

105 FERC ¶ 61,147
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
William L. Massey, and Nora Mead Brownell.

Midwest Independent Transmission
System Operator, Inc.

Docket Nos. ER03-323-001
ER03-323-004

ORDER DISMISSING REQUESTS FOR REHEARING
ADDRESSING TECHNICAL CONFERENCE AND
PROVIDING GUIDANCE

(Issued October 29, 2003)

1. In this order, the Commission dismisses the requests for rehearing filed by the Midwest Independent Transmission System Operator, Inc. (Midwest ISO) and Potomac Economics, Inc., the Midwest ISO's Independent Market Monitor (IMM) jointly;¹ Reliant Resources, Inc. (Reliant); Cinergy Services, Inc. (Cinergy); and the Midwest Transmission Dependent Utilities (Midwest TDUs),² of the Commission's order issued in this proceeding on March 13, 2003 (March 13 Order),³ regarding the Midwest ISO's Market Mitigation Measures (Mitigation Measures).

2. This order is being issued concurrently with companion orders in Docket No. ER03-1118-000, 105 FERC ¶ 61,145 (2003), which grants the Midwest ISO's motion to withdraw its Open Access Transmission and Energy Markets Tariff (TEMT), and, as requested by the Midwest ISO, guides the Midwest ISO in further developing an energy markets tariff for future resubmission (TEMT Order), and in Docket Nos. ER03-323-002 and ER03-323-003, 105 FERC ¶ 61,146 (2003), which addresses the Midwest ISO's compliance filing to the March 13 Order (Compliance Order). As

¹Unless otherwise indicated, the Midwest ISO and the IMM shall be collectively referred to as Midwest ISO.

²The Midwest TDUs include Lincoln Electric System, Madison Gas and Electric Company, Missouri River Energy Services, and Wisconsin Public Power, Inc.

³Midwest Independent Transmission System Operator, Inc., 102 FERC & 61,280 (2003).

explained in the TEMT Order,⁴ the Commission believes that the many interrelated provisions of the TEMT, including the Mitigation Measures, are better evaluated in the context of a complete version of the TEMT, or any similar proposal, including all provisions that are to take effect on the same date, has been filed pursuant to Section 205 of the Federal Power Act.⁵ Given that the TEMT Order effects a withdrawal of the TEMT, of which we consider the Mitigation Measures to be an intricate part, in this order we will dismiss as moot the requests for rehearing regarding the Mitigation Measures, but with guidance for future filings. Similarly, the Compliance Order dismisses as moot the compliance filing at issue in that proceeding, but with guidance for future filings.

3. While we are dismissing the rehearing requests, we use the arguments set forth in the rehearing requests, as well as comments regarding the technical conference held on June 26, 2003 pertaining to the Mitigation Measures, as a vehicle for providing guidance to the Midwest ISO in further developing its Mitigation Measures. However, parties may revisit these issues, de novo, after the Midwest ISO refiles an energy markets tariff.⁶

Background

4. The Midwest ISO submitted the Mitigation Measures on December 23, 2002 (December 23 Filing), as Attachment S-2 to its Open Access Transmission Tariff (OATT).⁷ As detailed in the December 23 Filing and March 13 Order, the Mitigation Measures rely upon "conduct" and "impact" tests to identify situations where it may be appropriate to mitigate instances of market power abuse. Categories of conduct screened

⁴See also, March 13 Order, 102 FERC ¶ 61,280 at P 27 (emphasizing interaction between Mitigation Measures and other market design elements).

⁵16 U.S.C. § 824d (2000).

⁶As this order provides guidance only and the matters discussed are subject to further proceedings and orders, this order is advisory in nature and not subject to rehearing.

⁷The Mitigation Measures were developed by the IMM, Dr. David B. Patton, after consultation with the Midwest ISO's Market Monitoring Working Group.

under these tests include: (1) physical withholding, (2) economic withholding, (3) uneconomic production, (4) uneconomic load-bidding, and (5) virtual trading.⁸

5. In the March 13 Order, the Commission conditionally accepted for filing the Mitigation Measures, to become effective on the later of December 1, 2003, or the first day of operation of the Midwest ISO's Day-2, Day-Ahead Energy Markets. In conditionally accepting the Mitigation Measures, we directed the Midwest ISO to make several modifications to the Mitigation Measures. In addition, we provided guidance on certain issues the Commission considered critical to the development of the wholesale power market in the Midwest and directed a technical conference to be held regarding the adequacy, interaction and timing of various market design elements.

6. As indicated above, the Midwest ISO and IMM filed a joint request for clarification or, in the alternative, request for rehearing, and, Reliant, Cinergy, and the Midwest TDUs each filed requests for rehearing of the March 13 Order. These requests for clarification and rehearing are discussed, by issue, below.

7. In accordance with the March 13 Order, Staff convened a technical conference regarding the Mitigation Measures on June 26, 2003 (June 26 Technical Conference). The June 26 Technical Conference addressed application of the Mitigation Measures in broad constrained areas (BCAs) and narrow constrained areas (NCAs) (which are further discussed below), as well as the interaction between the Mitigation Measures and other market mechanisms, including resource adequacy requirements, safety-net bid caps, scarcity pricing and demand response.

8. Following the June 26 Technical Conference, the IMM filed initial comments. Reply comments were filed by: the Coalition of Midwest Transmission Customers (CMTC); Cinergy Services, Inc. (Cinergy); jointly, Dynegy Power Marketing, Inc. and Dynegy Midwest Generation, Inc. (jointly, Dynegy); jointly, Duke Energy North

⁸In general, under the Mitigation Measures, if a bidding party engages in economic withholding that has a substantial effect on prices (as determined by the conduct and impact tests), that party will have its bid replaced by a default bid. The default bid would be calculated by the IMM at reference levels. For all other actions that fail the conduct-impact test, such as physical withholding or an action that deliberately causes congestion, the offending party would incur financial penalties, if that party's conduct causes a substantial increase in prices or guarantees payments in any market administered by the Midwest ISO.

