122 FERC ¶ 61,070
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. ER08-404-000

ORDER CONDITIONALLY ACCEPTING EMERGENCY DEMAND RESPONSE FILING

(Issued April 22, 2008)

1. The Midwest Independent Transmission System Operator, Inc. (the Midwest ISO) has filed under section 205 of the Federal Power Act (FPA)[1] proposed revisions to its Open Access Transmission and Energy Markets Tariff (Tariff). These revisions add a new Schedule 30 to the Tariff that, among other things, provides for compensation to demand resources during North American Electric Reliability Corporation (NERC) Energy Emergency Alert 2 (Emergency Alert 2) or Energy Emergency Alert 3 (Emergency Alert 3) events.[2] As a general matter, under an Energy Emergency Alert 1 all available resources are committed to firm load and non-firm energy sales have been curtailed. Load management procedures are in effect under Emergency Alert 2, such as voltage reductions, interruption of non-firm end use loads, and demand-side management. Under Emergency Alert 3 a firm load interruption is imminent or in progress.[3]

2. The Midwest ISO states that the emergency demand response (EDR) initiative proposed in Schedule 30 will: (1) enhance its ability to call on demand response

[1] 16 U.S.C. § 824d (2000).

[2] The Reliability Coordinator, Midwest ISO in this instance, may declare whichever alert level is necessary and does not need to move through the alerts sequentially. *See* NERC Standard EOP-002-2 – "Capacity and Energy Emergencies" at 7.

[3] *Id.* at 7 – 10.

measures, including behind-the-meter generation, during emergency events; (2) enable it to establish curtailment priorities more effectively; (3) reflect varying costs of EDR options; and (4) allow the Midwest ISO to evaluate and dispatch EDR offers by location and priority status. As discussed below, we will conditionally accept the Midwest ISO's filing effective May 1, 2008, and direct a compliance filing and periodic informational filings. We also note that the Commission will be holding a future technical conference to address demand response issues.[4]

I. The EDR Proposal

3. In the Midwest ISO's currently effective Tariff, which only includes the energy market and does not include the ancillary services market (ASM) proposal,[5] demand resources are able to participate through offers provided those resources meet certain qualifications such as capability to respond to dispatch instructions and compliance with metering instructions.[6] In the ASM proposal, the Midwest ISO expanded the ability of demand resources to participate in both the energy and operating reserve markets through criteria to differentiate demand resources into Types I and II.[7]

4. The Commission encouraged the Midwest ISO to clarify in a future filing its procedures for deploying and compensating demand response resources during emergencies in an order that provided guidance on the Midwest ISO's ASM proposal.[8] The present filing is the Midwest ISO's response to those comments. It is a companion to the provisions submitted on December 28, 2007 as part of the Midwest ISO's long-term resource adequacy plan, which, among other things, details how demand resources

[4] The Commission issued a Notice of Technical Conference on these matters on April 10, 2008 in Docket No. AD08-8-000.

[5] As discussed further herein, on March 21, 2008, the Midwest ISO provided notification that it will start its ancillary services market on September 9, 2008 instead of the June 1, 2008 start date proposed in the ASM filing. *See* ASM transmittal letter at pg. 57.

[6] *See* Midwest ISO Tariff, Module C, section 38.2.2.g, Substitute Second Revised Sheet No. 373 – 374.

[7] Type I Demand Response Resources can provide a specified quantity of energy or contingency reserves through demand reduction. In contrast, Type II Demand Response Resources can provide energy, contingency and regulating reserves and operate similar to generation resources in that they are dispatchable over a range of outputs.

[8] *See Midwest Independent Transmission System Operator, Inc.*, 119 FERC ¶ 61,311, at P 70 (2007).

that are available during emergencies can qualify to meet planning resource requirements.[9]

5. In the Resource Adequacy Order the Commission approved of the Midwest ISO's proposal to have two categories of resources: (1) Capacity Resources; and (2) Load Modifying Resources that qualify as Planning Resources used to meet the applicable planning reserve margin. Capacity Resources include generation resources and Demand Response Resources Type I and Type II, and Load Modifying Resources include behind-the-meter generation resources and demand resources. Market participants are able to designate their qualifying resources as either Capacity Resources or Load Modifying Resources, with the major distinction being that Capacity Resources have a day-ahead must-offer obligation and Load Modifying Resources do not.

6. The Midwest ISO states that it is proposing the EDR initiative to provide a way for load to participate during emergencies. It notes that the EDR initiative is beneficial as a reliability tool for use during peak demand conditions. Furthermore, the Midwest ISO states that studies[10] have demonstrated that EDR programs in other regional transmission organizations (RTOs) have increased system reliability and contributed to reducing peak energy prices during emergencies.[11]

7. The Midwest ISO states that its proposed EDR provisions are designed to encourage parties that have demand response capabilities to offer them for use during specified emergency conditions. These parties include market participants that are able either to reduce load during emergency conditions (e.g., through existing demand response programs) or to operate back-up generation resources (also referred to as behind-the-meter generation) to the same effect. The proposal contains compensation provisions that encourage market participants with demand response capabilities to submit standing offers either to reduce load or to increase generation during Emergency Alert 2 or Emergency Alert 3 events. Proposed Schedule 30 also sets forth the process by which interruptible demand, behind-the-meter generation, and other demand resources can be committed and dispatched during Emergency Alert 2 or Emergency Alert 3 events. These provisions are only applicable to demand reductions made during such events.

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[9] The Commission addressed those provisions in *Midwest Independent Transmission System Operator, Inc.*, 122 FERC ¶ 61,283, at P 337 (2008) (Resource Adequacy Order).

[10] The Midwest ISO references the testimony of Andrew L. Ott, Vice President, Markets, PJM Interconnection, L.L.C. Docket No. AD07-11-000, pp. 7-8 (April 23, 2007).

[11] *See* Robinson Affidavit at 3.

8. The proposed Tariff language in Schedule 30 allows market participants to submit EDR offers to the Midwest ISO provided that the market participant: (i) is capable of reducing load in response to a request from the Midwest ISO, or (ii) has the ability to increase output from behind-the-meter generation resources that are not normally used to produce power in response to a request from the Midwest ISO. The market participant representing a load serving entity (LSE) will be able to submit an EDR offer to reduce demand to the Midwest ISO, unless otherwise specified.

9. Prior to becoming eligible to submit EDR offers, market participants will be required to complete an EDR registration form that describes the market participant and its associated asset. This form also requires market participants to specify whether demand will be curtailed to a firm service level, or if a specific level of demand reduction will be provided. The Midwest ISO requests an effective date of May 1, 2008 for the EDR tariff provisions. The Midwest ISO indicates that it will, in the future, file modifications to Schedule 30 to conform it to the Commission-accepted ASM provisions regarding Demand Response Resources Type I and Type II.[12] Details concerning the provisions of the Midwest ISO's EDR initiative are set forth below.

II. <u>Notice and Responsive Filings</u>

10. Notice of the Midwest ISO's filing was published in the *Federal Register*, 73 Fed. Reg. 2,238 (2008), with interventions or protests due on or before January 22, 2008. American Municipal Power – Ohio, Inc., DC Energy Midwest, LLC, Duke Energy Corporation, Exelon Corporation, FirstEnergy Service Company, Great River Energy, Illinois Municipal Electric Agency, Indianapolis Power & Light Company, and Northern Indiana Public Service Company filed timely motions to intervene. Ameren Services Company (Ameren), Coalition of Midwest Transmission Customers (CMTC), Detroit Edison Company (Detroit Edison), Illinois Industrial Energy Consumers (Illinois Industrials), Madison Gas & Electric Company (Madison), Midwest Industrial Customers (MIC), Michigan Public Power Agency (Michigan PPA), Nucor Steel Marion, Inc. and Steel Dynamics – Bar Products Division (Steel Producers), Otter Tail Power Company (Otter Tail), Wisconsin Electric Power Company (Wisconsin Electric), and Integrys Energy Group, Inc. (Integrys) filed timely motions to intervene and protests. Consumers Energy Company and Xcel Energy Services Inc. filed motions to intervene out of time. Midwest ISO and Duke filed answers to comments, and Integrys, CMTC, and Steel Producers filed answers to the answer of Midwest ISO. Steel Producers also moved to strike the answer of the Midwest ISO.

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[12] *See* transmittal letter at 5. We note that the Commission conditionally accepted the Midwest ISO's ASM filing on February 25, 2008, after the instant application was filed. *See Midwest Independent Transmission System Operator, Inc.*, 122 FERC ¶ 61,172, at P 215 (2008) (ASM Order).

III. Discussion

A. Procedural Matters

11. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2007), the timely, unopposed motions to intervene serve to make the entities that filed them parties to these proceedings. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedures, 18 C.F.R § 385.214(d) (2007), the Commission will grant Consumers Energy Company and Xcel Energy Services Inc.'s late-filed motions to intervene, given their interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2007), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept the answers and answers to answers that have been filed because they have provided information that assisted us in our decision-making process.

