UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Midwest Independent Transmission System Operator, Inc. — Docket Nos. ER04-691-079, ER04-691-081

ORDER ACCEPTING IN PART AND REJECTING IN PART COMPLIANCE FILING

(Issued March 15, 2007)

1. The Midwest Independent Transmission System Operator, Inc.'s (Midwest ISO) Transmission and Energy Markets Tariff (TEMT) provides generators of electric energy with a real-time revenue sufficiency guarantee (RSG).[1] The real-time RSG credit ensures that any generator scheduled or dispatched by the Midwest ISO after the close of the day-ahead energy market – either through the Reliability Assessment Commitment (RAC) or the real-time energy market – will receive no less than its offer prices for start-up, no-load and incremental energy. RSG credits are most often paid to units scheduled in the RAC or in the real-time market that do not earn sufficient real-time energy revenues to cover start-up and no-load costs. RSG costs are allocated based on the load and resource deviations, virtual offers, exports and imports of market participants withdrawing energy.

2. In a rehearing order dated October 26, 2006 (RSG Rehearing Order),[2] the Commission required the Midwest ISO to make compliance filings to ensure that RSG

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[1] The RSG payment is equal to the product of the market participant's load purchased in real time, all virtual supply in the day-ahead energy market, and resource uninstructed deviation quantities times the per-unit RSG charge. TEMT Module C, section 40.3.3.a.ii, Second Revised Sheet Nos. 577-78.

[2] *Midwest Independent Transmission System Operator, Inc.*, 117 FERC ¶ 61,113 (2006) (RSG Rehearing Order).

charges and credits are accurately assessed, to analyze the impact of virtual supply offers on RSG costs and to make a proposal to allocate RSG costs to virtual supply offers. In this order, the Commission accepts in part and rejects in part the compliance filings.

I. Background

3. In its order addressing the Midwest ISO's first filing proposing changes to RSG charges and credits, the Commission rejected the Midwest ISO's proposal to not allocate RSG charges to virtual supply offers and also required the Midwest ISO to revise its proposal so that RSG charges and credits are assessed on imports and generation deviations.[3] The RSG Rehearing Order affirmed the RSG Order rejection of the Midwest ISO proposal to not allocate RSG costs to virtual supply offers. It also required the Midwest ISO to undertake an analysis to determine the amount of RSG costs caused by virtual supply offers and to resubmit a proposal to allocate RSG costs to virtual supply offers based on a cost causation analysis. The RSG Rehearing Order also clarified that refunds would be required for RSG charges incorrectly assessed to imports and for incorrect assessments of RSG charges and credits for deviations from dispatch instructions. Finally, the RSG Rehearing Order required other tariff revisions, including specification of a tolerance band that would be used in determining liability for RSG charges and eligibility for RSG credits.

4. The Midwest ISO made its first compliance filing on November 27, 2006, as amended on December 8, 2006 (November 27 Compliance Filing). The November 27 Compliance Filing included revised tariff sheets that: (1) add definitions; (2) clarify the difference between actual and instructed generator output; (3) clarify that market participants will not be assessed RSG for differences caused by lags in the State Estimator and Unit Dispatch System; (4) make minor phrasing revisions as required in the RSG Rehearing Order; (5) specify a tolerance band to aid the Midwest ISO in determining what entities are eligible for RSG charges and credits; (6) proposes to refund all RSG charges assessed to import transactions for any type of deviations from day-ahead schedules. The Midwest ISO also indicates that in January 2007, it plans to begin to comply with the refund requirements affirmed in the RSG Rehearing Order.

5. The Midwest ISO submitted its second compliance filing on December 26, 2006, as amended on February 12, 2007 (December 26 Compliance Filing). In that submittal, the Midwest ISO: (1) presents its analysis of the amount of RSG costs attributable to

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[3] *Midwest Independent Transmission System Operator, Inc.*, 115 FERC ¶ 61,108 (2006) (RSG Order).

virtual supply offers; and (2) proposes tariff modifications that describe the method by which RSG costs attributable to virtual supply offers is calculated.

II. Notice, Interventions and Protests

6. Notice of the November 27 Compliance Filing was published in the *Federal Register*, 71 Fed. Reg. 74,511 (2006), with interventions and protests due on or before December 18, 2006. Notice of the Midwest ISO's amendment to the filing was published in the *Federal Register*, 71 Fed. Reg. 75,961 (2006), with interventions and protests due on or before December 29, 2006. Strategic Energy, LLC filed a timely motion to intervene. E.ON U.S., LLC (E.ON), Wisconsin Electric Power Company (WEPCO), Split Rock Energy, LLC (Split Rock), and Ameren Services Company (Ameren) filed timely motions to intervene and comment or protest. Ameren filed a Motion for Stay and Request for Expedited Treatment. The Midwest ISO, DC Energy Midwest, LLC (DC Energy), Hoosier Energy Rural Electric Cooperative, Inc. (Hoosier), Duke Energy Shared Services, Inc. (Duke Energy), E.ON, and Allete, Inc. (Allete) filed answers to the Motion for Stay.

7. Notice of the December 26 Compliance Filing was published in the *Federal Register*, 72 Fed. Reg. 1,507 (2007), with interventions and protests due on or before January 16, 2007. Strategic Energy, LLC and Alliant Energy Corporate Services, Inc. filed timely motions to intervene. E.ON, CAM Energy Trading, LLC (CAM Energy), Edison Mission Marketing & Trading, Inc. and Midwest Generation EME, LLC (collectively, Edison Mission), Saracen Energy LP (Saracen), EPIC Merchant Energy, LP and SESCO Enterprises, LLC (collectively, Financial Marketers), DC Energy, Otter Tail Power Company, WPS Resources,[4] Olde Town Energy Associates, LLC (Old Towne) and Ameren filed timely motions to intervene and comment or protest. The Midwest ISO filed an answer to the protests and Ameren filed an answer in response to the Midwest ISO answer.

8. Commission Staff sent the Midwest ISO a deficiency letter on January 26, 2007, asking (as further detailed below) for an analysis that would enable the Commission to identify the costs caused by virtual supply offers.[5] The Midwest ISO filed a response to the deficiency letter (Midwest ISO's Deficiency Letter Response).

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[4] WPS Resources include WPS Resources Corporation, Wisconsin Public Service Corporation and Upper Peninsula Power Company.

[5] Letter Order, Docket No. ER04-691-081 (Jan. 26, 2007) (Deficiency Letter).

