserve from a unit with dispatchable energy, the market would be assigning a lesser value during capacity shortages to true capacity that is capable of generating energy for at least 60 minutes.

b. Answers

29. The Midwest ISO answers that while stored energy resources cannot set prices for energy or offer energy, they can set the market clearing price for operating reserves. The Midwest ISO states that it will develop and file tariff language restricting the ability of stored energy resources to set market clearing prices for operating reserves, if so ordered by the Commission. The Midwest ISO also continues to believe that the constraints restricting the percentage of operating reserves cleared on stored energy resources should remain, in order to ensure reliability.

30. In its answer, Beacon Power disagrees with the conclusion that stored energy resources are not wholly dispatchable, noting that the Commission has previously found that the fifteen-minute energy discharge and recharge cycle of Beacon Power's flywheel technology enables this technology to provide regulation service for an indefinitely long period of time.¹⁵ Beacon Power also notes that the Midwest ISO allows for price separation when operating reserve clearing restrictions must be enforced on stored energy resources. Beacon Power therefore requests that the Commission allow stored energy resources to set the market clearing price for regulating reserves.

c. Commission Determination

31. In the day-ahead market, the Midwest ISO requires reserve offers to be a single value for each hour. The market clearing price is a single value for the hour. We do not consider it reasonable for stored energy resources that cannot provide reserves continuously over a sixty-minute period to set the market clearing price for reserves in the day-ahead market. If a stored energy resource can only provide reserves over maximum fifteen-minute intervals, the stored energy resource price does not reflect the marginal cost of reserves during a significant portion of the hour for which reserve prices are set. In contrast, the market clearing price is set every five minutes in the real-time market. As noted above, we find no evidence that stored energy resources cannot follow dispatch instructions over the five-minute dispatch intervals. Therefore, if the stored energy resource can provide reserves during a five-minute interval, it should not be precluded from setting the market clearing price in those five-minute dispatch intervals in

¹⁵ Beacon Power cites May 23 Order, 123 FERC ¶ 61,203 at P 33, for this proposition.

which it can provide reserves.¹⁶ For these reasons, we require the Midwest ISO to submit, in a compliance filing to be submitted within 30 days of the date of this order, tariff revisions consistent with our determinations.

3. Mitigation of Stored Energy Resources

a. Protests

32. Ameren notes that the proposed tariff provisions do not specify that stored energy resources will be subject to the same market monitoring and mitigation proposals and procedures as are other resources, and asserts that there is no reason why stored energy resources should not be subject to the same market monitoring and mitigation as other resources.¹⁷ Accordingly, Ameren recommends that the Midwest ISO proposal be revised to state that stored energy resources and any other new technologies incorporated into Midwest ISO markets in the future are subject to all monitoring and mitigation to which resources generally are subject.

b. Answers

33. The Midwest ISO answers that its intention is that stored energy resources be subject to the same monitoring and mitigation protocols applicable to all other resources in the ASM. Accordingly, the Midwest ISO indicates it will include language in the tariff stating that stored energy resources are subject to the same market monitoring and mitigation procedures as all other resources.

c. Commission Determination

34. We agree that stored energy resources should be subject to the same market monitoring and mitigation provisions that are applicable to other resources in the ancillary services markets. Accordingly, we require the Midwest ISO to submit, in a compliance filing to be submitted within 30 days of the date of this order, any necessary revisions to Module D's market monitoring and mitigation measures. To provide further clarity of Module D's applicability to stored energy resources, we also require the Midwest ISO to include, in that compliance filing, an explanation of the statement in

¹⁶ Although we will permit stored energy resources to set the market clearing price in the real-time market in those five-minute dispatch intervals in which they can provide reserves, we do not take lightly concerns about gaming. As discussed below, stored energy resources should be subject to the same market monitoring and mitigation provisions that are applicable to other resources in the ASM.