B. EDR Compensation

1. The Midwest ISO Proposal

12. The Midwest ISO states that in order to be compensated under Schedule 30 for any reduction in demand, EDR participants will be required to submit an EDR offer to the Midwest ISO no later than 30 days before the operating month. The offer must remain in effect for the entire operating month. EDR participants must specify: (1) minimum and maximum amounts of demand reduction; (2) minimum and maximum number of continuous hours during which demand reduction must be committed; (3) any shutdown costs associated with the demand reduction; (4) number of hours of advance notice required to reduce demand and whether such reductions are limited to certain hours; and (5) an actual dollar per MWh offer. EDR offers may be standing offers until the market participant changes the terms of the EDR offer, contingent upon 30 days advance notice to the Midwest ISO. EDR offers are subject to a $3,500/MWh cap and are not eligible to set the locational marginal price (LMP).

13. Once EDR offers have been received, the Midwest ISO will issue EDR dispatch instructions during an Emergency Alert 2 or Emergency Alert 3 event. These instructions will contain details regarding when reductions will begin and the amount and necessary duration of the demand reduction. In order to be compensated, EDR participants must comply with the Midwest ISO's instructions. If an EDR participant exceeds the instruction, it will only be paid for the amount of demand reduction contained in the instruction. EDR participants are entitled to proportionate compensation if they reduced demand by a fraction of the EDR dispatch instruction. If an EDR participant fails to meet the instruction, the Midwest ISO will charge an equitable amount to compensate the market participants in the local balancing authority area where the market participant's

resource was needed for energy costs incurred in real time during the EDR dispatch instruction period.

14. EDR participants that reduce demand in response to an instruction shall be compensated at 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. EDR participants must submit written verification to the Midwest ISO that the demand reduction was made in response to an instruction issued by the Midwest ISO and that the demand reduction would not have otherwise occurred. Demand reductions by EDR participants will be subject to verification and oversight by the Midwest ISO and the Commission.

2. Comments

15. Steel Producers argue that system savings and the reliability and environmental benefits created by demand response justify paying it no less than the real-time LMP plus a share of the system savings. The Commission thus should convene a technical conference to establish the mechanism for calculating the incremental amount to be paid.

16. Michigan PPA notes that an EDR participant will not be compensated to the extent that its EDR reduction would have occurred without an EDR dispatch instruction. Michigan PPA questions how this can be known and why the Midwest ISO would issue an EDR dispatch instruction if it could be known. An EDR participant should be compensated if an EDR dispatch instruction is issued and the EDR participant complies with it in accordance with its EDR offer. Wisconsin Electric seeks clarification and explanation of how the "but for" demand reduction is determined and how it will be verified.

17. Illinois Industrials maintain that the compensation provisions do not make clear that when calculating EDR production costs, the EDR offer is multiplied by the lesser of the amount of hourly verifiable demand reduction or the hourly dispatch reduction. Moreover, additional language is necessary to indicate that when calculating EDR production costs for EDR participants who reduce their net demand down to a firm service level, the EDR offer should be multiplied by the lesser of the amount of hourly verifiable demand reduction or the difference between the peak load expectation and the firm service level.

18. Detroit Edison maintains that by failing to allow EDR offers to set LMP prices, the EDR initiative will likely only drive imports back to other markets, which will result in fewer available resources when they are needed most. It also argues that Schedule 30 does little to encourage much-needed imports without this price-setting condition because these market participants will not be paid the true value of their generation, as determined by accurate real-time price signals. The Commission should reject the Midwest ISO's

filing as premature because technical limitations prevent it from providing EDR participants with either EDR offer flexibility or the ability to set LMP prices.

19. Madison argues that the Midwest ISO has not justified the $3,500/MWh cap on EDR hourly curtailment offers. This cap is an artificial restriction that discourages the use of state commission-approved load control programs. Madison operates a voluntary air conditioner direct load control program that costs it approximately $4,500/MWh. Madison states that there is no apparent reason for the price cap if EDR offers cannot set LMPs. Madison asserts that if the Commission allows the cap, there should be an exception that permits recovery of verifiable costs of programs that have been approved by state authorities.

20. The Midwest ISO states in its answer that it is appropriate to establish a realistic cap on EDR offers to reflect the scarcity conditions prevalent during Emergency Alert 2 or Emergency Alert 3 events, consistent with the $3,500/MWh value of lost load calculation filed as part of the ASM filing. In the absence of any credible record evidence supporting another figure based on contrary studies, the Midwest ISO asks the Commission to accept the EDR offer cap as a just and reasonable figure for the value of lost load.

21. The Midwest ISO acknowledges that EDR offers should be eligible to set LMP, but states that its systems are not yet adequate to permit this. The Midwest ISO asserts that EDR offers are appropriately treated consistent with the current pricing treatment of block loaded units, which do not currently set LMP.

22. In response to Steel Producers' proposal that EDR participants be compensated for the system benefits they provide, the Midwest ISO states that this would conflict with the Commission's recent decision regarding payments to demand resources in PJM.[13] That order involved PJM's emergency demand response program and the expiration of a subsidy payment to end-use customers when PJM LMPs were high. The Commission did not allow PJM demand response offers to receive the full LMP price, which the Midwest ISO states is much less than the type of payments Steel Producers propose. The Midwest ISO states that the Commission explained that PJM has a demand response program that provides an incentive to reduce load based on wholesale rates. Retail customers that pay rates below the wholesale rate receive the difference between the wholesale rate and the retail rate, which equalizes the incentive to curtail load. The Midwest ISO states that it will continue to evaluate that order to determine whether future improvements to Schedule 30 may be appropriate to conform the Midwest ISO initiatives further to the Commission decision in the PJM order.

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[13] *PJM Industrial Customer Coalition v. PJM Interconnection, L.L.C.*, 121 FERC ¶ 61,315 (2007) (*PJM*).

23. The Midwest ISO states in response to Illinois Industrials' comments on curtailment to a specified firm service level that it agrees it is important to encourage additional flexibility in Schedule 30, and it would be willing to make clarifications in a compliance filing.

24. Steel Producers respond to the Midwest ISO's answer by stating that *PJM* concerned PJM's economic demand response program, not its emergency demand response program. They also argue that the Commission was not asked in that case to consider whether PJM's tariff reflects the added value demand response provides in emergency situations. Real-time LMP alone does not capture that added value, but just and reasonable rates should do so. Steel Producers maintain that granting the demand response resource a share of the system and societal benefits is important to ensure that the demand response resource considers them in deciding whether to curtail or be available for curtailment in an emergency.

3. <u>Commission Determination</u>

25. We accept the Midwest ISO's compensation proposal. We note that the EDR program is voluntary and that demand response resources can participate as demand response resources in emergencies, and they also can participate in the Midwest ISO's energy and ancillary services markets. There currently are no compensation provisions for emergency demand resources, so the Midwest ISO's proposal will help to ensure that all resources capable of responding in emergencies are known to the system operator and able to participate. At present, we have no evidence that adopting these provisions will discourage imports from other markets as has been argued. We also note that EDRs that receive and comply with dispatch instructions are compensated at the "higher of" their offer or the LMP, so no EDR will be disadvantaged by being dispatched and compensated at less than their offer.[14]

26. Although the compensation provisions do not provide for the EDR offer to set the LMP, we believe that the opportunity to be compensated under the scarcity pricing provisions, capped at $3500/MWh, provides an incentive for EDRs to participate. The price cap of $3500/MWh is consistent with the value of lost load the Commission recently approved for Midwest ISO's ancillary services markets.[15] Furthermore, we clarify that the $3500/MWh rate is a wholesale rate. The EDR provisions in the Midwest

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[14] Specifically, the compensation for EDRs is the *higher of* the LMP for the associated pricing node of the EDR participant or EDR production costs during the period of actual demand reductions. As discussed further, EDR Production Costs = (*lesser of* hourly demand reduction or hourly dispatch instruction × EDR Offer) + Shutdown Cost of the applicable EDR.

[15] *See* ASM Order, 122 FERC ¶ 61,172, at P 215.

ISO's tariff do not restrict participation in state-approved load control programs or restrict rate recovery from retail customers.

27. However, we direct the Midwest ISO to act as expeditiously as possible to improve its systems so that EDRs may set the LMP. In a similar case regarding the New York Independent System Operator, Inc., the Commission expressed its preference that the marginal resource set the marginal clearing price for the market.[16] We note that the Midwest ISO is not opposed to doing this. Therefore, we direct the Midwest ISO to submit quarterly status reports on progress being made to allow EDRs set the LMP, so that we can ensure that the Midwest ISO is taking appropriate measures to improve its systems to allow EDRs to set the LMP.

28. In response to Michigan PPA's concerns, we understand the Midwest ISO's limitation on EDR compensation in Part IV of Schedule 30 to mean that EDR participants are not entitled to compensation if the demand reduction would have occurred anyway. We believe this limitation is reasonable and clear, and we therefore decline to direct clarification.