9. Notice of the Midwest ISO's Deficiency Letter Response was published in the *Federal Register*, 71 Fed. Reg. 8,372 (2007), with interventions and protests due on or before February 20, 2007. Edison Mission, E.ON, and Financial Marketers filed timely motions to intervene and comment or protest.

III. Discussion

A. Procedural Matters

10. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2006), the notices of intervention serve to make the entities that filed them parties to this proceeding.

11. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2006), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept the answers of the Midwest ISO, DC Energy, Hoosier, Duke Energy, E.ON, and Allete that address the November 27 Compliance Filing because they have provided information that assisted us in our decision-making process.

12. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2006), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We are not persuaded to accept the Midwest ISO's and Ameren's answers addressing the December 26 Compliance Filing and will, therefore, reject them.

B. Motion for Stay

13. In its Motion for Stay, Ameren states that Midwest ISO's plan to begin resettling the energy markets to implement RSG charges refunds is premature. Ameren further states that resettling the markets prior to the issuance of subsequent orders on rehearing would be grossly inefficient. Ameren requests that the Commission stay the resettlement until it has reconsidered its refund and crediting directives and the RSG Rehearing Order is final. Ameren claims that the instant proceeding meets the criteria for granting a stay. Specifically: (1) a stay of the refund and crediting directives is warranted by the public interest; (2) in the absence of a stay, Ameren and other market participants will suffer irreparable harm; (3) there is no adequate redress for injury that will result from the premature implementation of the refund and crediting directives; and (4) granting a stay will not harm other parties.

14. Ameren asks that alternatively, in the absence of a stay, the Commission could grant the Midwest ISO another extension of time to comply with the RSG refund and crediting directives until the rehearing process and judicial review are complete.

Ameren asks for expedited consideration of its request for either a stay or extension of time for Midwest ISO to comply with the previous orders.

15. In response to Ameren's argument that it would be premature for Midwest ISO to implement the Commission's refund directives in the January 2007 market resettlements, Midwest ISO states in its answer that there is no legal basis to stay implementation of the refund directives in the absence of any Commission order stopping such implementation.

16. E.ON supports Ameren's Motion to Stay until the Commission rules on Midwest ISO's compliance filings and the October 26 Order is final. E.ON asserts that in the November 27 Compliance Filing, Midwest ISO errs in interpreting the Commission's statement that imports are not withdrawals to preclude any RSG charges to an otherwise RSG-eligible market participant for its import transactions. E.ON notes that both positive real-time import deviations and real-time negative load deviations are, along with any of the other aforementioned RSG charge allocation types that may exist, included in the currently effective tariff among those transactions that contribute to the amount of RSG costs assessed to an otherwise eligible market participant.

17. Duke Energy disagrees with Ameren's arguments that companies received a windfall by engaging in virtual transactions that were not assessed RSG. Duke Energy states that if market participants had received bills each week assessing RSG charges for virtual offers, they could have changed their activities subsequently to avoid RSG charges by engaging in less virtual offers. Duke Energy agrees with the Commission that retroactive imposition of RSG charges has the potential to render past virtual transactions uneconomic. According to Duke Energy, if market participants had understood that RSG charges would be applied to virtual offers, they would have assessed the economics of each such transaction accordingly in advance, discovered that application of the RSG charge rendered some virtual transactions uneconomic, and hence would have engaged in fewer virtual transactions.

18. Allete states that Ameren's argument for a stay is unpersuasive with respect to the Midwest ISO's obligation to pay refunds for GFA-related transactions. Allete notes that the Midwest ISO has already indicated that the refund process for real-time RSG charges associated with GFA transactions will not be an overly complicated process requiring the expenditure of excessive amounts of time and energy. Allete believes that a stay of refunds will actually harm parties like Minnesota Power that have been working with the Midwest ISO concerning the calculation of refunds and have been expecting the full payment of such refunds in the near future.

19. Hoosier states that Ameren's request to stay ignores the fact that refunds related to RSG charges improperly assessed to parties to GFAs that are carved out of the energy markets have already begun to flow to Hoosier and other similarly impacted entities.

Accordingly, Hoosier states that granting Ameren's motion would cause, not prevent, market disruption and the issuance of unnecessary multiple settlement statements. Hoosier also notes that the Midwest ISO has already begun to provide refunds of RSG amounts that were improperly charged to Hoosier and other parties to carved-out GFAs.

20. We deny Ameren's Motion for Stay. While the Commission has the discretion to grant a stay of its orders, and a court may likewise stay the effect of Commission orders, orders are effective in accordance with their terms.[6] Moreover, Rule 713(e) of the Commission's Rules of Practice and Procedure clearly states that the filing of a request for rehearing does not itself operate to stay an order.[7] Since the Commission's directives with respect to refunds are final in light of this order, as discussed further below, the Commission's rulings on refunds are not premature. Therefore, implementation of the Commission's rulings does not provide a basis for a stay.[8] With respect to Ameren's alternative request for an extension until judicial review is complete, Ameren is asking, in effect, for an exemption from Rule 713(e) until appellate remedies have been exhausted. The Commission declines to do this since to do so would frustrate the implementation of its own orders, thereby creating uncertainty and leaving important market settlement issues unresolved.

C. Refunds for Assessing RSG Costs To Virtual Supply Offers and Effective Date Of Liability For RSG Costs For Virtual Supply Offers

1. Background and Midwest ISO Proposal

21. In the RSG Order, the Commission found that, to the extent the Midwest ISO did not charge virtual supply offers for RSG costs, it violated the terms of its tariff, and the Commission ordered the Midwest ISO to recalculate the rate and make refunds to customers, with interest.[9] The RSG Rehearing Order affirmed the RSG Order's finding

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[6] Section 309 of the FPA provides that orders of the Commission will be effective on the date and in the manner the Commission prescribes. 16 U.S.C. § 825h (2000). Section 313(c) of the FPA provides that the filing of an application for rehearing will not, unless specifically ordered by the Commission, operate as a stay of the Commission order. 16 U.S.C. § 825*l*(c) (2000).

[7] 18 C.F.R § 385.713(e) (2005).

[8] The finality of Commission actions also applies to the import issues raised by E.ON.

