

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Midwest Independent Transmission System,
Operator, Inc.

Docket No. ER06-1099-002

ORDER DENYING REHEARING AND PROVIDING CLARIFICATION

(Issued June 27, 2007)

1. In this order, the Commission addresses a request for rehearing and clarification of the Commission's order issued January 5, 2007,¹ in which the Commission approved revisions to the Midwest Independent Transmission System Operator, Inc.'s (Midwest ISO) Open Access Transmission and Energy Markets Tariff (TEMT or tariff). The approved tariff revisions add an Adequate Ramp Capability (ARC) step to the Midwest ISO's procedures for addressing shortage and emergency conditions in the real-time energy market. The Commission will deny rehearing and provide clarification, as discussed below.

I. Background

2. In June 2006, the Midwest ISO proposed revisions to its TEMT to add ARC as a new step to its already-existing real-time energy market shortage condition procedures. In response, the Commission ordered a technical conference to obtain more details and to better understand certain aspects of the Midwest ISO's proposal.² The Commission held the technical conference in September 2006, and provided participating parties with the

¹ *Midwest Independent Transmission System Operator, Inc.*, 118 FERC ¶ 61,009 (2007) (January 5 Order).

² *Midwest Independent Transmission System Operator, Inc.*, 116 FERC ¶ 61,124 (2006).

opportunity to submit post-conference comments. In the subsequent January 5 Order, the Commission accepted the Midwest ISO's proposed tariff revisions, subject to the Midwest ISO making certain modifications to its proposal in a compliance filing.³ The Commission also imposed reporting requirements on the Midwest ISO with respect to its use of ARC.

3. ARC, the new "Step One" in TEMT section 40.2.15,⁴ is meant to provide the Midwest ISO with an additional means for addressing capacity shortage conditions that can affect short-term reliability. Through ARC, the Midwest ISO intends to avoid declining frequency and other pre-emergency conditions when there is a substantial imbalance between generation and load that cannot be addressed within the normal operating ranges of on-line resources. More specifically, invoking ARC (*i.e.*, Step One) enables the Midwest ISO to use, for up to 60 minutes, up to 50 percent of a generating unit's capacity above that unit's economic maximum, but below its emergency maximum, excluding regulation. If use of ARC does not resolve a sudden energy imbalance within 60 minutes or if the Midwest ISO requires more than the 50 percent of capacity available above a generating unit's economic maximum capacity to manage the sudden energy imbalance, then the Midwest ISO can use the procedures available in revised Step Two.⁵

4. The Midwest ISO intends to provide market participants with price signals through "higher of" pricing; that is, once the Midwest ISO invokes ARC, the offer price for capacity dispatched is the higher of either: (1) the market participant's submitted offer, or (2) a shortage condition peaker proxy offer price. Once the offer price is established using "higher of" pricing, the Midwest ISO then dispatches segments of capacity in merit order, based on the offer price so determined. The established offer price is also eligible to set the locational marginal price (LMP).

³ The compliance filing, submitted February 5, 2007, is currently pending before the Commission.

⁴ The Midwest ISO's proposal reconfigured other steps listed in TEMT section 40.2.15 that are meant to address shortage conditions. ARC is the new "Step One." Revised "Step Two" combines the TEMT's previous Steps One, Two and Three. Revised "Step Three" is the previous Step Four, renumbered.

⁵ The Midwest ISO is authorized to initiate the procedure that best addresses the severity of the shortage condition, generally proceeding in a step-wise fashion, but without having to roll out each procedure in a designated order should system conditions dictate.

II. Request for Rehearing and Clarification

5. The Midwest TDUs⁶ request rehearing and/or clarification of three aspects of the Commission's January 5 Order. First, they request rehearing of the Commission's decision to approve "higher of" pricing. Second, the Midwest TDUs request the Commission to clarify that the Midwest ISO must apply automated mitigation procedures to ARC, or in the alternative, if the Commission does not make the requested clarification, then it should grant rehearing on the issue. Third, the Midwest TDUs request that the Commission require the Midwest ISO to confirm that it can fulfill the monitoring and reporting mandated by the January 5 Order.