29. However, we direct the Midwest ISO to include the additional flexibility requested by the Illinois Industrials allowing customers to specify the firm service level to which they will curtail demand and specify their expected peak load in their offer. The Midwest ISO must clarify its compensation provisions to reflect this additional flexibility as well. We note that the Midwest ISO agreed in its answer to provide demand resources with the additional flexibility requested by Illinois Industrials.[17] Therefore, we direct the Midwest ISO to do so through a compliance filing within 30 days of the date of this order.

30. We are not convinced by suggestions that compensation at the higher of the applicable LMP or the EDR production costs is insufficient and that further compensation through a share of system savings is needed. As discussed in the ASM Order, the value of lost load calculation estimates the value of the firm load that would be "lost" if an Emergency Alert 3 event is not remedied. Therefore, EDRs receiving scarcity prices based on a value of lost load analysis are receiving a price commensurate to the value of their resource. Through the EDR offer, participants may reflect their opportunity costs of

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[16] "The Commission agrees in principle with the comments of AES and Reliant on NYISO's proposed revisions that make Emergency Demand Response Program Resources and Special Case Resources eligible to set market-clearing prices. When these Resources are called, they are the marginal resources required to meet reserve shortages. As the marginal resources, these Resources should set the market-clearing prices." *See New York Independent System Operator, Inc.*, 102 FERC ¶ 61,313, at P 25 (2003).

[17] *See* Midwest ISO Answer at 18.

reducing demand and receive two benefits, namely, not paying the price of the energy not consumed and being compensated for the demand reduction.

C. Measurement and Verification

1. The Midwest ISO Proposal

31. The Midwest ISO proposes that measurement and verification for demand reductions provided by EDR participants will be based on actual usage in the hour immediately preceding the issuance of the EDR dispatch instruction. EDR participants thus will be required to submit meter information for the hour before the instruction and every hour during the demand reduction. Where on-site generation is used solely to support the demand reduction, EDR participants may provide qualified meter data from the on-site generation for each hour of the Emergency Alert 2 or Emergency Alert 3 event day.

32. EDR participants that reduce load through direct control load management must submit proposed measurement and verification procedures to the Midwest ISO and must include a detailed description of the direct control load management, the load research data used in the analysis, the formula used to develop the estimate, and a description of all source information for variables used in the analysis. EDR participants whose demand reduction is not metered by the Midwest ISO must submit meter data (or direct control load management data) within 53 days following the demand reduction to receive compensation.

2. Comments

33. Steel Producers argue that alternate approaches to measurement and verification agreed to by both the EDR participant and the Midwest ISO should not need to be incorporated into the Midwest ISO's Business Practices Manuals. Instead, the EDR registration form should set forth an alternate measurement and verification approach, if any, for the individual EDR participant, and this should be enough documentation. The Midwest ISO should have the discretion to approve matters such as alternate measurement and verification approaches for individual EDR participants. If alternate measurement and verification approaches must be in the Business Practice Manuals, Steel Producers argue this should not delay the implementation of the alternate methodology because amending the manuals is a lengthy process.

34. Otter Tail states that it is unclear who is responsible for the cost of installing metering equipment and argues that the Midwest ISO should provide more detail on these costs. Otter Tail argues that the Midwest ISO should not require metering equipment whose cost would discourage participation.

35. Ameren maintains the Midwest ISO should use meter data at the customer-specific or load-specific meter level where there are distinct loads. Where behind-the-meter generation is deployed exclusively to support demand reduction, the EDR participant should be able to provide qualified meter data from the generator. This will ensure that the Midwest ISO has sufficient information to determine whether a market participant is complying with its EDR offers and the extent to which it should be compensated. Where the demand response results from an aggregation of reduced customer demand, Ameren asserts the Midwest ISO should use data that represents the aggregate. Ameren requests that these modifications be made before Schedule 30 becomes effective. It asserts that failure to do so could mean that the Midwest ISO has inadequate data to implement its compensation provisions properly.

36. Ameren states that if meter data is provided on an aggregate basis, it may be impossible for the Midwest ISO to track a load reduction where there are distinct customers or distinct loads at that node. The Midwest ISO thus will not be able to determine the extent to which a specific market participant is acting in accordance with its EDR offer. For example, an intentional decrease in a market participant's load or demand could be offset by the normal increase or decrease of demand by other customers at the node.

37. Wisconsin Electric states the proposed tariff provides that measurement and verification for hourly interval metered EDR participants will be based on the actual hourly usage in the hour immediately preceding notification to the EDR participant of the dispatch instruction. It maintains that the hour before notification may not be proper, as the typical load may be increasing in a given hour, which would mean that the reduction actually would keep the demand level the same as it was in the hour before the notification. This approach is fine for constant loads that then reduce, but it will not work for variable loads. EDR participants should be able to use their forecasted load or profile to judge these reductions.

38. Wisconsin Electric requests clarification of the correct format and/or method for gathering, collecting, and maintaining demand reduction information. The information sought by the Midwest ISO is different from the information currently provided via the Internet Control Center Protocol.

39. Wisconsin Electric states that the Tariff is silent on how the Midwest ISO will verify that a demand reduction was made in response to a Midwest ISO EDR dispatch instruction and that the demand reduction would not have otherwise occurred. Detail on this issue must be stated in advance and must be in the Demand Response Business Practices Manual.

40. Wisconsin Electric also states that there is insufficient detail on proper metering equipment. While the equipment must meet the requirements set forth in the Business Practices Manuals, Wisconsin Electric notes that the relevant manuals are not identified.

Such details must be spelled out, and the Midwest ISO should in all cases identify which Business Practice Manual it is referring to.

41. The Midwest ISO states in its answer that Schedule 30 appropriately requires rigorous meter and verification procedures. It will have detailed Business Practices Manuals available before implementing the EDR initiative. If the Midwest ISO, with stakeholders and others, establishes agreed-upon, improved, alternative meter and verification procedures, the Midwest ISO will include them in the Business Practices Manuals.

3. Commission Determination

42. It is imperative that the Midwest ISO be able during an emergency to gauge accurately which resources it has at its disposal to alleviate the emergency and to prevent firm load shedding to the maximum extent possible. Measurement and verification of resources will help it to understand the demand resources available and their capacity to respond to dispatch instructions, as well as to determine compensation due after an emergency has passed. Because there are a great variety of direct load control systems, each with its own requirements, the Midwest ISO must have a general, flexible approach to specifying its measurement and verification procedures in the Tariff. The EDR initiative is entirely voluntary, so the costs of installing any necessary metering equipment should be the responsibility of the EDR participants. The Midwest ISO has proposed a reasonable approach to its measurement and verification procedures.

43. In response to commenters requesting more rigorous measurement and verification procedures, we note that the Midwest ISO is in the best position to determine if the information it is requesting from participants is sufficient to determine whether an EDR participant is acting in accordance with its EDR offer. As a non-profit, independent system operator, the Midwest ISO has a strong incentive to ensure that it can operate the system reliably during emergencies. We agree with the Midwest ISO's statement that Schedule 30 appropriately requires rigorous meter and verification procedures.[18] Further discussion of completion of the Business Practices Manuals is presented below.

44. Schedule 30 states that when a demand reduction is not metered directly by the Midwest ISO, EDR participants must forward the meter data to the Midwest ISO within 53 days of the demand reduction in order to receive compensation. The basis for the 53 day cut-off point is unclear, and we direct the Midwest ISO to explain how it arrived at the 53-day requirement through a compliance filing within 30 days of the date of this order.

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[18] *See* Midwest ISO Answer at 17.

D. EDR Offers

1. The Midwest ISO Proposal

45. The Midwest ISO states that its proposal was the subject of numerous stakeholder discussions throughout 2007, including at the Markets Subcommittee and the Tariff and Business Practices Subcommittee. It notes that there is stakeholder support for providing EDR participants with the flexibility to make new EDR offers or revise existing EDR offers on a day-ahead basis. However, the Midwest ISO states that its systems will be inadequate to implement day-ahead offer flexibility for some time. It is working as part of the ASM filing to be able to accommodate Demand Response Resource Type I and Type II offers on a day-ahead basis and will attempt to incorporate similar flexibility for EDR offers. It intends to file an amendment to Schedule 30 to allow more demand response offer flexibility when it is able. For now, however, the Midwest ISO requires that EDR offers be made for a minimum period of 30 days.

2. Comments

46. Many commenters state that the requirement that EDR offers be made for a minimum of 30 days and not be modified without 30 days notice is too inflexible and will discourage demand response participation. MIC states that this will limit participation by industrial customers because production at their facilities varies from day-to-day, and the costs associated with production and the reduction of load varies as a result. Industrial customers cannot predict the amount of load they will be able to shed 30 days in advance, and the 30-day static offer provision would require unreasonable business practices. Wisconsin Electric states that the threat of penalties will prevent companies from offering resources whose availability is uncertain.