America, LLC and Duke Energy Trading and Marketing, L.L.C. (jointly, DENA); Midwest TDUs; Coalition of Midwest Transmission Customers; Xcel Energy Services, Inc. on behalf of Northern States Power Company and Northern States Power Company (collectively, Xcel); PSEG Energy Resources & Trade LLC (PSEG); Reliant Resources, Inc. (Reliant); and Wisconsin Public Service Corporation and Upper Peninsula Power Company (jointly, WPSR Companies). The Midwest ISO, IMM, Midwest TDUs and WPSR Companies filed responses to the reply comments.

9. On August 27, 2003, Staff issued a data request to the IMM, seeking further information regarding application of the Mitigation Measures. The IMM responded to the request on September 8, 2003 (September 8 Data Response), and comments were filed by CMTC and Midwest TDUs.

Discussion

10. As stated above, we dismiss as moot all requests for clarification or rehearing regarding the March 13 Order. However, we will discuss arguments on rehearing below, for the purpose of providing guidance to the Midwest ISO in developing its energy markets tariff, including mitigation, for future refiling. Because comments associated with the June 26 Technical Conference and September 8 Data Response are relevant to the requests for rehearing, we address those comments within our discussion, by issue, of the arguments on rehearing.

Broad Constrained Areas

March 13 Order

11. In the March 13 Order, the Commission conditionally accepted the Midwest ISO's proposed mitigation for BCAs, as defined in Section 2.5.2(a) of Attachment S-2.⁹ The Commission directed the Midwest ISO to revise Sections 3.1.1 and 3.1.2 to clarify that

⁹BCA is there defined as "an electrical area in which sufficient competition usually exists even when one or more transmission constraints are binding, but in which a transmission constraint can result in Locational Market Power under certain market or operating conditions." Locational Market Power is defined as "the ability to raise prices above the competitive level in an area where competition is limited by physical transmission constraints."

mitigation will only apply in BCAs where a transmission constraint causes a unit to be dispatched above the level it would have been dispatched absent the constraint.¹⁰

Rehearing Requests

12. The IMM and Midwest ISO request clarification that the Mitigation Measures apply to binding constraints without the need for additional generator specific analysis. The Midwest ISO states that implementing a mitigation system that determines whether each individual generator is impacted by the constraint prior to applying the conduct and impact tests would require additional computer modeling of the system, at significant burden and expense, to establish dispatch levels for each generator with and without a given transmission constraint.

13. Cinergy asserts that the Mitigation Measures are unclear on when and where mitigation in BCAs will be applied, what notice will be given, and the meaning of a sufficient level of competition (as defined in Section 2.5.2(a) of the proposed Attachment S-2). Cinergy contends that the use of congestion or binding constraints as a trigger for mitigation will result in an overly broad application of mitigation in BCAs and therefore threatens the viability of bilateral and spot markets. Accordingly, Cinergy requests that mitigation be allowed only upon a showing that it will not harm the market and participants and not apply to broad areas with workable competition and an absence of congestion. Cinergy further contends that monitoring in these situations is an inefficient use of IMM resources.

Discussion

14. We first address the issue raised by Cinergy of which generators will be subject to BCA mitigation. At the June 26 Technical Conference, the IMM proposed to use specified generation shift factors (GSF) to trigger the conduct and impact tests for specific generators in BCAs. As explained by the IMM, GSFs identify generator resources that are significant in resolving constraints, as measured by the percentage flow over a flowgate when 1 MW is injected at a generator bus and 1 MW is withdrawn at a withdrawal point. Each incremental MW produced by a generator increases the net loading on a flowgate by the MW multiplied by the GSF. Hence, a positive GSF indicates that as the generator increases production, congestion is also increased. Bids by generators with GSFs above a threshold determined to be significant by the IMM will be subject to conduct and impact tests to determine if market power is being exercised. Bids

¹⁰March 13 Order, 102 FERC ¶ 61,280 at P 55.

from the set of generators identified by the GSF that exceed BCA conduct and impact thresholds when the associated transmission constraint is congested may be mitigated.

15. In short, GSFs identify generators that could exercise market power due to congestion. According to the IMM, the application of mitigation will be limited and specific. For example, the IMM's comments indicate that most generators will have only minimal impact at any flowgate and that GSFs decline rapidly the further the generator is located, geographically and electrically, from a transmission facility.¹¹ Therefore, the IMM maintains that mitigation in BCAs will apply only to those generators with potential market power at those times a constraint is active, as determined by a constraint and GSF analysis, and only if those generator's GSF exceed a specific threshold as yet to be defined by the IMM.

16. In response to the June 26 Technical Conference, several parties commented that the GSF analysis set forth by the IMM is a theoretical framework and that a more concrete framework is necessary in order to develop mitigation methods for market power due to congestion. We agree. The GSF analysis and related tariff modifications were not included in the Mitigation Measures that we conditionally accepted in the March 13 Order. Accordingly, if the Midwest ISO intends to utilize the GSF analysis as part of its Mitigation Measures, it should include the GSF analysis in its proposed energy markets tariff. We expect that the GSF proposal would establish and provide support for the threshold that will provide the basis to trigger application of the conduct and impact tests. The GSF proposal should further analyze the incentives that generators have in different locations and set forth the rules that the IMM will use for detecting and acting on such incentives. In addition, we expect that the GSF proposal would include a posting and implementation plan concerning constraints, as indicated by the IMM in its reply comments to the June 26 Technical Conference.

17. Having stated the foregoing, we note our understanding that mitigation in BCAs will only apply to those generators that attempt to exercise significant market power (i.e., market power that exceeds the conduct and impact thresholds) during times when a constraint is active and the generators have exceeded an established GSF threshold, as determined by the constraint and GSF analysis.

18. Cinergy expresses concern that the definition of Locational Market Power sets an "above the competitive level" standard that may unnecessarily intrude in true scarcity situations and unnecessarily punish market participants. However, we believe that the

¹¹IMM Comments at 3.

BCA threshold of 300 percent or \$100 above the reference prices combined with the IMM monitoring process outlined above will both limit the range of monitoring, as well as provide a band of reasonableness around the thresholds that can account for higher cost, yet competitive, bidding that does not warrant mitigation.