III. Discussion

A. "Higher Of" Pricing

6. The Midwest TDUs argue that the Commission has erred by approving "higher of" pricing, and in particular use of a peaker proxy offer. They object on the grounds that such a pricing scheme is not rationally related to the goal of attracting capacity with efficient ramp capability, and that it is not needed to ensure that LMPs do not decline when ARC is triggered. The Midwest TDUs state that the Commission's grounds for accepting "higher of" pricing are infirm, and that the Commission should grant rehearing.

7. Regarding the Midwest TDUs' objection that "higher of" pricing is not rationally related to attracting ramp capacity, the Midwest TDUs find fault with the Commission's discussion of this issue in the January 5 Order, where the Commission stated:

[W]e find that under ARC, potentially higher rates are rationally related to the attraction of new capacity inasmuch as the pricing signals ARC creates more accurately reflect the need for additional capacity in the market. ARC will only be triggered when scarcity supply conditions actually exist, which will be determined by Midwest ISO.⁷

⁶ The Midwest TDUs include: Great Lakes Utilities, Lincoln Electric System, Madison Gas & Electric Company, Midwest Municipal Transmission Group, Missouri Joint Municipal Electric Utility Commission, Missouri River Energy Services, Southern Minnesota Municipal Power Agency, and Wisconsin Public Power Inc.

⁷ January 5 Order, 118 FERC ¶ 61,009 at P 54.

The Midwest TDUs state that the Commission's conclusion is not supported by evidence that the need for ramp capability is attributable to scarcity conditions or that "higher of" pricing will attract capacity with needed ramp capability.

8. The Midwest TDUs state that the need for additional ramp capability is tied to Midwest ISO dispatch decisions and not to insufficient capacity. They cite a Midwest ISO explanation that the conditions giving rise to ARC pricing include "loss of [a] large unit or loss of substantial import capability due to a transmission loading relief (TLR) event by a neighboring Reliability Coordinator."⁸ The Midwest TDUs state that these conditions do not represent scarcity associated with the absence of generation, the Commission's apparent justification for raising prices.

9. The Midwest TDUs argue that the Commission cites no evidence that the peaker proxy would attract the kind of capacity into the market that would address the scarcity conditions present under ARC.⁹ The Midwest TDUs aver that, in fact, peaking capacity is not well-suited to addressing inadequate ramp capacity—due to peaking capacity's lack of dispatchable capacity or lack of sufficiently flexible dispatchable capacity.¹⁰ Midwest TDUs state that the IMM explained at the technical conference that relying on peakers to provide ramping capability increases Revenue Sufficiency Guarantee costs and is inefficient compared to calling on the reserves of steam units, due to the inflexibility of peaking units (*e.g.* because a peaking unit has a narrow range of operation between its economic minimum and economic maximum).¹¹ In this regard, the Midwest TDUs contend, the Commission has failed to provide a factual basis for its decision, and has also failed to "forecast or otherwise estimate the dimensions of the need for additional capacity" and calibrate the relationship between increased rates and the attraction of new capital," as required by *Farmers Union Central Exchange v. FERC*, 734 F.2d 1486, 1503 (D.C. Cir. 1984).

⁸ Midwest TDUs Reh'g Request at 3, *quoting* IMM Presentation, Slide 10, from the technical conference.

⁹ The Midwest TDUs presume that peaker capacity is the type of capacity that would be attracted into the market.

¹⁰ *See* Midwest TDUs Reh'g Request at 4, *quoting* IMM Presentation, Slide 10, from the technical conference.

¹¹ *Id.*, *citing* Tr.144, 145.

10. The Midwest TDUs contest the Commission's potential argument that, even if the Midwest TDUs' objections are justified, "higher of" pricing remains just and reasonable because it reflects "the cost of resources needed on the margin to replenish reserves that are used for energy during an ARC event."¹² The Midwest TDUs state that, as described above, the resources needed during an ARC event are not peakers, which are a poor source of ramping capability, but rather reserves of steam units. They state that there is no evidence that "higher of" pricing is needed to ensure that units better suited to provide ramp capacity recover their energy costs; rather, the cost of energy from such reserves can and should be reflected in such unit's bids, which will "enable to the LMP to reflect and recover such costs." Therefore, the Midwest TDUs aver, the Commission's cost recovery justification lacks both evidentiary support and a rational basis, and rehearing is justified.