47. Michigan PPA states that it does not agree with the limitation in Schedule 30 that an EDR participant can only offer the difference between maximum generation quantities of energy from the resource and the historic generation quantities from that same resource. Michigan PPA states that Schedule 30 seems to disqualify behind-the-meter generation from being included in an EDR offer if that generation has historically produced power to enable demand reductions. Michigan PPA maintains that what should matter is not the resource's history, but its availability to reduce load during the offer month and the amount of load reduction it can provide.

48. Otter Tail notes that under the proposal, a market participant representing an LSE will be able to submit an EDR offer to reduce load "unless otherwise specified," but it maintains that it is unclear what that phrase means. Schedule 30 appears not to apply to market participants already under contract for load control or as Capacity Resources with LSEs. It requests clarification and states that any clarification should not affect existing state jurisdiction.

49. Detroit Edison argues that the Commission should, at a minimum, require the Midwest ISO to have internal systems within six months following the implementation of the ASM to accommodate the characteristics of all facilities with meaningful demand response capabilities. This should include implementing (i) day-ahead and real-time EDR offer flexibility and (ii) appropriate measures/verification of demand response performance. Integrys argues that the Midwest ISO should provide a specific date by which EDR offers can be made on a day-ahead basis. The Commission should require the Midwest ISO to identify the steps needed to build the systems to allow flexibility, and to propose and justify a timeline for doing so; the Commission could then establish a specific date for allowing day-ahead offers.

50. Illinois Industrials and Wisconsin Electric argue that EDR participants should be able to specify the maximum number of times that the Midwest ISO is permitted to call demand reductions from the offer during the period covered by the offer. An EDR participant could be required to reduce load many times over a 30-day period without being able to change its offer. Wisconsin Electric asserts that too many load reductions could make participants vulnerable to under-serving their load.

51. Wisconsin Electric asks for several clean-up changes. At one point the filing says that EDR offers must be made 30 days before the month in which the dispatch instruction would be given, and at another point it states that it must be made for a minimum period of 30 days and may not be modified without 30 days notice.

52. Wisconsin Electric states that the proposal does not allow variable loads that are not located at the same commercial pricing node to be offered. It has some load that would not be available at a single node but could provide load reduction. Wisconsin Electric believes that this reduces the available resources. The Commission should direct the Midwest ISO either to clarify how variable load can be included for EDR purposes under the existing proposal or to develop a means to do so.

53. Wisconsin Electric argues that EDR participants should be able to include hourly availability in addition to daily availability. Moreover, Wisconsin Electric seeks clarification of the consequences of specifying increments in units of 0.1 MW. It asks how EDR participants are to comply with this requirement while keeping records in MWh, as stated on Original Sheet No. 1050Z.43.

54. In response to Michigan PPA's concern about potential disqualification of some behind-the-meter generation, the Midwest ISO states that it did not intend to exclude varying, historic behind-the-meter generation from participating in the EDR initiative. The Midwest ISO states that it would be willing to clarify this in a compliance filing.

55. In its answer to the Midwest ISO's answer, Integrys argues that the Midwest ISO still did not sufficiently justify its inability to provide day-ahead offer flexibility. Integrys asks the Commission to direct the Midwest ISO to provide a date certain by

which it will provide day-ahead offer flexibility and/or provide a timeline to achieve such flexibility.

3. Commission Determination

56. First, we note that the Midwest ISO has committed to developing Tariff provisions to allow offers to be made on a day-ahead basis. However, it does not currently have the systems in place to support day-ahead offers and is concurrently updating all of its software to implement the ASM.[19] We also note that the Midwest ISO's comments on this matter were made before the Commission's recent acceptance of the ASM filing. The Midwest ISO has changed its targeted ASM launch to September 9, 2008.[20] Due to the change in market launch date, its software systems will most likely not be ready in time for summer 2008 peak conditions. Therefore, in the interest of affording demand response the maximum possible chance to participate in the market during the 2008 peak period, we approve of the Midwest ISO's 30-day offer requirement, but direct further revisions.

57. We will honor the Midwest ISO's request and not direct it to commit to a date certain to accommodate day-ahead offers.[21] However, in accordance with our directive regarding the ability of EDR offers to set the LMP, we direct the Midwest ISO to submit quarterly reports providing status updates on progress being made to accept day-ahead offers. We note that when the ASM is implemented, market participants will be able to submit day-ahead and real-time offers for both Type I and Type II Demand Response Resources.

58. In response to commenters' concerns about offers made in minimum increments of 0.1MW, we note that the Commission accepted a similar provision in the ASM Order and believe that the same criteria should apply here.[22] We also note that offers are made hourly, and therefore, it is reasonable that both offers and record keeping be done in MWh units, and we direct the Midwest ISO to clarify Schedule 30 accordingly.

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[19] *See* Midwest ISO's Answer at 4.

[20] *See* Midwest ISO's filing on March 21, 2008 in Docket No. ER07-1372.

[21] "Although some parties have requested that the Midwest ISO commit to developing such day-ahead capability by a date certain, the Midwest ISO respectfully requests that the Commission reject such requested mandate in this proceeding, given the Midwest ISO's current activities and efforts required to update its software and systems in order to implement ASM." *See* Midwest ISO's Answer at 4.

[22] *See* 122 FERC ¶ 61,172, at P 355 (2008).

59. In addition, according to the offer requirements listed on Sheet No. 1050Z.44, participants can specify the daily availability of the demand reduction and thus can control how often they would have to respond to dispatch instructions. In response to commenters, we interpret the Midwest ISO's proposal to mean that offers are made at least 30 days in advance of an operating month, those offers are valid for the entire operating month, and may not be modified without 30 days notice to the Midwest ISO. Because July and August have 31 days in the month, we find it appropriate that the Midwest ISO use "month" and not 30 days.[23] Furthermore, we note that the 30-day offer requirement is not a permanent feature. Emergency Alert 2 and Emergency Alert 3 events historically have been infrequent, short duration events. Therefore, it is not likely that one demand resource would be called frequently within the same 30-day offer period. We emphasize that Schedule 30 only applies during emergencies, and for rare cases the Midwest ISO has included a provision to allow EDR participants to modify offers for "exigent" circumstances.

60. Although we find it reasonable that the Midwest ISO include some flexibility for EDR offers, we emphasize that offers from EDR participants are binding and should not be made without the assumption that the EDR resource in question could be dispatched. Instead, it is the EDR participant's responsibility to ensure that any limits not specified in the EDR offer are not violated.[24]

61. The Midwest ISO has stated that its intent was not to exclude historical behind-the-meter generation from being included in an EDR offer, even if the demand reduction varies.[25] Therefore, we direct the Midwest ISO to clarify this matter through a compliance filing within 30 days of the date of this order. We also direct the Midwest ISO to clarify the intent of "unless otherwise specified" in response to the comments of Otter Tail in a compliance filing within 30 days of the date of this order.[26]

E. Tolerance Band

1. The Midwest ISO Proposal

62. Under the Midwest ISO's proposal, EDR participants that do not reduce demand in response to a dispatch instruction to the levels specified in the instruction are not guaranteed cost recovery for the demand reduction shortfall beyond the tolerance band.

[23] *See* Original Sheet No. 1050Z.44.

[24] *Id.*

[25] *See* Midwest ISO's Answer at 19.

[26] *See* January 22, 2008 comments of Otter Tail at 2-3.

The tolerance band is the maximum of (i) the EDR dispatch instruction multiplied by 95 percent or (ii) 5 MWs. EDR participants that reduce demand between the levels specified in the EDR dispatch instruction and the tolerance band are guaranteed payment.

2. Comments

63. A number of commenters criticize aspects of the proposed tolerance band. MIC states that it should be eliminated. The tolerance band implies that loads of less than 5 MW do not have the flexibility of a tolerance band since the tolerance band would be the maximum at plus/minus 5 MW, although this would cease to be an issue if the penalty provision is removed. CMTC argues that no resource smaller than 5 MW could ever comply with EDR dispatch instructions. There always would be a shortfall because even if it performed fully, it would be less than 5 MW. Illinois Industrials argue that the 5 MW minimum should be dropped to 0.1 MW. The proposal to charge the real-time LMP for missed demand reductions is unreasonable because it would effectively prohibit participation by loads that cannot reduce demand by at least 5 MW and places an undue burden on smaller EDR participants that are larger than 5 MW. Illinois Industrials state that the tolerance band cannot be practically applied to EDR participants who curtail to the firm service level specified in their EDR offer.

64. Integrys states that the demand reduction tolerance calculation is vague. The Commission should direct Midwest ISO to clarify the demand reduction tolerance calculation to avoid misinterpretation and provide a clear statement of market participants' rights and obligations. Because of the importance of this issue, the clarification should be set forth in the Tariff and not in the Midwest ISO's Business Practices Manual.