[9] 18 C.F.R. § 35.19a (2005).

that virtual supply offers should be assessed RSG costs, per the terms of the tariff,[10] and made the determination that refunds would not be required.[11] In its December 26 Compliance Filing, the Midwest ISO states that it has not yet allocated RSG costs to virtual supply, and will do so only after the Commission accepts the Midwest ISO's analysis and recommendation concerning the appropriate allocation. As support for this action, the Midwest ISO cites to a statement in the RSG Rehearing Order that RSG costs should not be allocated to virtual supply until after completion of the allocation analysis[12] and its determination that it would be inappropriate to retroactively apply an allocation to parties that cannot revisit their economic decisions in engaging in virtual transactions. The Midwest ISO intends to implement the refunds through the January 2007 resettlement process, retroactive to April 1, 2005. After the issuance of the RSG Rehearing Order, the Midwest ISO maintains that it stopped assessing RSG charges on the refund-related transactions other than imports, as a result of which the related refunds will retroact from October 26, 2006 to market start.

2. <u>Comments and Protests</u>

22. E.ON states that Midwest ISO is not assessing RSG costs to virtual transactions. E.ON claims this is opposed to the direction given to Midwest ISO in the RSG Order and the RSG Rehearing Order. E.ON claims that Midwest ISO continues to violate its currently effective tariff by not charging RSG costs to virtual transactions. E.ON states that any parties that overpaid RSG costs should receive refunds with interest for any overcharges and the Midwest ISO should not delay compliance with its tariff.

23. Midwest ISO notes in its answer that its proposed effective date relates solely to proposed tariff revisions, and as such has nothing to do with the effective date or implementation of any currently effective tariff provisions. In any event, Midwest ISO argues that it is unclear how it can properly allocate RSG costs to virtual supply under the current tariff after the October 26 RSG Rehearing Order without having completed the allocation analysis required by that Order, and before the Commission approves the RSG cost allocation proposed by Midwest ISO’s December 26, 2006 compliance filing in this proceeding.

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[10] RSG Rehearing Order at P 45.

[11] *Id.* at P 92-96.

[12] *Id.* at P 117-19, 122.

24. In response to Ameren's belief that Midwest ISO will recalculate and reallocate RSG charges for virtual supply transactions from April 25, 2006 to the present, and will provide refunds for such period, DC Energy argues this interpretation is a misstatement of the Commission's RSG Rehearing Order. In its answer, DC Energy notes that the Commission found in the RSG Rehearing Order that any revisions to Midwest ISO's tariff applying RSG costs to virtual supply transactions will be implemented on a prospective basis only.[13] DC Energy states that the Commission also granted rehearing and specifically rejected retroactive refunds with regard to virtual supply transactions, finding that refunds would be inappropriate given the lack of clarity in Midwest ISO's tariff and reliance by market participants on the Business Practices Manual.[14]

25. In its answer, DC Energy notes that in Midwest ISO's compliance filing following the RSG Rehearing Order, Midwest ISO requested an effective date of April 1, 2007 for the application of RSG charges to virtual supply transactions, though it noted that such tariff revisions will not go into effect until the Commission accepts an appropriate cost allocation for virtual supply transactions. Although DC Energy opposes the application of any RSG charges to virtual supply transactions, it is clear from the RSG Rehearing Order and Midwest ISO's compliance filing that any such application will be prospective only, if and after the Commission approves a mechanism for such application.

3. <u>Discussion</u>

26. As the Commission states in the companion rehearing order, the Commission's finding in the RSG Order that virtual offers should share in the allocation of RSG costs, per the terms of the currently-effective tariff, served as notice to market participants that virtual offers, for those market participants withdrawing energy, were liable for RSG charges. Therefore, the RSG Rehearing Order waiver of refunds applies to the period before that order, *i.e.*, from market start-up in April 2005 until April 24, 2006. After this date, virtual supply offers are liable for RSG costs[15] and therefore, to the extent virtual supply offers were not assessed RSG costs, refunds are due for the period starting April 25, 2006. To delay the effective date of liability for RSG charges would render the currently effective tariff meaningless and without effect even after the Commission made clear in the RSG Order and RSG Rehearing Order that the Midwest ISO had violated the terms of the tariff. Our finding here strikes an appropriate balance between the interests

[13] *Id.* at P 122.

[14] *Id.* at P 92-95.

[15] Per the terms of the currently-effective TEMT, the liability for RSG costs is limited to market participants withdrawing energy in the real-time energy market.

of market participants that reasonably relied on the Business Practices Manuals and the interest of the Commission in ensuring the tariff is implemented, particularly after it has provided notice of the effective tariff provisions.

27. In this regard, the Midwest ISO's request for a proposed effective date in its compliance filing transmittal letter misinterprets the RSG Rehearing Order. Commission statements that the prospective allocation of RSG costs to virtual supply offers would be effective upon Commission approval applied only to a *revised* allocation as reflected in the proposal required by the Commission in the RSG Rehearing Order. Inasmuch as the Commission made clear that the currently effective tariff provision allocates RSG costs to virtual offers in both the RSG Order and RSG Rehearing Order, there is no basis to conclude that RSG costs should not be allocated to virtual supply offers at any time since market start. Furthermore, the Midwest ISO argument that market participants cannot revisit their economic decisions and therefore there should be no allocation of RSG costs to virtual offers is a request for rehearing that is beyond the scope of this proceeding since it does not address compliance issues.

D. Refunds for Assessing RSG Charges To Imports

1. Background and Midwest ISO Proposal

28. In the RSG Order the Commission found no basis in the currently effective tariff for charging RSG costs to imports from the start of the energy markets and required the Midwest ISO to make refunds, with interest, to customers for amounts charged to imports from the start of the energy markets.[16] The RSG Rehearing Order affirmed the Commission's requirement for refunds and clarified that for those market participants physically withdrawing energy in real-time and therefore paying the RSG charge, part of their allocation of RSG costs should be based on resource deviations, including resources outside the Midwest ISO that provide imports and therefore there should not be refunds for this subset of imports.[17]

29. In its proposal, the Midwest ISO believes that the directives in the RSG Rehearing Order are susceptible to a variety of interpretations. Midwest ISO proposes to refund all real-time RSG Charges on all such import transactions for any deviation from day-ahead schedules, regardless of whether such deviations were positive or negative. The Midwest ISO believes that this is the appropriate interpretation of such directives in the context of

[16] RSG Order at P 77.

[17] RSG Rehearing Order at P 142.

the discussion of the applicability of RSG charges to imports under the currently effective provisions of the TEMT, as set forth in both the RSG and RSG Rehearing Orders.