11. Regarding the Midwest TDUs' objection that "higher of" pricing is not needed to keep LMPs from falling under ARC conditions, the Midwest TDUs claim that the Commission's response to this argument mimicked the Midwest ISO's claims when the Commission stated in paragraph 53 of the January 5 Order:

We also recognize the potential for prices to fall (and thus not reflect shortage conditions) should Midwest ISO call on on-line resource capacity without "higher of" pricing. Prices could fall because Midwest ISO would be calling into the energy market on-line resource capacity that is usually withheld by balancing authorities to meet reserve obligations. This capacity is lower cost than the capacity likely to be clearing the market at the time at which ARC is invoked. The result could be falling prices just when more expensive generation may be needed to replenish reserves that are being used for energy. We find that Midwest ISO's use of an administratively determined peaker proxy price is an appropriate mechanism to prevent LMPs from dropping when ARC is triggered.¹³

The Midwest TDUs state that this response fails to respond meaningfully to their showing that the Midwest ISO does not need to manipulate LMPs or resort to an administratively determined peaker proxy price to prevent LMPs from falling when ARC is triggered.

¹² *Id.* at 6, *citing* January 5 Order, 118 FERC ¶ 61,009, at P 54.

¹³ Midwest TDUs Reh'g Request at 4-5, *citing* January 5 Order, 118 FERC ¶ 61,009, at P 53.

12. To illustrate their point, the Midwest TDUs recall the example the Midwest ISO provided at the technical conference of why LMPs could decline under ARC, where the Midwest ISO claimed that LMPs could decline during ARC if the marginal cost of in-merit peakers bidding from at or below their economic maximum was higher than the marginal cost of segments above economic maximum of, *e.g.*, steam units dispatched under ARC. The Midwest TDUs argue that, rather than using “higher of” pricing, the Midwest ISO can prevent LMP decline by setting the LMP at the highest dispatched offer, regardless of whether it comes from an output segment of a peaker operating at or below its economic maximum, or an output segment of a steam unit dispatched above its economic maximum. They state that such an approach ensures that already dispatched units are not harmed by falling LMPs, and that units dispatched to higher levels under ARC recover at least their incremental costs, and, where they are inframarginal, additional contributions toward fixed costs. The Midwest TDUs state that the Commission’s reasoning neither addresses nor overcomes the Midwest TDUs’ showing that “higher of” pricing is not needed to prevent falling LMPs.

Commission Determination

13. In the January 5 Order, the Commission found the Midwest ISO’s proposed “higher of” pricing methodology for ARC to be just and reasonable, because, in the event of a temporary shortage when conditions warrant use of on-line operating reserves to supply energy, the ARC pricing methodology would provide the right incentives to the market in the form of an appropriate pricing signal. We noted that without “higher of” pricing, LMPs could fall during the imposition of ARC because the Midwest ISO would be calling into the energy market on-line capacity that is usually withheld by balancing authorities to meet reserve obligations. This capacity is lower-cost than the capacity likely to be clearing the market at the time ARC is invoked. As such, the result could be falling LMPs just when more expensive generation may be needed to replenish reserves that would now be used for energy. The Commission also found that, under ARC, potentially higher rates would be rationally related to the attraction of new capacity, inasmuch as the pricing signals ARC creates more accurately reflect the need for new capacity in the market. Further, we found that ARC would only be triggered when scarcity supply conditions already exist (which would be determined by the Midwest ISO).

14. We are not persuaded that we erred, and we will deny rehearing. ARC is intended as a short-term reliability mechanism that will provide incentives for existing generators to offer megawatts into the market so that the Midwest ISO can resolve unpredicted shortage conditions and maintain system reliability. ARC is not intended to provide

long-term price signals to encourage the building of more generation.¹⁴ The Midwest TDUs rely on *Farmers Union* for their argument that increased rates must be rationally related to the attraction of new capacity, but *Farmers Union* addressed the need for increased oil pipeline rates to be rationally related to the need for long-term capital investments to build additional oil pipeline capacity. The “higher of” pricing methodology used in ARC is necessary to address short-term reliability. Measures needed to ensure that the Midwest ISO is capable of maintaining system reliability in the short-term should be distinguished from measures needed to ensure that the long-term capital investment needs of a system are being met. And, ARC’s “higher of” pricing is rationally related to the Midwest ISO’s need to maintain short-term system reliability.