65. Illinois Industrials argue that it is not clear whether an EDR participant who provides more demand reduction than instructed will be paid for the demand reduction covered by the EDR offer. They also argue that the demand reduction tolerance band cannot practically be applied to EDR participants who curtail to the firm service level.

66. In response to parties that express concern about the ability of entities with demand reductions of less than 5 MW to meet the tolerance band, the Midwest ISO states that the "or" in the demand reduction tolerance definition makes it clear that all demand reductions will have a tolerance of the larger of either 5 MW or 95 percent of the EDR dispatch instruction. This means that a 2 MW EDR offer would meet this tolerance regardless.

67. The Midwest ISO responds to MIC's argument by saying that rather than deleting the tolerance band, which is needed, it could modify the calculation of the tolerance band with additional language.[27]

68. In response to Integrys, the Midwest ISO states that it has included in the Tariff all of the necessary details regarding the rates, terms and conditions of service. The Midwest ISO argues that the Commission has made it clear that the standard for determining which provisions must be in a tariff is whether the provisions affect rates and services significantly. Any provisions that will significantly affect rates, terms and conditions of services are in Schedule 30.

69. Integrys states in its answer to the Midwest ISO that the definition of demand reduction tolerance will affect rates and services significantly and thus must be in the Tariff. The value derived from the demand reduction tolerance may affect an EDR participant's compensation and overall participation. In addition, the definition is vague. Finally, the definition is not so generally understood that its inclusion in the Tariff would be superfluous.

3. Commission Determination

70. We accept the Midwest ISO's proposal for a tolerance band. The Commission has consistently determined that some measure of tolerance around dispatch instructions is needed so that market participants that unintentionally deviate are not subject to penalties.[28] In this case, two considerations factor into the setting of an appropriate tolerance band: first, the resources are demand response resources, which generally have smaller quantity dispatch instructions; second, the dispatch instruction will only be sent when reliability is threatened, which makes it important that there not be too much flexibility. The Midwest ISO's original proposal balances these two objectives reasonably.

71. Based on the Midwest ISO's representations in its application and in its answer, we understand that resources whose actual demand reduction falls short of the instructed

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[27] *See* Midwest ISO's Answer at 11. "The Demand Reduction Tolerance is equal to the minimum of the actual demand reduction, or the maximum of (i) the EDR Dispatch Instruction multiplied by ninety-five percent (95%) or (ii) 5MWs" (emphasis in original).

[28] "Therefore, it is essential that the Midwest ISO propose a reasonable amount of flexibility around its dispatch instructions so that resources can comply, without giving those same resources free rein to operate at any level of their choosing. There is also a reliability concern because the system operator must know, to the closest extent possible, which resources it can count on and for what amount." *See Midwest Independent Transmission System Operator, Inc.*, 122 FERC ¶ 61,172 at P 255 (2008).

demand reduction, within 5 MW, or 5 percent of the instructed reduction, whichever is greater, would not be subject to penalties under its proposal. Thus, resources providing less than 5 MW of demand reduction are not unfairly exposed to penalties, because the entire EDR dispatch instruction is within the tolerance band. However, we find that the proposed Tariff provisions are not sufficiently clear in that the Demand Reduction Tolerance, as defined, could be read to establish a 5 MW floor for the area outside of the deviation tolerance band. Therefore, we direct the Midwest ISO to revise its tolerance band definition to make it clear that resources providing less than 5MW of demand reduction are not unfairly exposed to penalties through a compliance filing within 30 days of the date of this order.

72. Clarification of the tolerance band provisions is needed because a literal reading of the tariff leads to the unintended consequence that dispatch instructions equal to or less than 5MW are put at a disadvantage. For example, a 3 MW demand reduction dispatch instruction, where the EDR participant reduces by 3 MW would have a demand reduction tolerance of the maximum of 95 percent of 3 MW or 5 MW, so 5 MW would be the demand reduction tolerance. Because the demand reduction shortfall to which penalties would apply is calculated as the demand reduction tolerance minus the actual demand reduction, it would result in the resources incurring penalties for a 2 MW shortfall (5 MW – 3 MW) even though the resource did not deviate from the dispatch instruction. We do not believe this was the Midwest ISO's intent, but it is the implication of a literal reading of the tariff language.

73. We agree with Integrys that the demand reduction tolerance is an important issue and that the details belong in the tariff. However, we note that the Midwest ISO has added a definition in Module A and companion language explaining the tolerance band in Schedule 30. We believe that the combination of the language included in these two provisions, with the clarifications ordered herein, reasonably explains how the tolerance band is calculated.

74. In response to commenters that are concerned about curtailments to a firm service level and the tolerance band, we note that the tolerance band is based on the EDR dispatch instruction, not the offer parameters, and any firm service level specifications are included in the EDR offer. It is reasonable to assume that the Midwest ISO will not issue EDR dispatch instructions that are not commensurate with the parameters included in the EDR offer.

F. Penalties

1. The Midwest ISO Proposal

75. The Midwest ISO proposes that EDR participants that fail to reduce demand be charged the demand reduction shortfall multiplied by the real-time LMP of the host load

zone. The demand reduction shortfall is the maximum of (i) the demand reduction tolerance minus the actual demand reduction or (ii) zero.

2. Comments

76. A number of parties argue that these penalty provisions are unreasonable. CMTC maintains that the only justification the Midwest ISO provided is that stakeholders agreed the charges were appropriate given, among other things, the critical nature of emergency requests. MIC states that if the Midwest ISO does not yet have a system that can provide greater flexibility, it should eliminate the penalty for market participants who fail to reduce demand precisely as specified in their 30-day offers. Compensation should be based on the amount of demand response that gets delivered and verified. CMTC states that the penalty provisions must be eliminated until day-ahead offers are allowed. It notes that other RTOs have been able to attract EDR resources without penalties, and the Midwest ISO has not shown why it cannot do the same. A penalty may be justified where a resource receives a fixed payment or other benefit to be on call, but that is not the case here. Illinois Industrials maintain that the penalty provision will dampen participation. Wisconsin Electric states that the Commission should direct the Midwest ISO to clarify its penalties and credits in its tariff.

77. Detroit Edison argues that the penalty provisions do not properly align penalties with the costs of nonperformance. EDR participants that reduce demand as required will be paid the LMP or their EDR offer price, whichever is higher, but EDR participants who fail to do so will be charged an amount equal to the product of their demand reduction shortfall and the real-time LMP. Since demand resources dispatched under Schedule 30 are not eligible to set the LMP, their dispatch likely will not increase, and may even decrease, the real-time LMP. The LMP penalty borne by an EDR participant for a shortfall will almost always fall short of the payment it receives for the amount of demand it reduced. This may leave customers responsible for much higher replacement energy costs that should have been borne by the deficient market participant. Detroit Edison argues that the penalty provisions for non-performance under Schedule 30 should mirror those in the Midwest ISO's proposed permanent long-term resource adequacy plan in Module E of the Tariff. These provisions strike a fair balance between the legitimate needs of market participants with demand response resources and customers bearing the costs of demand response.

78. The Midwest ISO states in its answer that concern was expressed in the stakeholder process that some EDR participants might attempt to "game" the system if there were no penalty provisions. It thus added the provisions to attempt to prevent an EDR participant from, for example, (1) offering to increase behind-the-meter generation that historically operates during non-emergency conditions; (2) submitting demand reductions that would not be in response to EDR dispatch instructions; or (3) making EDR offers and then failing to reduce demand after receiving an instruction. Stakeholders expressed concern that an EDR participant could attempt to be compensated

for reducing load even though the subject load would not otherwise have been on the system. A vast majority of Demand Response Working Group members strongly endorsed the proposed penalty provisions.

79. The Midwest ISO argues that its EDR initiative will not succeed without penalties for EDR participants that fail to make a timely response to EDR dispatch instructions. If it does not have Tariff provisions that will strongly encourage compliance with EDR dispatch instructions, the Midwest ISO will not be able to reliably respond to Emergency Alert 2 and Emergency Alert 3 events by using EDR offers. The Midwest ISO disagrees that the penalty provisions are unduly onerous. Rigorous provisions are necessary to ensure that EDR participants seriously consider the consequences of making EDR offers. Unlike a generator, an EDR participant is responding during an Emergency Alert 2 and/or Emergency Alert 3 emergency, so there must be assurance that EDR participants will deliver as promised.

80. Duke argues in response to MIC and CMTC that demand response shortfall charges are necessary, given that the Midwest ISO is relying on these EDR offers during emergencies when system reliability may be critical and to reduce the incentive to game the system. Time is of the essence during an emergency event, and the Midwest ISO would be hampered in responding to emergencies if it had to identify substitutes for resources that could not respond as specified in their offers. This could lead to curtailment of load. Duke notes that participation in the EDR initiative is voluntary, and market participants with concerns can decide to not participate. Market participants also have flexibility in their offers to account for times during the month in which the EDR offer would not be available or to place restrictions on the offer.

81. Duke states in response to Illinois Industrials that the penalties or demand shortfall charges will not significantly reduce participation. Compensation will encourage participation, and EDR participants that can handle the risk will not be deterred.