30. Since the Commission accepted proposed TEMT provisions prospectively assessing RSG costs to imports, the Midwest ISO adopted a different approach that uses the resettlement process as a means to facilitate the transition from the period of refunding prior RSG charges on imports, to the period of prospectively assessing RSG charges on imports. In particular, the Midwest ISO has tentatively continued assessing RSG costs on imports after October 26, 2006, but will likewise refund these amounts in an ensuing resettlement, retroactive to market start, until such time as the Commission approves an effective date for the proposed TEMT revisions that allocate RSG costs to imports. Once the proposed TEMT revisions are effective *(e.g.,* the currently requested effective date of April 1, 2007), the Midwest ISO contends that it shall stop the current assessment and refund of RSG charges on imports, and shall instead begin allocating RSG costs to imports based on such proposed TEMT revisions.

2. <u>Comments and Protests</u>

31. E.ON claims that Midwest ISO's proposal to refund all real-time imports and real-time deviations ignores the requirement that refunds are only due to market participants that did not withdraw energy in that specific hour. E. ON states that Midwest ISO has incorrectly chosen to apply refunds to all import transactions. E.ON alleges that Midwest ISO has misinterpreted the language from the Commission's RSG Order as well as the RSG Rehearing Order. E. ON avers that the Commission intended that import transactions engaged in by market participants withdrawing energy in real-time are not to be refunded RSG costs. As support E.ON states that import transactions that have a negative deviation to the day-ahead schedule are in fact withdrawing energy in real-time and are therefore not entitled to any refunds of RSG costs. Furthermore, E.ON states that importers that are in a negative deviation situation, are required by the Commission's previous orders to be charged their share of RSG costs.

32. In response to E.ON, Midwest ISO asserts in its answer that in the context of requiring RSG refunds to imports, the RSG Rehearing Order expressly stated that imports as such are not physically withdrawing energy, and consequently "should not determine eligibility for RSG charges."[18] Since the Commission has determined that RSG charges should be refunded to imports because they are "not physically withdrawing energy," Midwest ISO sees no basis for selectively withholding refunds from some imports based on their "physically withdrawing energy," which the Commission already found imports

[18] *Id.* at P 139, 142.

do not do. Thus, Midwest ISO believes it is consistent with the Commission's directives to refund RSG charges to all imports.

33. Ameren contends that Midwest ISO's proposal to refund RSG charges to import transactions that deviated from day-ahead schedules is inconsistent with the October 26 Order. Ameren states that the October 26 Order requires that import transactions be treated as "Resources". Further, Ameren states that "Resources" which deviate from their day-ahead schedules should be allocated RSG charges. Therefore, Ameren concludes that imports which deviate from the day-ahead schedule should be treated the same as any other "Resource Deviation" and subject to RSG costs.

34. In response to Ameren, Midwest ISO states in its answer the April 25 Order categorically requires the Midwest ISO to make RSG refunds to imports because the Commission "find[s] no basis in the currently effective tariff for charging [RSG] for imports."[19] Midwest ISO believes its proposal to make such RSG refunds to all imports is consistent with the meaning of the Commission's refund directives concerning imports.

3. <u>Discussion</u>

35. We clarify that the previous orders in this proceeding require the Midwest ISO to refund RSG costs charged to those market participants assessed charges based on their import activity, back to market start, since the currently-effective tariff does not list imports as an allocation factor. By the terms of the currently-effective TEMT, those market participants that were assessed RSG costs were market participants withdrawing energy in the real-time market and therefore we expect the refunds would apply only to these market participants. We further clarify that refunds are not required for the subset of imports that represent real-time deviations from external generation resources, as we specified in the RSG Rehearing Order,[20] since resource deviations are listed as an allocation factor in the currently-effective tariff and resources include external resources that provide energy that is imported into the Midwest ISO. We clarify the subset applies only to market participants withdrawing energy in the real-time energy market. Finally, to ensure there is no further confusion on this issue, we clarify that to the extent the Midwest ISO was assessing RSG charges to market participants not withdrawing energy in real-time, contrary to the tariff, refunds are due with interest.

[19] RSG Order at P 77.

[20] RSG Rehearing Order at P 142.

36. With respect to effective dates, the Commission approved the allocation of RSG charges to imports in the RSG Order.[21] The Midwest ISO interpretation is correct that the Commission in that order deferred the implementation of an allocation to imports until a virtual supply offer allocation proposal was submitted and approved.[22] Since we are rejecting the revised proposal to allocate RSG costs to virtual offers, as discussed in this order, the effective date for the allocation to imports is the date of this order.

E. Midwest ISO Analysis and Proposal

1. Background

37. The Commission, in the RSG Rehearing Order, required the Midwest ISO to undertake an analysis to identify those costs caused by virtual supply offers, as determined by an analysis of the energy market with virtual supply offers compared to the energy market without virtual supply offers. The Commission required the Midwest ISO to calculate the RAC and real-time start-up, no-load and production costs not recovered by real-time revenues for each day -- in one case with virtual supply offers and another case assuming no virtual supply offers. The Midwest ISO was also required to adjust the real-time load so that it is equal to the day-ahead load, thereby avoiding attribution of higher cost units to virtual supply offers when they in fact were caused by changes in load forecasts. Once the costs have been identified, the Midwest ISO was required to divide the costs attributed to virtual supply offers, *i.e.*, the difference between the case with virtual supply offers compared to the case without virtual supply offers, by the virtual supply offer megawatts thereby yielding a $/MW charge.

38. To give market participants a sense of the magnitude and variability of the charge, the Midwest ISO was required to calculate a $/MW charge for each hour of real-time for representative historic periods that would incorporate high unit commitment periods and low unit commitment periods.[23]

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[21] RSG Order at P 84 ("We find that the Midwest ISO proposal assigns costs to transactions that cause those costs to be incurred and, therefore, accept this aspect of the proposal.").

[22] *Id.* ("Since we have, above, rejected this proposed tariff provision because it improperly excludes virtual supply offers from the RSG charge calculation, our acceptance of the proposed allocation will be conditional upon the filing by the Midwest ISO of a new tariff proposal, per the requirements of this order.")

[23] RSG Rehearing Order at P 117-18.