15. ARC’s “higher of” pricing methodology serves a short-term reliability function by ensuring that the price signal when ARC is implemented is consistent with the temporary shortage condition that triggered ARC. As the system operator, the Midwest ISO commits generators in response to the day-ahead market and in anticipation of the need for additional reserves to meet forecast load. Because short-term shortage conditions arise unpredictably, such as from unanticipated outages, load, or TLR events, it is difficult for the Midwest ISO to forecast the precise amount of capacity that will be needed to maintain short-term system reliability during a shortage condition. Meanwhile, it is costly and inefficient for the Midwest ISO to keep substantial capacity in reserve for infrequent short-term events. The “higher of” pricing methodology sets a price during a shortage condition that is designed to provide a price signal that reflects the opportunity costs of using reserved capacity for energy—as measured by the price of a peaking unit that would have been needed without ARC. That price signal may ultimately be needed to replenish the reserves now being used for energy under ARC. Hence ARC provides incentives consistent with the objective of reliable operation at the lowest reasonable cost.

16. We disagree with the Midwest TDUs’ argument that the need for additional ramp capability is tied to Midwest ISO dispatch decisions, and that the conditions that precipitate ARC do not represent true shortage conditions. The role of the Midwest ISO is to make dispatch decisions based on forecasted demand and to maintain system

¹⁴ We note that peaker costs may be used in other aspects of the Midwest ISO’s market in order to attract new capital, such as in the NCA thresholds. We are not arguing that peaker proxy pricing will not encourage entry, merely that the intent of peaker proxy pricing in ARC is to address short term shortages, and as such, no evidence of attraction of new capacity is required.

reliability.¹⁵ In committing capacity to meet expected demand, it would be inefficient for the Midwest ISO to commit (or over-commit) system resources in such a way as to prepare for every potential shortage condition. Unanticipated load, outages, or TLR events, or even fluctuations in demand or weather can give rise to such shortage conditions. The premise of ARC is to allow the Midwest ISO to continue committing capacity (*i.e.*, making dispatch decisions) to meet expected demand, while giving the Midwest ISO a tool in the event that an unanticipated condition should occur and cause a temporary shortage on the system. By giving the Midwest ISO quick access to resources that are otherwise set aside for reserves, ARC allows the Midwest ISO to avoid over-committing system resources without sacrificing system reliability.

17. We also find that “higher of” pricing properly accounts for the cost of system operation at the time of the shortage that caused ARC to be implemented. Without ARC, the Midwest ISO would need to start a peaking unit to maintain the energy balance (since without ARC, reserves would not be available to remedy the temporary shortage). ARC avoids the cost of starting a peaker in the situation where on-line capacity above the economic maximum can relieve the ramping constraints and balance the system; ARC permits the operator to use reserves that otherwise would not be available for energy. “Higher of” pricing ensures that the bids associated with using otherwise reserved capacity, *i.e.*, above the economic maximum, are consistent with the avoided cost of starting a peaker to respond to the temporary shortage.

18. Furthermore, we find that “higher of” pricing will attract the appropriate resources into the system to replenish reserves when needed. Units providing on-line reserves (*i.e.*, units already being dispatched by the Midwest ISO) are, on average, different than the types of units that would be brought on-line to provide replacement reserves in the event of a shortage. Units providing on-line reserves are more likely to be large baseload units,¹⁶ while units brought on-line in the event of a shortage are likely to be peaking units that can respond quickly. Steam units cannot be brought on-line quickly enough to address the short term shortage of reserves ARC is designed to resolve. “Higher of” pricing, by having the potential to set the LMP at a peaker proxy price, also ensures that peakers—which are designed to ramp up quickly—will be given an adequate incentive to

¹⁵ The Midwest TDUs’ argument is something of a tautology in that the Midwest ISO’s role as system operator is to make dispatch decisions in order to manage the system both reliably and efficiently; thus, the need for additional resources or ramp capability can always be “tied” or related back to Midwest ISO dispatch decisions.

¹⁶ These already on-line units are the ones the Midwest ISO would call upon under ARC to provide operating capacity from the range above their economic maximum.

come on-line to replenish reserves and/or to supply energy to permit the operator to reduce the output levels of on-line units back to within their economic operating ranges.