19. With respect to the IMM and Midwest ISO's request for clarification, the GSF analysis may potentially provide an adequate framework to detect market power and determine when conduct and impact tests should apply. To the extent that, in identifying generators with market power, the GSF analysis serves the same function as the generator dispatch analysis, there does not appear to be the need for generator dispatch analysis in addition to GSF analysis.

20. Further, we take this opportunity to respond to PSEG's argument, set forth in its comments regarding the June 26 Technical Conference, that the Mitigation Measures are contrary to Commission policy because they result in "first-level" mitigation for suppliers that are not pivotal. In ISO-NE, which uses the pivotal supplier definition in mitigation, market power concerns are concentrated on individual, pivotal suppliers. As characterized by the IMM, in the Midwestern market, market power is less concentrated and likely to shift as trade patterns shift. Accordingly, we believe it is appropriate to limit mitigation to specific circumstances, such as during times of binding constraints, and to allow higher thresholds that may apply to several generators.

Physical Withholding

March 13 Order

21. In the March 13 Order, the Commission rejected the application of penalties for physical withholding in the Day-Ahead market. We further specified that generators should not be required to bid into the Day-Ahead market, unless they are subject to a Midwest ISO or state Resource Adequacy obligation. We agreed with intervenors that the imposition of economic withholding mitigation and penalties for physical withholding constitutes a must offer obligation without a capacity payment. Additionally, we noted that it is reasonable to require generators to bid available generation (defined as, "generators that were on line but not fully loaded, excluding units that were shut down and could not provide power in real time") into the Real-Time Market and mitigate generators' bids to a level near their marginal costs, including opportunity costs.¹²

¹²March 13 Order, 102 FERC ¶ 61,280 at P 96.

Requests for Rehearing

22. The IMM and Midwest ISO request clarification or, in the alternative, rehearing that physical withholding penalties must be applied to the Reliability Assessment Commitment (RAC) process, which occurs after the Day-Ahead Market closes and prior to Real-Time. They contend that this mitigation measure is necessary to address market power concerns that are similar to those that occur in Real-Time for meeting physical requirements of the system.

23. Reliant seeks Commission clarification that there will be certain circumstances when the physical withholding penalties do not apply. For example, Reliant states that, in situations where a significant portion of a generator's portfolio is sold bilaterally under liquidated damages contracts, it is critical that the single largest unit be held in reserve to support these existing contracts. Reliant believes that penalties for physical withholding should not apply to this hedging strategy, which, according to Reliant, is common in current markets.

24. Moreover, Reliant argues that the Commission should eliminate the second threshold under the Mitigation Measures (Section 3.1.1(a)(2) of the proposed Attachment S-2), *i.e.*, operating a unit in Real-Time at an output level that is less than 90 percent of the Midwest ISO's dispatch level for the unit.¹³ Reliant states that generators who deviate from their dispatch instructions already are required to pay the Real-Time imbalance price. Reliant reiterates this argument in technical conference comments, and further states that the uninstructed deviation provision in the proposed TEMT filing in Docket No. ER03-1118-000 is redundant.

Discussion

25. The Commission believes that penalties may be applied in the RAC process, but only with a concomitant capacity payment. As explained by the IMM in comments

¹³Section 3.1.1(a)(2), Thresholds for Identifying Physical Withholding, provides: Except as specified in subsection (d) below, the following initial thresholds will be employed by the IMM to identify physical withholding of a generating unit: Operating a unit in real-time at an output level that is less than 90 percent of the Midwest ISO's dispatch level for the unit.

regarding the June 26 Technical Conference,¹⁴ after the close of the Day-Ahead Market and the completion of the Security Constrained Unit Commitment (SCUC) process, in which generators offer capacity into the Day Ahead Market, the Midwest ISO will evaluate the system Load Forecast in each hour of the next operating day and allow market participants that did not offer into the Day-Ahead SCUC process to offer capacity into the RAC process. Participants will submit Start-Up, No-Load and Other Offer Data as part of their bids. The IMM and Midwest ISO propose to impose physical withholding penalties on those units that do not voluntarily offer into the RAC process that the IMM determines could be acting in an anti-competitive manner in an attempt to distort Real-Time Energy Market LMPs.¹⁵ Those units accepted in the RAC process will be paid for their Start-Up and No-Load bid, but will not receive any other capacity payment.

26. Based upon the foregoing, the Midwest ISO and IMM's request for clarification that physical withholding penalties may apply to the RAC process is problematic for the same reason as the previously proposed and rejected Day-Ahead penalties, namely, that it constitutes a must-offer requirement prior to Real-Time with no capacity payment. Accordingly, applying physical withholding penalties to the RAC process is contrary to the March 13 Order.¹⁶ We consider the proposal a must-offer commitment since penalties will be applied to any and all eligible¹⁷ units not committing to the RAC process

¹⁴ IMM Comments at 14.

¹⁵Joint Request For Clarification at 3, IMM Reply Comments at 6, Midwest ISO Comments at 12.

¹⁶The fact that the commitment is required at the end of the Day-Ahead Market, in the RAC process, as opposed to the previous proposal in the Day-Ahead Market, does not change the critical element of the proposal – namely that generators must commit prior to Real-Time and have no other options once they commit.

¹⁷Based on the explanation provided by the IMM in technical conference reply comments, we expect the commitment process will apply to all generation resources not scheduled in the DayAhead Market, not designated as self-scheduled load following and not designated as a bilateral transaction schedule. All the above resources have already committed and therefore are not available.

that are determined to be necessary for system reliability.¹⁸ This commitment is a total commitment of all uncommitted capacity for all hours, thereby foreclosing the possibility for generators to earn capacity payments by other means. Payment for Start-Up and No-Load costs only, as proposed by the IMM and Midwest ISO, are not capacity payments for fixed costs since they only cover the variable running cost of starting the unit and keeping units “on”. Also, Start-Up and No-Load bids are subject to mitigation.