39. In its December 26 Compliance Filing, the Midwest ISO conducted an analysis of RSG costs and proposed an appropriate assignment of these costs to cleared virtual transactions. The Midwest ISO contends that this analysis focused on cost causation factors in order to divide the Real-Time RSG payments into two categories: one assigned to net virtual supply positions and the other to deviations relating to other factors *(i.e.* load, imports, exports, and injections). According to the Midwest ISO, the Real-Time RSG rate to be charged to virtual supply transactions is calculated by dividing the portion of the Real-Time RSG payments assigned to virtuals by the total of the virtual supplies cleared in the day-ahead energy market. The Midwest ISO states that after the appropriate costs are assigned to cleared virtual supply, the remaining portion of the Real-Time RSG payment is then allocated to deviations relating to other factors. The Midwest ISO asserts that this portion of the Real-Time RSG payment is recovered using the existing two-pass process currently used to recover the entire Real-Time RSG payment, modified, however, to recover only the reduced portion ascribed to deviations resulting from other factors.

40. In its analysis of the proposed Real-Time RSG payments, the Midwest ISO selected a representative sample of days that included high, medium and low resource commitment periods in 2005 and 2006 in order to provide parties an indication of what the cost allocation assignment would have been on a historical basis if the proposed RSG cost allocation had been in place.

41. The Midwest ISO also states that its approach allocates costs associated with Real-Time RSG payments based on several potential contributors to resource commitment in the Reliability Assessment Commitment process and the real-time energy market. The Midwest ISO notes that these cost allocation drivers are: (1) net virtual supply cleared in each hour of the day-ahead energy market – total virtual supply cleared minus total virtual demand cleared, (2) net deviations from day-ahead schedules - if net deviations result in increased withdrawals, capacity must be available to serve the additional physical withdrawals, and (3) other factors such as forecasting errors that may result in increased commitment.

42. Moreover, the Midwest ISO affirms that the proposed approach allocates the Real-Time RSG payment for each hour to two basic cost causation categories: (1) Real-Time RSG payments allocated to virtual supply transactions, and (2) Real-Time RSG payments allocated to deviations relating to load, imports, exports, and injections. This approach, asserts the Midwest ISO, calculates the net virtual supply in the individual hours, where net virtual supply is equal to total virtual offers cleared in the hour minus total virtual bids cleared if this difference is positive and otherwise zero. The Midwest ISO maintains that the net virtual supply in an hour is used in allocating RSG capacity that would be used to replace the net virtual supply in the real-time energy market. The Midwest ISO

notes that its analysis also allocates RSG capacity to serve any net deviations that result in increased withdrawals.

43. The Midwest ISO's proposal allocates RSG costs in each Hour to two buckets - a net virtual bucket and a net deviations/forecast bucket. According to the Midwest ISO, the latter bucket is accounted for under the current provisions of the TEMT in section 40.3.3.a.ii, whereby market participants are charged a Real-Time RSG Charge. Midwest ISO asserts that the proposed revisions modify the existing language in order to sum the absolute value of all net deviations from Day-Ahead Schedules, and to account for any uncertainty in forecasting consistent with the Commission's directives that resource commitment for forecasting error is not to be charged to virtual supply.

2. Comments and Protests – Analysis

44. CAM Energy asserts that the Midwest ISO did not perform the study that the Commission requested. Olde Towne also protests the calculation and allocation of RSG charges to virtual transactions as proposed by the Midwest ISO. Olde Towne argues that the proposed Midwest ISO tariff changes will simply socialize the RSG charges rather than follow the principals of cost causation. Saracen asserts that according to cost causation principles, if a market participant's virtual supply transactions do not cause any costs to be incurred in the RAC process, it should not be allocated any RSG charges. Accordingly, Saracen does not believe that the Midwest ISO's approach and proposed tariff language properly complies to allocate RSG costs based on cost causation principles. WPS Resources does not believe the Midwest ISO determined the true costs to the system of virtual supply offers. WPS Resources states that it is hard to determine how these costs were determined with the data the Midwest ISO provided.

45. Edison Mission agrees, stating that the Midwest ISO's analysis failed to determine whether, and to what extent, virtual supply contributes to RSG costs by comparing RSG levels resulting from an energy market with virtuals to RSG levels using a hypothetical energy market without virtuals, with other assumptions held constant. Instead, Edison Mission asserts that the Midwest ISO assumed that all "net" virtual bids (the excess of virtual supply bids over virtual demand bids) always cause an increased level of RSG costs and then conducted an allocation. Accordingly, Edison Mission believes that the Midwest ISO should conduct the comparative analysis described in the RSG Rehearing Order in order to ensure that RSG charges assigned to virtuals are based on principles of cost causation and establish a just and reasonable allocation of RSG costs.

46. Specifically, Edison Mission requests that the Midwest ISO calculate the RAC and real-time start-up, no-load and production costs not recovered by real-time revenues for each day - in one case with virtual supply offers and another case assuming no virtual supply offers. The Midwest ISO thus should adjust the real-time load so that it is equal to

the day-ahead load, thereby avoiding attribution of higher cost units to virtual supply offers when they in fact were caused by changes in load forecasts. Once the costs have been identified, Edison Mission believes that the Midwest ISO should divide the costs attributed to virtual supply offers, *i.e.*, the difference between the case with virtual supply offers compared to the case without virtual supply offers, by the virtual supply offer megawatts thereby yielding a $/MW charge. In order to make the comparison directed by the Commission, Edison Mission affirms that the Midwest ISO should have run the day-ahead market with and without any virtual supply and demand bids in order to determine the incremental commitments associated with virtual supplies. In fact, Edison Mission notes that the Midwest ISO's RAC process is very similar with the Commission's instruction to determine cost causation. According to Edison Mission, units committed in the postday-ahead market RAC represent the set of commitments that were caused by the combined impact of load deviations and virtual bids.

47. CAM Energy states that the study fails to remove RSG costs attributable only to physical load from the total RSG costs to be considered for allocation to virtual supply. CAM Energy and DC Energy note the Midwest ISO excluded costs due to forecasting errors, and ignored factors such as local voltage support, the tripping of generators in real-time and other RSG costs related to local reliability requirements. CAM Energy and DC Energy are concerned that the Midwest ISO fails to study enough days to produce reliable results and fails to explain the methodology it used to calculate costs.

48. CAM Energy affirms that the Midwest ISO ignores the cost reduction benefits that virtual offers provide to the market. According to CAM Energy, this would lead to an unjust and unreasonable rate that unduly discriminates against market participants engaging in virtual trading.