19. Regarding the Midwest TDUs' argument that "higher of" pricing is not needed to prevent LMPs from falling when ARC is triggered, we disagree. Under ARC, there is the potential for the resulting LMPs to be too low,¹⁷ and thus to fail to signal that additional capacity is needed in the dispatch or reserve commitment process. Lowered LMPs, resulting from the influx of on-line reserves under ARC, would send a price signal that is likely to be below the cost of resources that may be needed to replace such reserves quickly, and thus would prevent replacement of those reserves. In addition, a drop in LMPs would send the wrong signal to the demand side of the market, creating the potential for increased demand just as the system is trying to recover from a shortage condition. By allowing price to be set at the estimated cost of a peaking unit that would be the unit used to replenish reserves, "higher of" pricing establishes a proxy price that is not lower than the estimated cost of replenishing reserves, thereby avoiding these problems.

20. The Midwest TDUs claim that the Midwest ISO should not employ "higher of" pricing under ARC to prevent the LMP from falling, but should instead generate LMPs that are sufficiently high by setting the LMP at the highest offer dispatched. This claim appears to be based on a misconception of the pricing approach currently used in the Midwest ISO's energy market. In the Midwest ISO, the LMP is not based on all units dispatched, but only on units that are *dispatchable*; that is, the LMP is based on units that can respond to a dispatch signal. A unit that has already been dispatched and is running at its maximum dispatchable output cannot set the LMP because it is no longer dispatchable. Without proxy pricing, the LMP could be set by a bid of a large coal unit for capacity above its economic maximum which becomes dispatchable because of ARC. Since the bid would be set by an inexpensive coal unit, not by the more expensive bid of a peaking unit, just as described above the LMP could fall with the implementation of ARC. LMPs would likely fall below the cost of the capacity that may be needed to replenish the reserves used under ARC to balance the system. We believe that the proxy pricing methodology of ARC, which provides price signals based on the estimated cost of

¹⁷ LMPs can fall because, as explained in the January 5 Order, the "Midwest ISO would be calling into the energy market on-line resource capacity that is usually withheld by balancing authorities to meet reserve obligations. This capacity is lower cost than the capacity likely to be clearing the market at the time at which ARC is invoked."

replenishing reserves, recognizes this potential and constitutes a reasonable approach to addressing it.

21. Finally, the Midwest TDUs make the argument that the cost of energy from reserves can and should be reflected in the offers themselves, rather than the proxy price. As a practical matter, the Midwest TDUs do not address how the cost for such reserves would be valued given that the Midwest ISO does not yet have a market for ancillary services.¹⁸ We further note that the costs of providing such reserves may be unknown at the time an offer is made and could require repeated revisions. The cost of providing the capacity will vary depending on whether the capacity will be used to replace reserves or as energy during the ARC event. The cost will also vary depending on the status of the generator. For example, when the generator is derated and its economic maximum is lowered, the cost of providing additional capacity are likely be higher, as the generating unit may be put at more risk as it increases its output. Such costs could be difficult to determine and thus monitor, and could potentially be subject to manipulation. The Midwest TDUs have offered no explanation of how these problems with their recommended approach would be resolved. We believe that using the proxy price is a reasonable method to deal with pricing under ARC, and it is simpler and more straightforward than the Midwest TDUs' recommended approach.

B. Automated Mitigation

22. The Midwest TDUs request clarification on whether the Midwest ISO must apply automated mitigation procedures to offers submitted under ARC; that is, whether automated mitigation will apply to those offers of output in the range between a unit's economic maximum and emergency maximum, as occurs for other offers in the real-time market.¹⁹ The Midwest TDUs explain that, at the technical conference, the Independent Market Monitor (IMM) stated that automated mitigation procedures would not apply to ARC because "the marginal costs of emergency output are uncertain."²⁰ The Midwest

¹⁸ Without a market for ancillary services, it would be difficult to determine the value of the reserves.

¹⁹ Here automated mitigation occurs when bids that fail the conduct and impact tests are reset to the default bid of the generator. In the real-time market, such mitigation generally occurs within two to three dispatch cycles. We note that automated mitigation has not yet been instituted in the Midwest ISO's day-ahead energy market.

²⁰ Midwest TDUs Reh'g Request at 6, *quoting* IMM Presentation, Slide 2, from the technical conference.