27. However, the Commission recognizes the need to ensure adequate capacity for reliability. Therefore, we believe that physical withholding penalties may apply to the RAC process, but we would require a capacity payment for units committed.¹⁹ We believe that this would be the appropriate course of action, considering that a resource adequacy market has not been proposed and because appropriate mechanisms must be in place for a smoothly functioning energy market at start-up. Ideally, a well-developed Day-Ahead Market with a comprehensive approach to resource adequacy would be a key component in making the Midwest ISO more reliable in the future. For this reason, we encourage the Organization of Midwest States to complete its work on developing a Resource Adequacy Plan for the Day-Ahead Market.²⁰

28. Turning to Reliant’s argument on rehearing that Section 3.1.1(a)(2) (quoted above) that the proposed penalties should be eliminated, we note that this mitigation penalty only applies if the IMM determines that the deviation has caused a substantial increase in prices (per Section 4.3.1(b)) and that the deviation is at least 10 percent less than the

¹⁸IMM Reply Comments at 6: “The Midwest Transmission Customers comment that because the RAC is voluntary, suppliers can avoid withholding penalties by not participating. This is incorrect. I believe that resources withheld from the RAC and real-time markets when they are economic, and which significantly affect prices or other payments by the Midwest ISO, should be subject to the physical withholding penalties.”

See also Midwest ISO Reply Comments at 12: “If the IMM determines that a resource has not voluntarily offered into the RAC process in an attempt to distort the Real-Time Energy Market LMPs in an uncompetitive manner, then sanctions should apply.”

¹⁹See California Independent System Operator, Corp., Docket Nos. ER02-1656-003, et al., 105 FERC ¶ 61,140 (2003).

²⁰The capacity payment is addressed in the TEMT Order in Docket No. ER03-1118-000, 105 FERC ¶ 61,145 (2003)

dispatch level for BCAs or any level below the dispatch level for NCAs. We agree with Reliant that in this set of circumstances, a generator could be subject to both the mitigation measures and the uninstructed deviation penalties in the proposed TEMT (Section 41.7.4). Accordingly, the Midwest ISO should address in its proposed energy markets tariff, if necessary, its objectives with regard to these penalties and specifically address whether the double penalty is by design and why a double penalty would be appropriate, in order to address reliability impacts and manipulation.²¹

29. With regard to Reliant's request for clarification, we further note that, to the extent that based upon the IMM's comments regarding the June 26 Technical Conference, the Commission understands that physical withholding penalties would not apply in the circumstance described by Reliant, as long as the units held in reserve were committed, if needed, in the RAC process.

Economic Withholding

March 13 Order

30. In the March 13 Order, the Commission found that a more precise definition of terms like "unjustifiably high bids" and "artificially high price," used in identifying economic withholding would be preferable. Accordingly, we directed the Midwest ISO to submit in the compliance filing a revised definition of economic withholding. However, we declined to require that the Midwest ISO adopt the definition of economic withholding in the Notice of Proposed Rulemaking on Standard Market Design (SMD NOPR) (which compares bid levels to caps specified in the SMD tariff),²² as some intervenors had suggested, since we have not issued a final rule in the SMD proceeding

²¹We also note that the IMM has suggested modifying the Mitigation Measures to indicate that over-generation amounts to anti-competitive behavior and should result in penalties. Data Response at 3. If the Midwest ISO seeks to adopt such a policy, a provisions should be included in its proposed energy markets tariff.

²²Remedying Undue Discrimination Through Open Access Transmission Service and Standard Electricity Market Design, Notice of Proposed Rulemaking, FERC Stats. & Regs. & 32,563 (2002), 67 Fed. Reg. 55,451 (Aug. 29, 2002).

and we did not order adoption of participating generator agreements or a safety-net bid cap.²³

Requests for Rehearing

31. On rehearing, Reliant reiterates its argument from the initial proceeding that the Midwest ISO should be required to adopt the definition of economic withholding contained in the SMD NOPR. Reliant argues that the use of specific bidding limits combined with the SMD NOPR's definition of economic withholding, would provide a more precise definition of that term and therefore would eliminate disputes over how to identify economic withholding. Alternatively, Reliant requests that the Commission eliminate the definition because, according to Reliant, the Midwest ISO's proposed Mitigation Measures obviate the need to define economic withholding.

32. Reliant further contends that, in addition to the conduct and impact thresholds, the Mitigation Measures should include an initial price screen as is utilized in CAISO,²⁴ to limit unnecessary mitigation and ensure that the costs of entry for new generation are accounted for in the thresholds. The price screen, asserts Reliant, should be set at the cost of a new simple cycle gas turbine amortized over 10 years divided by the average number of hours run by similar units in the region over the most recent five years plus fuel and O&M costs.

33. On the other hand, the Midwest TDUs assert the Commission should require the lower of \$25/MWh or 50 percent threshold, as is used in ISO-NE.²⁵ Furthermore, argue the Midwest TDUs, the thresholds used in the Mitigation Measures are too high and lack evidentiary basis.

Discussion

34. With regard to Reliant's argument for a price screen, although we required a price screen in CAISO, we did so due to our concern that its mitigation measures may result in unnecessary mitigation. However, we find that none of the circumstances cited with

²³March 13 Order, 102 FERC ¶ 61,280 at P 46.

²⁴See California Independent System Operator Corp., 100 FERC ¶ 61,060 (2002).

²⁵See New England Power Pool, 101 FERC ¶ 61,344 (2002).

regard to CAISO as potentially resulting in unnecessary mitigation, *i.e.*, volatile bidding behavior by hydroelectric resources and a concern that generation will be sited outside of California,²⁶ exist in the Midwest ISO. As stated above, our understanding is that monitoring of GSFs followed by conduct and impact tests will be limited to specific generators with the potential to exercise market power. We do not believe that there will be a significant likelihood of unnecessary mitigation. Also, because mitigation will not be applied widely to generators that lack market power, we expect that the Mitigation Measures will not suppress prices in true scarcity situations.