82. In response to CMTC's argument that other ISOs/RTOs do not assess penalties unless the demand response resource is also a capacity resource, Duke states that CMTC does not support the claim that other demand resources have in fact responded. There also is no indication what percentage of participants in these programs are subject to penalties because they are also capacity resources. Duke notes that there are PJM stakeholder concerns about gaming the system, and Duke understands that PJM stakeholders are proposing rules intended to decrease gaming of the demand response program.

83. Finally, Duke states that the Commission routinely permits penalties or charges to discourage conduct that could adversely impact reliability. The *pro forma* OATT contains or permits imbalance penalties and penalties for unauthorized use. The only support generally required for penalties is that they will encourage or discourage certain

conduct. The amount of a penalty typically is tied to a multiple or percentage of cost or a market price, the latter being the case here. There thus is no need for additional support.

84. CMTC states in response to the Midwest ISO and Duke that it does not dispute the need for a realistic estimate of available demand response, but a demand response offer that is locked in for a minimum of 30 days in advance and perhaps as much as 60 days in advance does not provide a realistic prediction of available demand response. Such an approach differs from actual Midwest ISO system operations. Currently, when there are early warnings of a capacity emergency, the Midwest ISO solicits each balancing authority to provide updated real-time information on the MW amounts of load response available. Midwest ISO operators rely on this updated real-time information when deciding how and when to deploy emergency demand response. The Midwest ISO collects and manages this information using its existing systems.

85. CMTC objects to the proposed penalty provisions, in part, because the settlement and penalty provisions of Schedule 30 are tied to available offers that are locked in a minimum of 30 days in advance, rather than recognizing the actual availability of a demand resource closer to real time, as the Midwest ISO will do in practice. CMTC maintains that the inherent conflict between the rigidity in the Midwest ISO's proposed Schedule 30 and the dynamics of its actual operations underscores the lack of justification for the proposed penalty.

86. CMTC maintains that there is no evidence that there will be gaming. Because they are locked-in for an extended period, EDR offers must be recognized as forecasts that will likely vary from actual availability. Because dispatch decisions are made by the Midwest ISO, and because compensation is tied directly to actual performance as measured by before-and-after snapshots of actual meter values, claims of potential gaming are illusory and do not justify penalties.

3. Commission Determination

87. We find that penalty provisions are necessary to ensure that EDR offers are only made with the intention of actually reducing demand. We also find that the penalty provisions here are not so stringent as to be onerous. The Midwest ISO proposal contains reasonable financial incentives to respond quickly to EDR dispatch instructions through compensation, and reasonable financial disincentives discourage failure to respond to EDR dispatch instructions. The penalty provisions are also tempered by the tolerance band provisions. It is important to note that the EDR program is entirely voluntary and is not the only means for demand resources to participate in the Midwest ISO's markets.

88. When reliability is the primary concern, as it is for this emergency plan, the Midwest ISO must be able to rely on EDR participants to follow dispatch instructions. By requiring EDR participants to make up any shortfall in demand reduction at the applicable LMP, the Midwest ISO will have greater assurance of responsiveness to

dispatch instructions. As a further backstop, demand reductions are subject to verification and potential investigation by the Midwest ISO and the Commission.

89. We find the real-time LMP to be an appropriate basis for the penalty charge. The Midwest ISO has assessed uninstructed deviation penalties on the basis of the real-time LMP since the start of its energy markets, a practice similar to that of other RTOs and ISOs, and the Commission has found those charges reasonable. Since this penalty charge will reflect scarcity pricing that is determined by an administratively-set price curve, we expect that the real-time LMP paid by EDRs will in most instances be the same price paid for the replacement MW, and therefore we do not consider it likely that customers will be responsible for higher replacement energy costs that should have been borne by the deficient market participant, as Detroit Edison contends.

90. Turning to the amount of the penalty, the actual shortfall amount on which the penalty provision is based is the maximum of the demand reduction tolerance minus the actual demand reduction or zero. As noted above, the proposed Tariff provisions defining the demand reduction tolerance are unclear, and as a result, so are the provisions defining the demand reduction shortfall, which are dependent on the value of the demand reduction tolerance. Therefore, we direct the Midwest ISO to file revised tariff sheets consistent with the discussion of the demand reduction shortfall as it relates to the demand reduction tolerance through a compliance filing within 30 days of the date of this order.

G. <u>Cost Issues</u>

1. <u>The Midwest ISO Proposal</u>

91. In general, the Midwest ISO proposes to use Schedule 30 as another option to help balance energy during emergencies. Schedule 30 allows the Midwest ISO to reflect the varying costs of EDR options and to evaluate and dispatch EDR offers in merit order by location and by priority status.[29] For all hourly payments due to EDR participants that exceed market revenues, the Midwest ISO proposes to debit these costs from market participants on a pro rata basis, based on load ratio shares in the local balancing authority areas in which the Emergency Alert 2 or Emergency Alert 3 events occurred.[30]

2. <u>Comments</u>

92. Integrys states that the proposed cost allocation for demand reduction is inappropriate. It is based on a load ratio share across the system and does not follow cost

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[29] *See* Original Sheet No. 1050Z.39.

[30] *See* Original Sheet No. 1050Z.50.

causation, which requires market participants that cause the need for the demand reduction to pay for its cost. Integrys suggests that the total cost of the demand response be allocated among just the commercial pricing nodes that have real time asset energy purchase charges, in proportion to the purchased real time asset energy charge megawatts.

93. Otter Tail states that it is not clear how the costs of participation will be recovered, and the Commission should direct the Midwest ISO to provide details. This is important to Otter Tail because approximately 50 percent of its balancing authority area is not in the Midwest ISO and is not subject to the Midwest ISO Tariff or its EDR directives. Otter Tail asks the Commission to direct the Midwest ISO to clarify that Otter Tail will not be held accountable for costs imposed on behalf of the entire balancing authority area, as its load comprises only 30 percent of the Otter Tail balancing authority area. Otter Tail asserts that the Midwest ISO should demonstrate adherence to cost causation principles or consider offering non-Midwest ISO LSEs that are located in balancing authority areas in the Midwest ISO footprint an opportunity to participate in the EDR program.

3. Commission Determination

94. We find that the Midwest ISO has reasonably followed the principles of cost causation in its EDR proposal. By definition, emergency alerts only apply during scarce periods when LSEs expect not to be able to meet customers' energy needs because of a lack of resources or a lack of transmission available to move resources into deficient regions.[31] Therefore, energy emergencies generally reflect localized energy and reserve shortages. We note that the EDR offers proposed in Schedule 30 are price-capped at the value of lost load and operate in conjunction with the scarcity pricing provisions detailed in the ASM filing.[32] In the ASM Order, the Commission found it appropriate that the Midwest ISO assign scarcity costs to the load zone that benefits from the reserves.[33] For all intents and purposes, EDRs will be another classification of reserves on which the Midwest ISO may rely to alleviate shortages. Moreover, when revenues collected to fund EDR payments are insufficient, the Midwest ISO will assign those shortfalls to the local balancing authority area where the energy emergency occurred. This is an appropriate reflection of cost causation because shortages will be assigned the local areas that caused the energy shortage with a reasonable amount of granularity.

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[31] *See* NERC Attachment 1-EOP-002-0 to Standard EOP-002-2—Capacity and Energy Emergencies, "Situations for initiating alert" at 6.

[32] *See* 122 FERC ¶ 61,172, at P 217 (2008).

[33] *Id.*

H. Relationship to Other Initiatives

1. Comments

95. Ameren argues that the Midwest ISO should be required to clarify how the EDR, ASM and Resource Adequacy Requirement (RAR) initiatives will work together. For example, EDR offers must be for a minimum of 30 days and cannot be modified without 30 days advance notice. This results in a demand resource being locked down 30 days before the operating day under both the EDR and RAR initiatives. Ameren states that the Midwest ISO needs to clarify how it will integrate this with its real-time operations under the ASM or even its existing energy markets.

96. Detroit Edison states that the Commission should direct the Midwest ISO to explain the relationship between, and reconcile its treatment of, demand resources under Schedule 30 and the Midwest ISO's permanent resource adequacy plan in Module E. LSEs that rely on demand resources to meet resource adequacy requirements under Module E should not be prevented from doing so when Schedule 30 becomes effective, regardless of whether they submit EDR offers under Schedule 30. Detroit Edison notes that it relies heavily on certain Demand Response Resources to meet its long-term Resource Adequacy Requirements and questions whether its right to rely on them under Module E would be jeopardized if it does not submit these resources in an EDR offer under Schedule 30. It asks whether making certain demand resources available under Schedule 30 will affect its right to rely on them to meet its long-term Resource Adequacy Requirement under Module E. It also asks how the Midwest ISO will distinguish between, and prioritize, demand resources under Schedule 30 and Module E for curtailment purposes and how the same demand resources can be used under both.