TDUs state that they responded to this argument in their comments submitted after the technical conference, in which they showed that non-application of automated mitigation is not just and reasonable. The Midwest TDUs are unclear whether the Commission's discussion on mitigation in the January 5 Order (at paragraph 76) is consistent with the Midwest TDUs' position that automated mitigation should be applied to ARC, or if the Commission agreed with the IMM's position that automated mitigation would not apply to ARC.²¹

23. The Midwest TDUs state that, if the Commission does not clarify that automated mitigation applies to ARC, then the Commission should grant rehearing on the issue; that is, the Commission should require that the Midwest ISO apply automated mitigation measures to ARC. In support of their position, the Midwest TDUs aver that the IMM's claims regarding uncertainty as to the marginal costs of emergency output are not credible given existing procedures for accounting for changes in marginal costs. Further, they argue that any additional effort required to make the mitigation measures work with ARC is mandated by the Commission's obligation under the Federal Power Act (FPA) to protect consumers from market power.

24. The Midwest TDUs identify three mechanisms in the Midwest ISO's mitigation procedures that can specifically address the marginal costs of operating a unit above its economic maximum. First, the Midwest TDUs state that reference prices can be set for specific output segments; second, a seller can contact the Midwest ISO to obtain a change in its reference price based on changes in its marginal costs; and third, the thresholds for broad constrained areas (BCAs) accommodate a broad range of changes in marginal costs—the lesser of \$100/MWh or 300 percent. According to the Midwest TDUs, the ability of these mechanisms to account for the marginal costs of units' output segments above their economic maximum makes the IMM's claims regarding the imprudence of applying automated mitigation ring hollow.²² The Midwest TDUs note that the IMM acknowledged at the technical conference that it would be possible to establish "a second set of reference prices that would apply to the emergency range," and that doing so

²¹ See Midwest TDUs Reh'g Request at 7, discussing why the Commission's language is ambiguous.

²² The Midwest TDUs contest the IMM's contention that applying automated mitigation is "probably imprudent, because you're letting the software just mitigate it without any review of whether it's appropriate or not." Midwest TDUs Reh'g Request at 8, *citing* Tr. 121.

“would require a fair amount of software changes,” but couldn’t think “of any reason why that would be technically infeasible.”²³

25. The Midwest TDUs state that the foregoing shows that any added burden associated with applying the Midwest ISO’s mitigation measures to ARC is manageable in the context of the Midwest ISO’s existing mitigation procedures, or modifications thereto. They state that the Commission’s obligation to ensure that consumers are protected from market power—an obligation that is a prerequisite to reliance on market-based pricing—requires that the Midwest ISO apply its mitigation measures to ARC. They state that the ARC procedures will set, and, in some cases increase, LMPs applied to a potentially large number of megawatt-hours of energy sales and purchases. They further state that the harm to consumers is “no less cognizable because those sales and purchases occur under Step One ARC conditions.”²⁴

Commission Determination

26. We clarify that it was our intent that automated mitigation of ARC offers by the IMM (as is currently needed within BCAs and narrow-constrained areas (NCAs)) is not required. We also deny rehearing on the issue of automated mitigation of offers of energy obtained under the ARC process. We will hereinafter, when discussing mitigation, distinguish between automated mitigation and “other” or “non-automated” mitigation measures in Module D of the Midwest ISO’s TEMT.

27. We agree with the IMM’s statement from the technical conference that the actual costs of operating above economic maximum can be uncertain and that ratings can change with conditions, potentially subjecting output in the range above a unit’s economic maximum to reference prices based on periods when the output was in a more typical range.²⁵ Given this finding, we determined in the January 5 Order that applying automated mitigation to output in the above-economic-maximum range would be problematic.²⁶ And, as indicated in the January 5 Order, generators will still be subject to the provisions of Module D of the TEMT; *i.e.*, even though generators will not be subject to automated mitigation, their offers will remain subject to other, non-automated mitigation. These other mitigation measures in Module D provide for monitoring and

²³ Midwest TDUs Reh’g Request at 8, *citing* Tr. 126-27.

²⁴ Midwest TDUs Reh’g Request at 9.

²⁵ January 5 Order, 118 FERC ¶ 61,009, at P 71; *see also* Tr. 118-19.