35. With regard to Midwest TDUs' rehearing request, we note that mitigation is counter-productive to the extent it penalizes suppliers trying to resolve constraints, and their higher bids reflect higher costs, not manipulation. Therefore, a range of pricing needs to be accepted that ensures suppliers can bid and mitigation does not hinder that bidding. Past bidding or a marginal cost estimate may not be truly reflective of the costs of supplies that are needed at the hour of binding constraints. We note further that we have used similar thresholds in NYISO to those proposed by the Midwest ISO and we have been satisfied that they provide safeguards against market power while providing bid flexibility to accommodate likely operating conditions.

36. Especially considering the IMM's characterization of the Midwestern market as generally competitive, typical bidding behavior should be disciplined by market forces. Therefore, an extremely tight bidding threshold for BCAs, such as \$25 errs too far in the direction of penalizing suppliers when they may be submitting competitive bids.²⁷

²⁶See California Independent System Operator Corp., 100 FERC ¶ 61,060 at P 68 (2002).

²⁷The \$25 threshold for New England cited by Midwest TDUs only applies to certain suppliers dispatched above unconstrained levels in New England; higher thresholds apply as well.

Definition of Narrow Constrained Area

March 13 Order

37. In the March 13 Order, the Commission conditionally accepted mitigation in Narrow Constrained Areas (NCAs).²⁸ However, we found that the NCA definition was overly broad and could inappropriately designate some areas as NCAs. Accordingly, we directed the Midwest ISO to adopt in its tariff a definition that includes a reasonable minimum number of congested hours that would define an NCA, or another less discretionary criteria paired with, or in addition to, the less than three suppliers rule.²⁹

Requests for Rehearing

38. On rehearing, Midwest TDUs argue that the NCA definition is imprecise and ignores the facts of the Wisconsin – Upper Michigan (WUMS) market. As an example, they cite a WUMS flowgate with an HHI of 3600 that would not be considered an NCA because there are more than two suppliers. Midwest TDUs propose a definition that considers the relative market shares of pivotal suppliers in place of the IMM proposal.

39. Midwest TDUs also assert that market concentration, not constraints, is the major competitive issue in NCAs. They argue that, even if more generation is built, the market will still be concentrated and therefore uncompetitive. They state that entry barriers in the form of environmental regulations and local resistance will ensure that WUMS NCA will stay concentrated.

Discussion

40. With regard to Midwest TDUs' request for rehearing regarding the definition of NCAs, at this time, the Commission lacks the specific information necessary to render a determination regarding the merits of the NCA definition. If the Midwest ISO intends to utilize NCAs, it should designate NCAs in its proposed energy markets tariff. This

²⁸NCAs are discussed at length in the discussed in the March 13 Order. Briefly, as conditionally accepted in the March 13 Order, the Mitigation Measures (Original Tariff Sheet No. 619J) define an NCA as an area in which resources capable of relieving a binding constraint are owned or controlled by a limited number of suppliers, defined initially as fewer than three suppliers.

²⁹March 13 Order, 102 FERC ¶ 61,280 at P 69.

designation should address all the components of the NCA definition, which include the number of suppliers for individual or specific flowgates, number of constrained hours, cost of generation, and any other market characteristics that are a process of designating an NCA.

Fixed Cost Adder

March 13 Order

41. In the March 13 Order, the Commission found that the process for setting reference levels should provide adequate opportunity for participants to recover appropriate fixed costs.³⁰

Requests for Rehearing

42. Midwest TDUs dispute the Commission's acceptance in the March 13 Order of a fixed-cost adder as the threshold for NCAs. They state that those costs are already being recovered by generators through other mechanisms and that LSEs in the Midwest ISO footprint pay for generators' fixed costs through either long-term contracts or retail rates. Midwest TDUs maintain that, in lieu of a fixed-cost adder, thresholds should be set at marginal costs plus 10 percent. Midwest TDUs also assert that the Commission should not have eliminated the "lower of" threshold since the new definition allows thresholds in NCAs to reach three to four times the marginal cost of generation and to be more generous than the BCA thresholds.

Discussion

43. As stated by the IMM in its June 26 Technical Conference comments, the NCA adder will set the NCA threshold at \$30 - \$120/MWh, depending on constraint hours.³¹ The NCA threshold allows prices to indicate the need for investment in peaking capacity, yet mitigate the impact of the exercise of market power. As the Commission stated in the March 13 Order, mitigation should not discourage investment where needed. We believe that proposals to set thresholds at the lower of BCA and NCA or the marginal cost of existing generation do not allow prices to reflect the investment cost required to resolve a constraint and thereby defeats the purpose of the NCA fixed cost adder. The

³⁰March 13 Order, 102 FERC ¶ 61,280 at P 81.

³¹IMM Comments at 8.

Commission must ensure, in the context of a bid-based market design and taking account of all elements of market design, that there are both adequate incentives to attract and retain needed investment as well as rates that are not excessive.³² Accordingly, the Midwest ISO and IMM should include such an analysis in a comprehensive energy markets tariff.

44. We also disagree with Midwest TDUs' contention that the threshold is not rational because retail customers do not see any price signal. The price signal will be seen by generators and transmission operators, who make the investment decisions. The price signal will therefore provide incentives to construct either generation or transmission.

45. Further, as stated above, the Commission does not draw any conclusions at this time about the permissiveness of NCA thresholds. If the Midwest ISO intends to utilize NCAs, it should provide data in its proposed energy markets tariff, regarding generator characteristics in NCAs, including WUMS.³³

46. Midwest TDUs' proposal that the NCA threshold be set at marginal costs plus 10 percent reflects a misunderstanding of the purpose of the fixed cost adder.³⁴ These areas will need either new generation or new transmission capacity. While customers must be protected from the exercise of market power in these situations, thresholds must reflect scarcity. Midwest TDUs' proposal therefore does not provide the market signal needed to encourage new investment.³⁵

³²See *Reliant Energy Mid-Atlantic Power Holdings, L.L.C. v. PJM Interconnection, L.L.C.*, 104 FERC ¶ 61,040 at P 38 (2003).

³³We note that the fact that the sellers in WUMS, as vertically integrated utilities, will also be buyers, should balance bidding incentives.

³⁴Contrary to Midwest TDUs' assertion, their proposed method for calculating thresholds is not similar to the method used in PJM.