49. Financial Marketers state that Midwest ISO’s study and its proposed tariff revisions should be rejected. Financial Marketers aver that the study does not accurately take into account all the effects of virtual supply on the market. Financial Marketers claim that without appropriate cost causation, the Midwest ISO cannot meet its burden to prove that its proposed rates are just and reasonable under FPA section 205.

50. Financial Marketers support their position by stating that Midwest ISO’s study methodology is seriously deficient and ignores the effect of hours when virtual supply offers are exceeded by virtual demand bids. Financial Marketers claim that the result of virtual demand exceeding virtual supply causes a reduction in RSG charges and that Midwest ISO’s study did not address this situation.

51. Olde Towne states that if a participant’s virtual offers and bid net out, they cannot cause any additional costs within the RAC process and could therefore not cause RSG

costs to rise. Olde Towne further states that RSG charges should only be assessed to entities that have a net cleared virtual supply.

52. Ameren suggests that the Commission direct Midwest ISO to revise its proposal to use the net of all other deviations, including net load, net imports, net exports and net dispatch. Ameren concludes that Midwest ISO's study actually understates the extent to which virtual supply can cause RSG costs. DC Energy agrees, arguing that the Midwest ISO has not distinguished between real-time RSG costs incurred due to reasons clearly unrelated to virtual supply, and those which may have been related to virtual supply. DC Energy notes that most RSG charges are not caused by virtual supply scheduled in the day-ahead market or by simple real-time energy market deviations from day-ahead schedules.

53. Edison Mission further states that the Midwest ISO did not provide a valid analysis of "cost causation" because its proposal did not consider the benefits associated with RSG costs. Edison Mission notes that the Commission ordered the Midwest ISO to compare an energy market with virtuals to one without virtuals. Edison Mission affirms that the Midwest ISO's analysis focused exclusively on the quantity of virtual supply relative to deviation quantities. According to Edison Mission, the Midwest ISO failed to analyze the nature of the benefits associated with RSG charges and whether virtual supply receives any of these benefits. According to Edison Mission, under traditional rate-making principles, an analysis of cost causation includes adjustments for benefits associated with the costs. Edison Mission notes that RSG costs exist in order to compensate generators that do not recover their costs through market clearing prices. The primary intended benefit associated with providing such compensation is the operation of these units, which is necessary to maintain reliability. Edison Mission asserts that a secondary effect of RSG costs is a reduction in real-time market clearing prices. Uplift costs, according to Edison Mission, that lower real-time prices also lower day-ahead prices through the arbitrage process of competitive markets. The Midwest ISO did not study the relationship between net virtual supply and the overall balance of costs and benefits associated with RSG costs, and Edison Mission believes that the total impact must be considered in order to perform a valid and complete "cost causation" analysis.

54. DC Energy believes that in addition to rerunning the market to remove virtual supply to ascertain the effect on real-time market RSG costs, the Midwest ISO should have addressed the overall increase in day-ahead RSG and energy costs attributable to removal of virtual supply. If virtual supply offers are removed from the day-ahead market for purposes of determining real-time RSG cost allocation, DC Energy asserts that they should also be removed for purposes of determining the associated impacts on the market – most notably day-ahead RSG and energy costs.

55. DC Energy affirms that RSG costs are highly sensitive to the Midwest ISO's load forecasting process and as such, can be strongly affected by any errors in such load forecasting. DC Energy notes that the Midwest ISO's Compliance Filing does not discuss this issue at all, nor do its calculations provide for, or identify costs associated with, load forecasting errors.

56. DC Energy also contends that the Midwest ISO does not attempt to identify the unit commitment costs associated with reliability needs. DC Energy claims that such costs should not be allocated to virtual supply. DC Energy asserts that the failing of the day-ahead market to optimize the dispatch solution for these noneconomic issues is not due to virtual supply. Instead, it is due to the fact that the day-ahead market as administered by the Midwest ISO today does not co-optimize the energy market with any Ancillary Services, nor does it explicitly address the physical relevant factors of reactive energy, voltage support, loop flow or local reliability requirements.

57. In the absence of co-optimized energy and ancillary services markets, DC Energy states that reserve requirements are currently met through non-market means, including self-supply and bilateral contracts. DC Energy argues that the Commission's directive that the Midwest ISO set real-time market load equal to day-ahead market load for determining cost allocation would do nothing to avoid misallocation of real-time RSG costs to virtual supply. DC Energy asserts that the misallocation of RSG costs attributable to manipulating ECO MAX and MIN levels is merely one of many causes of real-time RSG costs which are unrelated to virtual supply and which demonstrate the need to resolve material factual issues. DC Energy maintains that the Midwest ISO has the data necessary to perform this analysis.

58. Financial Marketers assert that the study fails to consider how virtual supply offers actually increase competition for generators and therefore reduce the price of physical supply acquired during the RAC process. Financial Marketers contend that this downward pressure leads directly to reduced RSG charges.

59. Financial Marketers also state that the study wrongly suggests that virtual supply should be allocated RSG charges based on the entire cost of acquiring sufficient supply during the RAC process. Financial Marketers conclude that this approach is flawed and leads to overstatement of the costs associated with all accepted virtual supply offers. Additionally, Financial Marketers aver that the Midwest ISO proposal attempts to assign RSG charges attributable to load to virtual supply offers.

60. DC Energy contends the Midwest ISO did not present any analysis of detrimental impacts on overall market costs that may result from the application of the proposed RSG charge to accepted virtual supply offers. DC Energy asserts that punitive RSG charges to virtual supply transactions will act to reduce the number of virtual supply transactions,

causing increased harm to the market as a whole. According to DC Energy, charging real-time RSG costs to physical deviations creates an appropriate incentive to reduce or eliminate these deviations, and is clearly in the best interest of the market. DC Energy concludes it is imprudent to allocate any real-time RSG costs to virtual supply offers in the absence of accurate cost causation that reflects the market benefits provided by virtual supply offers.

3. <u>Comments - Proposal</u>

61. E.ON avers that Midwest ISO's proposal to use net virtual supply cleared in each hour is not consistent with cost causation principles and should be replaced with total virtual supply cleared in each hour.