97. Michigan PPA maintains that it is not clear that participation under Schedule 30 is voluntary. The filing states that the Midwest ISO believes the EDR initiative is a component for meeting Module E requirements, and when the permanent RAR in Module E becomes effective, load modifying resources under Module E will have an obligation to participate in the EDR Initiative. Michigan PPA states that it should be clarified that participation is voluntary and does not preclude market participants from submitting price-sensitive demand bids and keeping demand response resources to serve load not cleared in the day-ahead market. Michigan PPA maintains that the interplay between demand response resources and load modifying resources is unclear, as is the reference to the obligation of load modifying resources to participate. Michigan PPA seeks confirmation that a market participant will not be precluded from utilizing its own resources based upon the clearing of price sensitive demand bids by being required to instead submit EDR offers for those same resources.

98. Integrys states that Sheet No. 567A proposes tariff language that was not included in the Midwest ISO's pending ASM filing although the language involves the same tariff sheet. It is not clear how the Midwest ISO will address the inconsistent tariff language if

the demand response language becomes effective before the ASM filing becomes effective. Integrys states that the Commission should require Midwest ISO either to explain how it will handle this inconsistency once the ASM is implemented or require the Midwest ISO to modify the EDR proposal to be consistent with the ASM filing. Integrys also notes that the term “PNode” was deleted from the ASM filing, and the Commission should also require the Midwest ISO to delete it from this filing or explain why it should remain.

99. The Midwest ISO states in its answer that the ASM initiative, the EDR Initiative and the RAR filing all propose consistent, but related, demand response elements. The ASM filing enables Type I and Type II demand response resources to participate in the day-ahead and the real-time energy and operating reserves markets. These are everyday programs that enable parties with behind-the-meter generation resources or facilities that can reduce demand to be compensated for making those resources available to provide energy and operating reserves, including capacity that has been designated as emergency only. The EDR initiative applies only to specific declared emergencies. It is expected to be implemented at most only a few times each year during Emergency Alert 2 or Emergency Alert 3 conditions. The Midwest ISO explains that the EDR Initiative will be a step in the defined sequence of measures that it may take to resolve such emergency conditions. This step is separate from the emergency measures in the ASM proposal.

100. The Midwest ISO states that the resource adequacy filing is a forward-looking reliability program to address long-term reliability comprehensively. The resource adequacy filing establishes two types of planning resources to meet resource adequacy standards: (i) Capacity Resources (which consist of Generation Resources, External Resources and Demand Response Resources) and (ii) Load Modifying Resources or LMR (which consist of Demand Resources and Behind the Meter Generation resources). The Midwest ISO clarifies in the resource adequacy filing that a Demand Resource is a type of Load Modifying Resource that may be used to satisfy Resource Adequacy Requirements, even if it does not qualify as a Network Resource; however, all load modifying resources must be registered with the Midwest ISO and must be available for use in the event of an emergency. An EDR participant may choose to designate an EDR resource as a Load Modifying Resource to meet its resource adequacy obligations. If so, the EDR resource would not have a must-offer obligation like a Demand Response Resource, however it would have an obligation to participate during emergency conditions.

101. In response to Michigan PPA, the Midwest ISO confirms that the EDR initiative is voluntary.

2. <u>Commission Determination</u>

102. We consider the EDR proposal to be a complement to the energy and ancillary services market provisions and long-term resource adequacy plan. It contains provisions

that are not in those programs. Accordingly, the 30 day offer requirement for EDRs only applies to demand resources that are not Demand Response Resources subject to the requirements of the Midwest ISO energy and ancillary services market. Similarly, the offer requirement is an operating rule for Load Modifying Resources, and has no bearing on how these resources meet resource planning requirements. Since none of the EDR provisions are intended to meet Resource Adequacy Requirements and the EDR provisions do not indicate that they affect Resource Adequacy Requirements, we do not see them as a barrier to the use of demand resources, or Load Modifying Resources, in fulfilling planning resource requirements, nor as a barrier to market participants using Demand Response Resources as capacity resources.

103. The EDR program is voluntary, and the Load Modifying Resources program is voluntary. Therefore, market participants can use Demand Response Resources as energy resources, reserve resources and capacity resources, if they choose. We interpret the Midwest ISO provision that obligates Load Modifying Resources to also be EDRs to mean that Load Modifying Resources must follow the operating rules for EDRs and be compensated according to Schedule 30, and that these requirements are separate from the resource adequacy requirements of load modifying resources, as specified in Module E. We require the Midwest ISO to confirm this interpretation in its compliance filing.[34]

104. In response to Integrys, we direct the Midwest ISO to revise tariff Sheet No. 567A to reflect revisions in its ASM filing correctly, as accepted by the Commission in the ASM Order. We also require the Midwest ISO to delete the term "PNode" from the tariff, consistent with the ASM Order. To provide clarity for market participants, we direct the Midwest ISO to explain how it will manage emergencies in the period before its ancillary services market starts in September, 2008[35] and how it will administer the EDR program during that period, in its compliance filing.

[34] We note that the Midwest ISO has stated its intent to submit another section 205 filing to integrate the EDR initiative with the ASM initiative, but that the Midwest ISO believes it necessary to get acceptance of the EDR initiative before submitting this filing. We clarify this compliance directive because due to the delay in ASM market start, we believe that the order and timing of the Midwest ISO making related filings may have to change as well. *See* Midwest ISO's Answer at 5.

[35] On March 21, 2008, the Midwest ISO provided notification that it will start its ancillary services market on September 9, 2008.

I. Definitions, Clarifications, Business Practices Manuals and Participation

1. Comments

105. Michigan PPA maintains that the definition of EDR participant is too broad. An EDR participant is defined, in part, as a "Market Participant capable of reducing demand," and Michigan PPA argues that the term "capable" casts a wider net than intended because market participants have the option not to participate even if they are capable. Michigan PPA argues that the definition should be revised to make clear that it covers only market participants that elect to participate under Schedule 30.

106. Michigan PPA also recommends that "demand reduction" be defined as "Reductions in Load and/or increases in behind-the-meter generation."

107. Wisconsin Electric maintains that the filing defines the term "Emergency" more broadly than Emergency Alert 2 or Emergency Alert 3 events, and says that the Midwest ISO should correct its filing and replace the capitalized defined term with a lowercase undefined term. Wisconsin Electric also requests that the Commission direct the Midwest ISO to remove "anticipated future Emergency conditions" from the list of factors that may be used to issue EDR dispatch instructions.

108. Wisconsin Electric states that it is not clear how an EDR participant can comply with the requirement that EDR participants that intend to use a behind-the-meter resource for EDR purposes confirm that they hold the necessary permits. Its retail load owns the resources and hence the permits.

109. Wisconsin Electric asserts that the Midwest ISO should be directed to specify the details of the revenue sufficiency guarantee exemption in its Tariff. Wisconsin Electric states that the Robinson Affidavit states that EDR participants are exempt from revenue sufficiency guarantee charges during EDR events, but the Tariff does not contain corresponding language to this effect.

110. MIC states that the Midwest ISO's Business Practice Manuals should be provided to stakeholders as soon as possible so that they may give Midwest ISO appropriate feedback. MIC also states that the manuals should be finalized as soon as possible.

2. Commission Determination

111. We do not see a problem with the defined term "Emergency" in Schedule 30.[36] It is sufficiently clear that Schedule 30 only applies during Emergency Alert 2 and

[36] "Emergency" is defined in the Midwest ISO's tariff in Module A, section 1.80, Third Revised Sheet No. 70.

Emergency Alert 3 events and that the Midwest ISO is only using the broader term "Emergency" in the context of Schedule 30. Also, the Midwest ISO is the Reliability Coordinator for the region, and therefore it is appropriate that it be able to issue dispatch instructions based on anticipated emergency conditions. The Reliability Coordinator initiates Energy Emergency Alerts, and this provision works in conjunction with the Midwest ISO's role during emergencies.

112. We also believe that "EDR Participant" is defined properly and that use of "capable" is not a mandate to perform. We note that the Midwest ISO has clarified in its answer that the EDR initiative is voluntary.[37]

113. We decline to direct the Midwest ISO to define "demand reduction," as the Midwest ISO has already included a defined term in Module A, "Demand Reduction Shortfall" and "Demand Reduction Tolerance," and the Midwest ISO has also detailed how it will measure demand reductions for compensation purposes.

114. We agree with commenters that the Midwest ISO should work to provide stakeholders the Business Practices Manuals as quickly as possible so that market participants understand all the elements of the EDR program.

115. In response to concerns about EDR participants holding the required permits, we interpret the proposal as requiring demonstration that the resource is able to participate in the EDR program and not precluded by a restriction such as a state environmental restriction. To ensure reliability, it is appropriate for the Midwest ISO to confirm that emergency resources will be able to provide emergency demand reductions during an actual emergency. We do not interpret the phrase "confirm in writing" as requiring the EDR participant relying on behind-the-meter generation to hold the permits physically.[38] In any event, we note that this section also specifies that the EDR participant is solely liable for identification of and compliance with all such permits.[39] We direct the Midwest ISO to work with stakeholders that want to participate in the EDR program to allow them to demonstrate that all behind-the-meter generation is capable of providing demand reductions.