³⁵In addition, Midwest TDUs' formulation may lead to the perverse result of a higher adder than is proposed by the IMM. Midwest TDUs assume that the cost of existing units in WUMS is significantly below the costs of peaker generation including the fixed adder. This assumption may not be accurate since the marginal cost of existing units, in the output range required to meet market demand, may be significantly above Midwest TDUs' assumption and even above the fixed cost of new generation. We believe that the Mitigation Measures have been designed to ensure that the IMM is applying the most accurate marginal costs, including legitimate opportunity costs and risks, all of which may be significant for existing units operating at high capacity factors.

Reference Levels

March 13 Order

47. In the March 13 Order, the Commission accepted the methods proposed by the Midwest ISO for calculating reference levels,³⁶ since they are similar to those we had approved in other markets that mitigate through conduct and impact thresholds. However, we found that the Midwest ISO failed to explain the transition method that it will employ for calculating reference levels between the effective date of the Day-2 Markets and a date at least 90 days later, when sufficient bidding histories are available. We stated our expectation that the method would involve a consultation between the IMM and the market participant to negotiate a reference level that at a minimum will apply for the first 90 days of the operation of Day-2 Markets. We directed the Midwest ISO to file tariff changes which incorporate details on the method it proposes to use during the transition period. Additionally, we required the Midwest ISO to provide reference levels to all market participants until the latter of 100 days after the start of Day-2 Markets, or when the Midwest ISO deems the transition from a consultation-based method to a historical bid-based method is completed.³⁷

Requests for Rehearing

48. On rehearing, Midwest TDUs argue that the reference levels in the Mitigation Measures should, but fail, to reflect bids in competitive markets. They seek Commission clarification that the IMM should use marginal costs (including legitimate and verifiable opportunity costs) as the standard method for calculating reference levels, to the extent

³⁶Reference levels are calculated by the IMM using either: (1) the lower of the mean or median of the units accepted bids for the last 90 days, adjusted for changes in fuel prices; (2) the mean of the LMP at the units location during the lowest-priced 25 percent of the hours that the unit was dispatched in the last 90 days, adjusted for changes in fuel prices; or (3) a level determined in consultation with the supplier. The IMM will calculate reference levels over the unit's output range with a different reference level calculated for each 10 MWs of output using the method that the IMM deems the most accurate in reflecting a competitive bid level, provided that sufficient data are available. Reference levels will be calculated for all bid components, including start-up costs and minimum generation costs.

³⁷March 13 Order, 102 FERC ¶ 61,280 at P 80.

reasonably accurate data is available. Midwest TDUs state that, at a minimum, the Commission should clarify that the IMM is required to demonstrate that prior periods, from which the historical bids or LMPs are drawn, reflect competitive, comparable market conditions.

Discussion

49. With regard to Midwest TDUs' request for rehearing regarding reference levels, we note that bids are the basis for reference prices in the CAISO and NYISO markets, including their load pockets. Bid-based reference prices are not restricted to markets with numerous bidders and ample capacity. Even in the CAISO and NYISO markets, with their transmission constraints and need for more supplies, bids have been below the thresholds for substantial periods, including peak periods.³⁸ We expect the same experience in Midwest ISO, and Midwest TDUs have not offered any evidence to indicate the bidding behavior of generators in WUMS will be continually and systematically anti-competitive so that a marginal cost cap must be put on every bid.

50. Responding to concerns raised in the June 26 Technical Conference comments, we find that just and reasonable rates can be achieved with IMM monitoring in markets with an appropriate market design and mitigation. The IMM has wide-ranging monitoring authority and access to all market data, and accordingly, is ideally suited to assess market behavior. Therefore, we urge customers to bring concerns to the IMM and utilize the capabilities of this entity, which is set up specifically to provide effective and timely customer protection in energy markets. Further, having customers review hundreds of

³⁸During certain peak hours in 2002, average bid prices were \$60/MWh in California, compared to caps ranging from \$91.87/MWh to \$250/MWh. See 2002 Annual Report on Market Issues and Performance, California Independent System Operator, Corp., April 2003, at 3-21. For entities allowed to bid market prices into the New York City load pocket during 2002, no bids were mitigated in the Day-Ahead market, and Real-Time bids were mitigated from zero percent to 48 percent at the intervals for constraints in the New York City load pockets. See 2002 State of the Market Report: New York Electricity Markets, New York Independent Market Advisor, April 2003 at 14.

prices in Real-Time offers, as the Midwest TDUs proposed in June 26 Technical Conference comments, is neither realistic nor productive.³⁹

51. Addressing additional issues raised in the technical conference,⁴⁰ we do not believe the reference prices for self-scheduling generators are onerous, since these generators have the option of bidding into the energy markets, and receive the mean or median of bids. In addition, they do not have to self-schedule if they expect the LMP will be lower than their marginal cost. Nevertheless, in proposing reference levels, the Midwest ISO should include guidelines for calculation of fuel price changes, the information required for consultation, and its process for the release of reference price information.⁴¹

Resource Adequacy, Safety-Net Bid Caps and Scarcity Pricing

March 13 Order

52. In the March 13 Order, the Commission conditionally accepted the Mitigation Measures without directing a resource adequacy requirement, safety-net bid cap, and scarcity pricing mechanism. We found that the Mitigation Measures could be considered absent a resource adequacy requirement that, in any case, implicated state interests.⁴² We further found that the IMM does not have undue discretion under the Mitigation

³⁹In its reply comments regarding the June 26 Technical Conference, the IMM asserts that such review of confidential information violates Attachment S, Section 6.4 of Midwest ISO OATT and would have the perverse effect of discouraging generators from providing the data needed by the IMM to determine marginal costs.

⁴⁰See Dynegy's June 26 Technical Conference Reply Comments.

⁴¹We note that in its comments regarding the June 26 Technical Conference, the IMM described the transition mechanism for developing reference prices during the first 90 days of market operation. IMM Comments at 13.

⁴²March 13 Order, 102 FERC ¶ 61,280 at P 26-27.