62. Ameren states that while Midwest ISO's proposed netting of virtual bids from virtual supply may be appropriate, it is not what the Commission directed. CAM Energy believes that the Midwest ISO should not be allowed to charge virtual participants whose virtual offers in a given market hour are the same or less than their virtual demand bids for that same hour. According to CAM Energy, such an entity cannot contribute to the causation of RSG charges since the virtual participant's obligation does not create a net supply position for that hour. WPS Resources agrees, noting that an assessment of a charge on a market participant that has a net zero virtual supply/demand position should not result in the assessment of RSG charges and is not consistent with cost causation principles. DC Energy supports the Midwest ISO's netting of virtual load and virtual supply. According to DC Energy, virtual supply offers and load bids are tools to arbitrage the difference between the day-ahead market and real-time market energy prices to produce more liquid and efficient market solutions. If virtual supply offers and virtual load bids net each other out, then DC Energy notes that from the Midwest ISO's perspective, only the net difference where virtual supply exceeds virtual load will have a direct effect on the aggregate amount of resources committed in the day-ahead market.

63. Edison Mission notes that the Midwest ISO's primary allocation formula takes net virtual supply and divides it by the sum of net virtual supply and "net deviations" (net load deviation, net import deviation, net reduction in generator capacity available compared to the day-ahead schedule and deviation by Resources from Dispatch Instructions). This proposed denominator, according to Edison Mission, presumes that the only causes of RSG costs are net virtual supply and the net deviation quantities. Accordingly, Edison Mission affirms that the Midwest ISO's proposal overstates the share of RSG costs caused by virtual supply in every hour in which this formula applies and there is a cause of RSG costs other than net virtual supply and net deviations. Edison Mission argues that there are a number of factors other than net virtual supply and net deviations that cause RSG costs; the large number and nature of these other factors indicate that it is almost certain that these factors cause a large portion of RSG costs and

that at least some of these factors cause RSG charges on a regular basis. In addition to overstating the RSG costs caused by virtual supply, Edison Mission notes that the Commission instructed an analysis of all the relevant factors in order to ensure that the costs associated with them can be separated from the costs associated with virtual supply.

64. Edison Mission believes that the Midwest ISO incorrectly attributes to virtual supply uplift costs caused by problems with the Midwest ISO's current real-time pricing rules, which incorrectly account for the output of fixed-block gas turbine peaking units. Edison Mission notes that the Midwest ISO market monitor has independently identified this problem, but the Midwest ISO does not account for this problem as a cause of RSG charges and therefore inflates the total amount of RSG costs that are allocated to virtual supply. When the output of these peaking units is not correctly reflected in energy prices, Edison Mission asserts that the market price signal is distorted because energy prices do not reflect the true cost of supplying energy at the affected locations. Therefore, Edison Mission states that the deficiency in the real-time pricing rules not only inflates RSG charges, it affects market efficiency.

65. Edison Mission believes that the Midwest ISO should use a consistent method to allocate RSG charges. Under the Midwest ISO's proposal, Edison Mission states that RSG charges are allocated between virtual supply and deviations based on net virtual supply, but the amount allocated to virtual supply is then sub-allocated among virtual supply based on total cleared virtual supply. If the Commission accepts the Midwest ISO's proposal, which is based on the assumption that cost causation depends on the net virtual position, then Edison Mission asserts that the net quantity should be used in both cases and the sub-allocation among virtual supply should also be tied to net virtual position. Edison Mission state that an additional flaw is that load deviations and virtual supply bids by a market participant with real load have the identical financial impact. That is, Edison Mission explains, a load-serving entity would be able to shift the allocation of RSG charges between virtual supply and load deviations by submitting virtual supply instead of underbidding load. Therefore, Edison Mission asserts that the Midwest ISO's proposal needs to be amended to include a rule that net virtual supply by real load is treated as load deviation rather than virtual supply.

66. DC Energy notes that generally some market participants' loads are higher in real-time than in their schedules, and other market participants' loads are lower. According to DC Energy, the Midwest ISO nets these out to develop the denominator for allocating RSG costs to virtual supply. Although the Midwest ISO appropriately nets cleared virtual supply offers and virtual load bids, DC Energy contends that it does not justify netting of physical deviations from schedules.

67. Otter Tail agrees with Midwest ISO's initial allocation process to develop a revenue requirement for RSG. However, Otter Tail disagrees with Midwest ISO's

proposed process of dividing the net virtual supply revenue by the total amount of virtual supply. Otter Tail states that a neutral virtual position cannot drive RSG costs and should therefore not be included in the calculations. Otter Tail also contests the Midwest ISO's proposal to divide net deviation revenue requirement by factors which may not contribute to physical withdrawals. Otter Tail suggests that Midwest ISO revise its proposed tariff language in section 40.3.3.a.ii to reflect that the net physical withdrawal from the market is the driver of real-time RSG.

68. Saracen explains that the potential imposition of RSG charges after the fact where the amount of the charge is only known after the fact and not based on any assessment of the difference between day-ahead and real-time prices would act as a great disincentive to engage in virtual transactions. Virtual traders, such as Saracen, could only engage in such transactions if they could obtain a sufficient margin to cover RSG volatility and uncertainty. According to Saracen, the Midwest markets would thus be deprived of all of the salutary effects of virtual trading in terms of liquidity and transparency of price formation.

69. CAM Energy affirms that the Midwest ISO does not give participants the information they need to continue making virtual trades in the Midwest ISO, despite the Commission's directives to provide information that would allow traders to know with reasonable certainty how much RSG costs are likely to be assessed to future virtual supply offers. In the absence of data from which market participants may replicate the Midwest ISO charges, DC Energy asserts that the lack of transparency and high volatility associated with the charge will result in higher risk premiums in the Midwest ISO's virtual energy market because virtual participants will find it harder to determine the level of RSG charge to which their transactions may be subject.

70. WPS Resources notes that cost shifts may arise from the Midwest ISO's proposal to the extent that congested areas of the system utilize virtual supply offers as a means to avoid congestion, causing net virtual supply activity which could result in the assessment of RSG costs on all virtual activity in the Midwest ISO market, not just in the constrained area.

4. Deficiency Letter and Response

71. The Deficiency Letter directed the Midwest ISO to identify those costs caused by virtual supply offers, as determined by an analysis of the energy market with virtual supply offers compared to the energy market without virtual supply offers. Specifically, the Midwest ISO was required to calculate the RAC and real-time start-up, no-load and production costs not recovered by real-time revenues for each day - in one case with virtual supply offers and another case assuming no virtual supply offers. The Midwest ISO was instructed to adjust the real-time load so that it is equal to the day-ahead load,

thereby avoiding attribution of higher cost units to virtual supply offers when they in fact were caused by changes in load forecasts. Once the costs have been identified, the Midwest ISO was directed to divide the costs attributed to virtual supply offers (*i.e.*, the difference between the case with virtual supply offers compared to the case without virtual supply offers) by the virtual supply offer megawatts, thereby yielding a $/MW charge.