²⁶ *Id.* P 76.

reporting of the exercise of market power to the Commission. The Commission has the authority, upon such reporting, to determine whether a penalty or sanction is appropriate. TEMT section 62.c provides for monitoring of conduct that may distort competitive outcomes but does not trigger the thresholds associated with the mitigation measures. If the IMM identifies such conduct, the IMM is to make a filing with the Commission under section 205 that requests authorization to apply appropriate mitigation measures, proposes a specific mitigation measure for the conduct, and provides justification for that specific mitigation measure. Generators that bid above their reference levels in the range above their economic maximum levels should be aware that their bids will be scrutinized by the IMM for the exercise of market power. We find that the non-automated mitigation measures in Module D are sufficient to address any exercise of market power, and that applying these other mitigation measures to ARC fulfills our obligation under the FPA to ensure that rates remain just and reasonable.

28. The Midwest TDUs argue that automated mitigation of generation obtained under ARC is manageable, and in this regard emphasize that reference prices are not uniform throughout a unit's output range, that a seller can contact the Midwest ISO to request a change in its reference price based upon changes in its marginal costs, and that the thresholds for BCAs can accommodate changes in marginal costs. However, it is likely that a generator's cost of operating in the above-economic-maximum range is significantly more variable than its cost of operating within its normal range; it is also not clear to us that the reference prices are necessarily reflective of the costs of operation in the above-economic-maximum range, even for a single generator. This is because capacity in this emergency range may be subject to uncertain operating costs, such as the cost of operating a unit at a higher-than-normal level given that operation at that level could well lead to problems like tube leaks which could degrade the unit's ability to operate longer-term. Frequent updating of reference prices in the above-economic-maximum range solely to address automated mitigation during ARC events would also impose significant costs, even if ARC were to be applied infrequently (as it likely would be). Thus, we find that automated mitigation of ARC generation is much less practicable than the Midwest TDUs claims it to be.

29. We recognize that the IMM noted at the technical conference that automated mitigation could be feasible for ARC units after "a fair amount of software changes." However, we are not convinced the software changes are necessary at this time, and given the difficulties presented in applying automated mitigation to ARC, we will not order it at this point in time. We also believe that the use of the proxy price with higher of pricing during the use of ARC will reduce the incentive for generators to increase their offers to take advantage of an ARC event. The proxy price should serve as a reasonable estimate of the expected cost of replenishing reserves, a generator's incentives to try to raise the offer price to guess the cost of such replacement is diminished.

C. Monitoring and Reporting Confirmation

30. The Midwest TDUs note that the January 5 Order imposed a number of requirements on the Midwest ISO to monitor and report on the performance of the ARC procedures. They state that they support these requirements, but are “wary” of the Midwest ISO’s ability to fulfill them. In particular, the Midwest TDUs cite to an order the Commission issued in April 2005, *Midwest Independent Transmission System Operator, Inc.*, 111 FERC ¶ 61,053 (2005), in which the Commission required the Midwest ISO to provide “an estimate and analysis” of losses for selected market participants in “megawatt-hour terms.” The Midwest TDUs state that, after missing several deadlines, the Midwest ISO submitted a letter informing the Commission that it was incapable of tracking the required data in megawatt-hour terms, and that it could not even make estimates of such data; the Midwest ISO suggested instead that tracking be done in “dollar terms” because tracking in megawatt-hour terms was not feasible under the energy-markets as designed and operated. The Midwest TDUs contend that the Midwest ISO ultimately did not submit the financial information.

31. The Midwest TDUs, fearing “non-performance” by the Midwest ISO, request that the Commission require the Midwest ISO to state, within 30 days of this order, whether and to what extent it is capable of fulfilling the monitoring requirements in the January 5 Order, and that if the Midwest ISO is incapable of fulfilling a particular requirement, it should explain why. The Midwest TDUs state that, based on the Midwest ISO’s response, the Commission should modify its ARC directives to ensure the kind of market participant protection for which such directives were intended.

Commission Determination

32. We find no need to impose further requirements on the Midwest ISO beyond the reporting and monitoring requirements already imposed in the January 5 Order. We note that the Midwest ISO was required to submit a compliance filing as a result of the January 5 Order. The Midwest ISO has submitted that compliance filing as requested, in the time requested.²⁷

²⁷ See Midwest ISO February 5, 2007 Compliance Filing, Docket No. ER06-1099-003.

The Commission orders:

Rehearing of the January 5 Order is hereby denied and clarification provided, as discussed above.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.