Measures, and accordingly, that a safety-net bid cap is not required.⁴³ Further, we directed and held the June 26 Technical Conference to address, among other things, the interaction between the Mitigation Measures and resource adequacy, safety-net bid caps, and scarcity pricing.⁴⁴

Requests for Rehearing

53. On rehearing, Reliant reiterates arguments set forth in the initial proceeding that the threshold levels and reference prices are too subjective and give undue discretion to the IMM. To counter this subjectivity, Reliant argues for safety-net bid caps or caps as defined in the SMD NOPR. Otherwise, continues Reliant, the Commission will be forced to judge where scarcity pricing ends and manipulation begins.

54. Midwest TDUs also protest the lack of bid caps, particularly for WUMS, and argue that insignificant demand response particularly in load pockets or NCAs, combined with lack of market analysis, make safety-net bid caps imperative to protect consumers. According to Midwest TDUs, a lack of demand response and market concentration in WUMS requires that a Regional Transmission Organization (RTO), not generators, set scarcity prices.⁴⁵ Also, Midwest TDUs contend that the Commission erred by delaying implementation of safety-net bid caps, because it found that the Mitigation Measures lack a resource adequacy requirement. In fact, argues Midwest TDUs, states already have resource adequacy requirements.

Discussion

55. With regard to a resource adequacy requirement, safety-net bid caps, and a scarcity pricing mechanism, the Commission has restricted its consideration of those market design elements only to their interaction with the Mitigation Measures. We

⁴³Id. at P 27, 36. We also noted the Midwest ISO's contention that a resource adequacy proposal will not be ready for Day-2 start-up, and that to impose a safety-net bid cap without a resource adequacy proposal at start-up may interfere with scarcity pricing. We also noted the IMM's contention that Mitigation Measures will not interfere with scarcity pricing and can take effect prior to addressing a safety-net bid cap and resource adequacy proposal. Id. at P 19.

⁴⁴Id. at P 27.

⁴⁵New England Power Pool, 101 FERC ¶ 61,344 (2002).

address issues surrounding the suitability and design of those market features in the companion TEMT Order in Docket No. ER03-1118-000.

56. Nevertheless, we take this opportunity to express our concern regarding proposals to eliminate the Mitigation Measures and replace them with only a safety-net bid cap, given the current structural conditions of the Midwest ISO market. We believe that such a regime will not address the exercise of market power and price manipulation that could occur at significantly lower prices than the bid cap.⁴⁶ For example, when there is transmission congestion narrowing the scope of the market, additional mitigation is required. For this reason, we have required mitigation plans based on bid and cost thresholds in other energy markets, even though they also have bid caps.

57. While the precise level of an appropriate threshold can be debated and is subject to judgment, as we discuss elsewhere in this order, we endorse the logic behind the screens, namely, that prices are compared to marginal costs and data on bid levels. The market monitor will be reviewing the results of his monitoring and providing analysis and proposals, based on actual market experience to refine the thresholds, if needed.

Automated Mitigation Procedures

March 13 Order

58. In the March 13 Order, the Commission rejected tariff provisions that included automated mitigation procedures (AMP). We found those provisions to be premature, given the IMM's determination that such procedures are not necessary at the start of Day-2 operations. Moreover, we stated that the IMM does not have the software to implement such procedures. We stated that our rejection of the procedures was without prejudice to a future filing to implement such provisions when the IMM determines they are necessary.⁴⁷

⁴⁶We note that the safety net bid cap proposed in the proposed TEMT filing in Docket No. ER03-1118-000 is \$5,000/MWh. Based upon the information provided by the IMM, the monitoring for potential exercise of market power will occur when bids are \$100/MWh above thresholds for BCAs and between \$30 - \$120/MWh above the threshold for NCAs.

⁴⁷March 13 Order, 102 FERC ¶ 61,280 at P 105.

Requests for Rehearing

59. Midwest TDUs contend that the IMM should be required to adopt AMP before the launch of Day-2, based upon the IMM's admission that the current mitigation process results in delay of mitigation to several time intervals after the initial occurrence (and a full day delay in implementation of Day-Ahead implementation).

Discussion

60. The Commission is not dissuaded from its finding in the March 13 Order that the Mitigation Measures, as then proposed, would ensure just and reasonable pricing in Midwest ISO. While Day-Ahead markets are not mitigated until the next Day-Ahead market,⁴⁸ the most significant locational market power exists in the Real-Time market, according to the IMM. In this market, the 10 to 15 minute lag in response time limits the potential for gaming to a very short period, and the procedures allow for uninterrupted mitigation through the succeeding hours, if needed.

Technical Conference and Market Analysis

March 13 Order

61. Given that the Midwest ISO did not file a market analysis with the Mitigation Measures, and in recognition of the importance of various issues surrounding the Mitigation Measures, including their interaction with other market design elements, in the March 13 Order, as previously stated, the Commission directed that a technical conference be held.⁴⁹ As referenced throughout this order, that conference was held on June 26, 2003.

⁴⁸The IMM explains in his September 8 Data Response that the non-automated process will result in mitigation being applied to the subsequent market interval once the conduct and impact thresholds are exceeded. For the day-ahead market, the next interval is the day-ahead market for the next day and for real-time it is next five minute interval. According to the IMM, real-time mitigation will be delayed no more than 2 or 3 intervals, or 10 to 15 minutes, due to the time required to run software programs. Mitigation would then apply to the balance of the hour. See, September 8 Data Response at 7-8.

⁴⁹March 13 Order, 102 FERC ¶ 61,280 at P 27.

Requests for Rehearing

62. On rehearing, Cinergy argues that a technical conference should explore such issues as the need for mitigation when congestion occurs but price increases are minimal, and the potential for harmful market impacts caused by over-mitigation.

63. Midwest TDUs contend that the Commission erred in accepting the Mitigation Measures prior to the Midwest ISO's submission of a market analysis that would, according to Midwest TDUs, reveal that multiplicity of control areas run by market participants and poor coordination will make effective monitoring and mitigation difficult. Without such an analysis, Midwest TDUs assert, the Commission cannot know whether the Mitigation Measures will provide meaningful relief, and of their impacts on consumers.