¹⁷ Indianapolis P&L agrees with Ameren's position.

proposed section 39.2.5C.b that “[a]ny limits on the [o]ffer over the full energy storage capability of the resource must be consistent with Module D.”¹⁸

4. Automated Mitigation Procedures

a. 60-day Compliance Filing

35. In response to the requirement in the February 25 Order that the Midwest ISO submit a plan to implement automated mitigation measures, the Midwest ISO explains that it has procured software that supports both manual and automated mitigation and states that this software will undergo operational testing prior to market start. The Midwest ISO states that it plans to apply manual mitigation measures for 60 days following the launch of the ASM. At the conclusion of this initial 60-day period, the Midwest ISO intends to implement its automated mitigation procedures, subject to “a determination by the IMM that the automated testing produced reliable mitigation indicators during the first 30 days of [ASM] operation.”¹⁹ The Midwest ISO states that it can activate its automated mitigation software sooner than 60 days following the launch of the ASM, if the Commission determines that the proposed 60-day transition period should be shorter.

b. Commission Determination

36. We find that the Midwest ISO’s plan to implement automated mitigation 60 days following the launch of the ASM, subject to a determination by the IMM that the automated software generates reliable mitigation indicators during the first 30 days of ASM operation, is consistent with the requirements of the February 25 Order. The Midwest ISO’s proposed initial 60-day period of manual mitigation should appropriately mitigate the exercise of market power, afford adequate time for the Midwest ISO to consult market participants regarding the determination of their initial reference levels, and ensure that the automated mitigation software functions properly. In the event that the IMM determines that the automated mitigation software does not produce reliable mitigation indicators during the first 30 days of operation,²⁰ we require the IMM to submit an informational report to the Commission, to be submitted no later than 60 days

¹⁸ Midwest ISO April 25, 2008 Compliance Filing, FERC Electric Tariff, Third Revised Vol. No. 1, Original Sheet No. 496B.

¹⁹ *Id.*

²⁰ If the IMM makes such a determination, we note that the implementation of automated mitigation procedures will be delayed and manual mitigation measures will continue beyond the initial 60-day period following the launch of the ASM.

following the launch of the ASM, to describe the Midwest ISO's software problem(s) and to provide a plan to implement automated mitigation procedures.

5. Other Issues

a. Effective Date of the Filing and Stakeholder Process

(i) Protests

37. Ameren recommends that the Commission set an effective date for stored energy resource integration that is no earlier than six months after the ASM is in operation, or March 2009 at the earliest. Ameren asserts that this delay is needed to allow the initial implementation of the ASM to proceed without the distraction of introducing a new technology. Ameren also requests clarification on the length of the initial implementation for stored energy resources that limits stored energy resources to 20 percent of the market-wide regulating reserve requirement.

38. Ameren and Indianapolis P&L recommend that the Commission reject the Midwest ISO's stored energy resource proposal without prejudice and request that the Midwest ISO conduct broader stakeholder proceedings on stored energy resources.

(ii) Answers

39. The Midwest ISO answers that it is proposing an implementation date of June 1, 2009 for stored energy resources and that this proposed date is after the earliest date recommended by Ameren. Regarding the initial implementation for stored energy resources, the Midwest ISO clarifies that it confirmed the 20-percent limitation for any specific resource in the 30-day compliance filing and the Midwest ISO is thus simply proposing to include stored energy resources as the type of resource covered under the 20-percent limitation. Consequently, the Midwest ISO states that there is no proposed restriction on the duration of the 20-percent limitation.

40. The Midwest ISO opposes the requests to reject its stored energy resource proposal, noting that the tariff revisions resulted from discussions with Beacon Power, as directed by the Commission. The Midwest ISO indicates that it is not opposed to conducting further stakeholder discussions.

41. Beacon Power requests that the Commission approve the Midwest ISO's proposed tariff revisions in their entirety and asserts that further delay of the process would continue the discriminatory treatment of new technologies in the ASM for an indeterminate period of time. Beacon Power notes that the Midwest ISO will not be in

compliance with Order Nos. 890 and 890-A²¹ and the Commission's compliance requirement in the February 25 Order until June 2009, the proposed effective date of stored energy resource integration. Beacon Power also contends that rejection of the filing and further stakeholder discussions²² would only delay the implementation of Commission directives that allow non-generation resources capable of providing regulating reserves to do so on a comparable basis with generation resources. Beacon Power further notes that Ameren and Indianapolis P&L have had ample opportunity to participate in the stakeholder process and to petition the Commission to expand the timeline for compliance.