116. We do not agree that there is disconnect between the Robinson Affidavit accompanying the filing and the actual tariff language regarding the exemption from

[37] *See* Midwest ISO's Answer at 19.

[38] *See* Original Sheet No. 1050Z.42.

[39] *Id.*

revenue sufficiency guarantee charges. Both the Robinson Affidavit[40] and the tariff[41] are clear that when an EDR participant follows dispatch instructions they will be exempt from revenue sufficiency guarantee charges.

The Commission orders:

(A) The Midwest ISO's proposed amendments are hereby conditionally accepted for filing, to become effective May 1, 2008, as discussed in the body of this order.

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

(C) The Midwest ISO is hereby directed to submit quarterly informational reports, with the first report being due within 90 days of the date of this order, as discussed in the body of this order.

By the Commission. Commissioner Kelly concurring in part with a separate statement attached.
Commissioner Wellinghoff concurring in part and dissenting in part with a separate statement attached.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

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[40] "Consistent with the Midwest ISO's April 17, 2007 filing for exemption from Revenue Sufficiency Guarantee ("RSG") charges, EDR Participants will not be charged RSG for following EDR Dispatch Instructions." *See* Robinson Affidavit at P 14.

[41] "If an EDR Participant reduces demand by more than the EDR Dispatch Instruction during an Emergency Alert 2 or Emergency Alert 3 event, the EDR Participant will not be allocated Real-Time Revenue Sufficiency Guarantee Charges for deviations in Load, pursuant to Section 40.3.3.a.iv." *See* Original Sheet No. 1050Z.47.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Midwest Independent Transmission System Operator, Inc. — Docket No. ER08-404-000

(Issued April 22, 2008)

KELLY, Commissioner, *concurring in part*:

I support this order because I believe the emergency demand response (EDR) program will provide the Midwest Independent Transmission System Operator, Inc.'s (Midwest ISO) with additional resources to call upon during North American Electric Reliability Corporation (NERC) Energy Emergency Alert 2 and Energy Emergency Alert 3 events. The EDR program allows market participants to submit EDR offers to the Midwest ISO if the market participant: (1) is capable of reducing load in response to a request from the Midwest ISO or (2) has the ability to increase output from behind-the-meter generation resources that are not normally used to produce power in response to a request from the Midwest ISO. Unfortunately, the definition of market participants eligible to become EDR participants does not include demand response aggregators. Given that this program is meant to allow the Midwest ISO to respond to emergencies conditions, I believe that it is all the more important to ensure the participation of as many entities as possible in the program. Therefore, I strongly encourage the Midwest ISO to amend its market rules as necessary to permit aggregators for retail customers to participate in the EDR program, unless the laws or regulations of the relevant electric retail regulatory authority do not permit a retail customer to participate.

Accordingly, I concur in part with this order.

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Suedeen G. Kelly

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Midwest Independent Transmission System Operator, Inc. — Docket No. ER08-404-000

(Issued April 22, 2008)

WELLINGHOFF, Commissioner, concurring in part and dissenting in part:

Midwest ISO has filed new Schedule 30 that, among other things, provides compensation to demand resources during specified emergency events. Midwest ISO refers to such demand resources as emergency demand resources (EDR). Midwest ISO explains that studies have demonstrated that demand resources in other regional transmission organizations (RTOs) have increased system reliability and have contributed to a reduction in peak energy prices during shortage conditions.[1] I agree that demand resources are a critical element of strong, competitive electricity markets, and that the benefits of demand resources are far-reaching. While Schedule 30 is limited to certain emergency events, it does represent a new opportunity for demand resources to be compensated for their role in preserving the reliability of Midwest ISO's system.

Schedule 30 has several laudable features. For example, an EDR can specify in its offer price its shutdown costs associated with a demand reduction, including direct labor and equipment and/or opportunity costs.[2] If dispatched, the EDR will receive the higher of the applicable real-time LMP or the EDR's offer price. Thus, at a minimum, the EDR will receive its production costs. Schedule 30 also provides some flexibility with regard to measurement and verification procedures.[3]

However, there are other features that have not been justified and will make Schedule 30 significantly less effective, and possibly ineffective, in attracting additional participation by demand resources during emergencies. In particular, Schedule 30 requires that EDR submit a binding offer no later than 30 days prior to the start of an operating month. Once the offer is submitted, the EDR has no ability to modify or withdraw the offer during that operating month, such that the offer must be available to Midwest ISO for at least 30 days. As a consequence, the amount of demand reduction an

[1] *See* Affidavit of Michael Robinson at 3.

[2] *See* Schedule 30, Section III.

[3] *See* Schedule 30, Sections VII and VIII.

EDR must provide remains static for 60 days. Moreover, if the EDR fails to reduce demand in accord with that standing offer, it will be assessed a penalty calculated by multiplying its demand reduction shortfall by the applicable real-time LMP. Midwest ISO's explanation for these requirements is that its systems are inadequate to accommodate modification or accept new EDR offers on a day-ahead basis.

Many commenters state that the requirement that EDR offers be made for a minimum of 30 days and not be modified without 30 days notice is too inflexible and will discourage demand resource participation. The commenters argue that they cannot predict the amount of load they will be able to shed 30 days in advance, and that complying with Midwest ISO's static offer provision would require unreasonable business practices. To address these concerns, the commenters suggest two different alternative approaches.

Coalition of Midwest Transmission Customers (CMTC)[4] suggests that these aspects of Schedule 30 are inconsistent with Midwest ISO's current operating procedures. CMTC explains that, in the early warning stages of a capacity emergency, Midwest ISO currently solicits each balancing authority to provide updated real-time information on the MW amount of load response that is available. It is this updated information upon which Midwest ISO operators rely when making operational decisions on how to respond to emergency conditions. CMTC asserts that Midwest ISO collects and manages this information using its existing systems. Therefore, CMTC concludes that timely information on EDR availability does not require new systems.[5]

CMTC and Midwest Industrial Customers[6] state that, until Midwest ISO can provide the necessary flexibility, registered demand resources should be allowed to provide demand response in a voluntary manner and without any penalty provisions. They point out that other RTOs have been successful in attracting emergency demand resources and that those resources have performed in the absence of penalties.

I do not believe that the inadequacy of Midwest ISO's systems is a sufficient basis to conclude that it is just and reasonable to require that EDR offers be made for a minimum of 30 days and not be modified without 30 days notice. No comparable

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[4] Coalition of Midwest Transmission Customers is an *ad hoc* coalition of large industrial end-users of electricity.

[5] *See* Answer of Coalition of Midwest Transmission Customers dated February 21, 2008 at 4-5.

[6] Midwest Industrial Customers represents an *ad hoc* coalition of four industrial trade associations: American Forestry and Paper Association, Wisconsin Industrial Energy Group, Inc., Wisconsin Manufacturers and Commerce, and Wisconsin Paper Council.

requirement is placed on generators. In addition, the commenters suggest that Midwest ISO's current load management procedures could accommodate a work-around to permit EDRs to submit updated availability information on a timely basis until Midwest ISO can improve its systems. The absence of such a work-around may preclude Midwest ISO from calling upon demand resources that are otherwise willing to participate during an emergency. I would have directed Midwest ISO to file such a plan.

In the alternative, the commenters suggest the elimination of the penalty provision. However, Midwest ISO claims that the penalty provision is necessary, given that it is relying on these EDR offers during emergencies when system reliability may be critical. The flaw in Midwest ISO's proposal is that an EDR is required to stand ready to provide a demand reduction service (*i.e.*, a capacity obligation) without any compensation. A penalty for non-performance is appropriate where an EDR receives a payment to be "on-call". A penalty to ensure compliance may be appropriate if the EDR has the ability to make a timely modification to its offer. Here, the EDR is not compensated for standing ready to serve nor given the opportunity to make a timely modification to its offer. Given these circumstances, the assessment of a penalty has not been justified. Therefore, it would also be acceptable to me to make the EDR program voluntary without a penalty provision, as structured in PJM, NYISO and ISO-NE.

Finally, I agree with Commissioner Kelly's comments regarding the need to allow participation by demand resource aggregators. The definition of market participants eligible to become EDRs does not include demand resource aggregators. Given that this program is meant to assist the Midwest ISO in responding to emergency conditions, it is all the more important to ensure the participation of as many entities as possible. I join Commissioner Kelly and strongly encourage Midwest ISO to amend its market rules as necessary to permit aggregators to become EDRs, unless the laws or regulations of the relevant electric retail regulatory authority do not permit a retail customer to participate.

For these reasons, I generally support approval of new Schedule 30. However, I respectfully dissent in part as described above.

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Jon Wellinghoff
Commissioner