64. Midwest TDUs further claim that in accepting the Mitigation Measures, the Commission approved market-based rates, and that therefore, the measures cannot lawfully be implemented without a market analysis.

Discussion

65. The Commission believes that the June 26 Technical Conference addressed an appropriate range of issues regarding the Mitigation Measures. The full day technical conference held by advisory staff, followed by several rounds of comments, as well as the September 8 Data Response with comments from parties, have provided more than ample opportunity for all parties to raise concerns regarding the Mitigation Measures and related issues. As indicated above, the June 26 Technical Conference and the comments provided parties with a step-by-step description of mitigation, further definition of the mitigation thresholds and further discussion regarding the interaction of the proposed mitigation measures with other market elements.

66. In addition, we disagree with Midwest TDUs' argument that the Commission erred, for both practical and legal reasons, in conditionally accepting the Mitigation Measures without a market analysis. As an initial matter, our conditional acceptance of the Mitigation Measures in the March 13 Order did not constitute the approval of market-based rates, as Midwest TDUs contend. Indeed, as noted in the March 13 Order, protestors had claimed that the Mitigation Measures would result in a suspension of every generator's market-based rate authorization.⁵⁰ In response to those concerns, we

⁵⁰March 13 Order, 102 FERC ¶ 61,280 at P 31.

determined that the Mitigation Measures, as modified, allow for Commission approval of the Midwest ISO's bid-based markets and thus do not disrupt the market-based pricing of power sold by generators participating in these markets.⁵¹

67. In any case, as explained in the TEMT order and here, we expect that the Mitigation Measures will be refiled as part of the Midwest ISO's proposed energy markets tariff. Interested parties will have an opportunity to comment, and we expect a thorough examination of all relevant issues at that time.

68. Having stated the foregoing, while Midwest TDUs argue that parts of Midwest ISO, such as WUMS, are not ready for market-based pricing, we disagree. We note that other independent system operators have load pockets and market-based pricing is utilized. The purpose of an LMP market is to provide price signals for efficient short and long run behavior, and mitigation controls the impacts of the exercise of market power. As we stated in the March 13 Order, market-based rates are premised on having effective mitigation and imbalance markets.⁵²

Seams and Timing Issues

March 13 Order

69. In the March 13 Order, the Commission recognized that approval of the Mitigation Measures may potentially create a seam between the Midwest ISO's markets and those of PJM. Nevertheless, we stated our belief that implementation of the Mitigation Measures would not create an insurmountable obstacle to a joint and common market. We further emphasized that as the Midwest and PJM transition to joint and common market, they should adopt a uniform approach to mitigation. To that end, we directed the Midwest ISO and PJM to work together to address any inconsistencies in their mitigation measures.⁵³

⁵¹Id. at P 37.

⁵²We note that our policy on market-based rate authority, and the role of mitigation measures, has also been stated in Huntington Beach Development, L.L.C., 98 FERC ¶ 61,252.

⁵³March 13 Order, 102 FERC ¶ 61,280 at P 28.

Requests for Rehearing

70. The IMM and Midwest ISO jointly request clarification that Midwest ISO and PJM are not required to adopt identical mitigation measures.

71. Cinergy reiterates arguments set forth in the initial proceeding that separate approval of mitigation programs for the Midwest ISO and PJM will create a seam. Cinergy also asserts that the resources spent on separate plans are redundant and unnecessary, and would be better spent on common market implementation.

72. Midwest TDUs argue that generators on both sides of the Midwest ISO and PJM seam could operate PJM resources in a way that tightens constraints in the Midwest ISO and raises prices in MISO, particularly in light of concerns raised by Commission on seams issues.⁵⁴ They further contend that the Mitigation Measures fail to address how the IMM will monitor and mitigate market power that involves facilities and generators on both sides of the seam.

Discussion

73. With regard to the Midwest ISO and IMM's joint request for clarification, given that the Midwest ISO has withdrawn its TEMT, we will merely reiterate our expectation set forth in the March 13 Order that the Midwest ISO and PJM will work together to resolve inconsistencies in their mitigation measures that result in seams issues, with particular attention to the impacts of gaming across the seam.

74. Further, we reject the argument that the Mitigation Measures are redundant and unnecessary, and will delay ultimate implementation of a joint and common market. While the final configuration of ISOs in the Midwest and Mid-Atlantic regions remains to be seen, all the resources currently dedicated to this effort are necessary. We are actively addressing Midwest seams issues⁵⁵ and consider this issue a priority that must be addressed to ensure future reliability is enhanced in the region. Reasonable and effective market monitoring in the Midwest ISO and PJM regions will realistically require two

⁵⁴Alliance Companies, 103 FERC ¶ 61,274 (2003) at P26 and P28.

⁵⁵As an example, in New PJM Companies, et al., Docket Nos. ER03-262-000, et al., we have initiated a proceeding to investigate seams issues with AEP, Midwest ISO and PJM.

monitors and their staffs under any plan and both RTOs have been working together extensively on systems coordination to ensure a smooth and rapid transition to a joint market.

75. In response to Midwest TDUs, we note that generators in the Midwest ISO which are capacity resources for other RTOs are subject to the market rules of those RTOs. Those participants should not be subject to two RTO market rules during the RAC process, as long as the unit is committed and available. The fact that its energy is obligated and ultimately sold in another RTO will not trigger RAC penalties.⁵⁶ In accordance with the commitment made by the IMM in June 26 Technical Conference comments, we expect that the IMM will work closely with the PJM market monitor to address joint market power issues. Nevertheless, the IMM lacks authority to address conduct of non-Midwest ISO market participants.⁵⁷

The Commission orders:

The Midwest ISO and IMM's request for clarification, and Reliant's, Cinergy's and Midwest TDUs' respective requests for rehearing are hereby dismissed as moot, as discussed in the body of this order.

By the Commission.

(S E A L)

Linda Mitry,
Acting Secretary.

⁵⁶IMM Reply Comments at 7.

⁵⁷IMM Reply Comments at 9.