(iii) Commission Determination

42. We accept the June 1, 2009 effective date for stored energy resource implementation and we find the Midwest ISO's proposed date to be responsive to Ameren's concerns. We believe that this effective date provides sufficient time to address the operational issues discussed above and thereby ensure that the ASM will operate efficiently and reliably, and ensure that there are appropriate mitigation procedures in place before stored energy resources are integrated into the ASM.

43. We find many aspects of the proposal reasonable and therefore consider the most appropriate course to be continued compliance and monitoring to ensure that the program is reasonable once implemented. Parties will have sufficient opportunities to raise concerns in the ongoing stakeholder discussions leading up to ASM start and after the market starts. Given the five months between the start of the ASM and stored energy resource implementation, we expect that there will be sufficient time before stored energy resources are integrated into the ASM for stakeholders to address all operational and reliability issues and for the Midwest ISO to make further tariff revisions, if necessary.

²¹ *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, 72 Fed. Reg. 12,266 (Mar. 15, 2007), FERC Stats. & Regs. ¶ 31,241 (2007), *order on reh'g*, Order No. 890-A, 73 Fed. Reg. 2984 (Jan. 16, 2008), FERC Stats. & Regs. ¶ 31,261 (2007). Beacon Power states that these orders direct ISOs to implement tariffs allowing for the provision of regulation service by non-generation resources capable of providing this service as necessary to follow the moment-by-moment changes in load.

²² Beacon Power notes that no stakeholder sought to participate in the discussion process and that no stakeholder asked to extend the Commission's 60-day compliance period.

b. Excessive Energy Payment

44. Ameren states that stored energy resources will settle excessive energy at the hourly ex post locational marginal price whereas other market participants are credited the lesser of the hourly ex post locational marginal price and the hourly excessive energy price. Ameren asserts that the Midwest ISO should be required to explain and justify any differences in the treatment of stored energy resources and other resources. The Midwest ISO answers that the reason for the different settlement method is that stored energy resources do not offer or set the price for energy. We find the Midwest ISO answer to be responsive and reasonable. We agree with the Midwest ISO that stored energy resources cannot settle based on the cost of excessive energy since they do not offer energy.

c. Miscellaneous

45. We require the Midwest ISO to revise or provide further explanations on the following sections in a compliance filing to be submitted within 30 days of the date of this order:

- **Sections 1.135d and e and 39.2.5C.b.ix and x:** While these sections reference MWh per minute, we assume that the correct reference is MW per minute. We require the Midwest ISO to revise its tariff accordingly, or provide an explanation of the meaning of the calculation.
- **Section 1.35d and e:** These sections, and other sections in the tariff, refer to the charging and discharging of stored energy resources. We require the Midwest ISO to define charging and discharging and to provide an explanation of how charging differs from ramping and withdrawing.

46. In the February 25 Order, we also required the Midwest ISO to both evaluate, through stakeholder discussions, adjustments to operating requirements and ASM procedures that will remove barriers to comparable treatment of demand response resources in the regulating reserve markets, and to provide a report on its efforts to incorporate those resources into its markets. The Midwest ISO has not yet complied with this part of our directive. Therefore, we require the Midwest ISO to submit, within 60 days of the date of this order, an informational report detailing its evaluation of adjustments to operating requirements and ASM procedures that will remove barriers to comparable treatment of demand response resources in the regulating reserve markets, and its corresponding efforts to incorporate those resources into its markets. The Midwest ISO also should submit revised tariff sheets, if adjustments are proposed, in a compliance filing to be submitted concurrently with the 60-day informational filing.

The Commission orders:

(A) The Midwest ISO's compliance filing is hereby conditionally accepted, subject to further compliance, as discussed in the body of this order.

(B) The Midwest ISO is hereby directed to submit a compliance filing within 30 days of the date of this order, as discussed in the body of this order

(C) The IMM is hereby directed to submit an informational report within 60 days of the launch of the ASM, as discussed in the body of this order.

(D) The Midwest ISO is hereby directed to submit an informational report within 180 days of the implementation date for stored energy resources, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.