72. The Deficiency Letter further required the Midwest ISO to calculate a $/MW charge for each hour of real time for representative historic periods that would incorporate high unit commitment periods and low unit commitment periods in order to give market participants a sense of the magnitude and variability of the charge.

73. The Deficiency Letter also encouraged the Midwest ISO to examine methods such as those suggested by Edison Mission. However, the Deficiency Letter suggested modifying Edison Mission's proposed Step 2 because units committed in a hypothetical day-ahead market clearing without virtual supply will not necessarily be the same ones committed by the RAC, due to the difference in the objective function between the two commitments. Hence, the Midwest ISO was requested to consider modifying Step 2 by undertaking a RAC commitment against the day-ahead bid-in load, identifying any incremental generators committed, and then following the suggested Steps 3 and 4.

74. In its response, the Midwest ISO indicates that it believes that Edison Mission's proposed method directs either excluding virtual supply offers or excluding both virtual demand bids and virtual supply offers. However, the Midwest ISO maintains that either way will yield invalid results. Midwest ISO illustrates that if the Step 2 analysis proposed by Edison Mission were conducted including virtual demand, but excluding virtual supply, the evaluation would produce a physical commitment well in excess of the amount needed to serve load in the Medium Term Load Forecast. Since the day-ahead market is producing a physical commitment greater than needed to serve the real-time load, the Midwest ISO asserts that there would not be an incremental commitment required by RAC. Midwest ISO argues that this analysis would lead to a determination that all real-time RSG costs are attributable to virtual supply transactions.

75. Alternatively, if the proposed Step 2 evaluation were conducted excluding both virtual demand and virtual supply, the Midwest ISO contends that day-ahead market physical commitment would be reduced. Midwest ISO further explains that this method would yield a finding that virtual supply does not contribute in any way to real-time RSG.

76. Moreover, the Midwest ISO asserts that the solution to the problem presented by the analysis suggested by Edison Mission – where the conclusion would indicate that virtual supply causes either 0 percent or 100 percent of real-time RSG – is to modify Step 2 evaluation to exclude virtual supply to the extent that it displaces physical day-ahead

market commitments that must be replaced in a later commitment process. Midwest ISO maintains that this can be accomplished by excluding the net of virtual supply and virtual demand when virtual supply exceeds virtual demand as it proposed in the December 26 Compliance Filing. Midwest ISO affirms that this would lead to a determination that real-time RSG costs are attributable in part, to virtual supply transactions to the extent that net cleared virtual supply must be replaced with physical commitments in the RAC process.

77. Midwest ISO asserts that there is no one-to-one correspondence between cleared virtual supply and units committed after the day-ahead. Midwest ISO explains that what is known at the end of the Forward RAC process is the amount of capacity expected to be needed, but not the amount that will actually be needed nor the specific units that will ultimately be committed in real time. Although it is not possible to identify specific units needed to replace cleared virtual supply transactions, the Midwest ISO affirms that it is possible to determine the relative megawatt quantity of units committed to replace virtual supply transaction and assign such megawatts a proportionate share of real-time RSG costs. The Midwest ISO proposed in the December 26 Compliance Filing to identify incremental commitment needs due to cleared virtual supply by calculating the cleared virtual supply that was serving day-ahead market physical rather than virtual demand. Midwest ISO states that this assures no attribution of real-time RSG caused by load uncertainty to virtual supply. According to the Midwest ISO, the proposal then allocates a share of total real-time RSG costs based on the relative amount of commitments needs that result from virtual supply transactions. Although it is not possible to identify specific units committed to replace cleared virtual supply, the Midwest ISO contends that the proposal does appropriately assign costs to virtuals only to the extent incremental commitments can be determined to arise from incremental commitments needs after clearing the day-ahead market.

5. Supplemental Comments

78. Edison Mission states that the Midwest ISO's allocation formula does not address the fundamental flaw in its approach of assuming that all RSG costs – including those incurred as a result of unit commitments in real time for reasons unrelated to virtual supply or deviations in the day-ahead market – must be allocated exclusively to virtual supplies and deviations. According to Edison Mission, the Midwest ISO's allocation methodology allocates all RSG charges, including those caused by real-time events, between virtual supply and deviations. Rather than trying to address the key issue, Edison Mission believes that the Midwest ISO focuses on possible ambiguities and alleged flaws in the second of Edison Mission's two proposals.

79. Edison Mission admits that it agrees with the Midwest ISO in the case where virtual demand exceeds virtual supply – virtual supplies do not increase unit

commitments in the RAC process, so no RSG charges should be allocated to virtual supplies. Edison Mission affirms that nothing it proposed is inconsistent with this conclusion. If the Midwest ISO believes that Edison Mission's proposal leads to the conclusion that 100 percent of RSG costs should always be assigned to virtual supply, then Edison Mission argues that the Midwest ISO does not understand its proposal.

80. Furthermore, Edison Mission believes that the Midwest ISO is unwilling to do the analysis that the Commission directed because it believes that cost causation cannot be established with exactitude. Edison Mission argues that the objective of its two proposals, one of which is already used successfully in the New York Independent System Operator, is to identify only those slow-start generating units that have to be committed in the RAC because virtual supply exceeds virtual demand. It appears to Edison Mission that the Midwest ISO believes that, so long as its methodology considers deviations resulting from load forecast error, it is acceptable not to consider factors other than virtual supply and deviations that create the need to commit units for reliability purposes.

81. E.ON believes that the Midwest ISO's submittal is non-responsive and fails to comply with the Commission's orders. By including virtual demand in the analysis, E.ON asserts that the Midwest ISO incorrectly assumes a nexus exists between cleared day-ahead virtual demand and post day-ahead/real-time unit commitment. E.ON maintains that the result of the Midwest ISO's current analysis would be that virtual suppliers would receive favorable treatment compared to other market participants because RSG charges to those virtual suppliers would be assessed at an inequitably reduced level due to the improper netting against virtual demand.

82. Financial Marketers also assert that the Midwest ISO's Deficiency Letter Response provided none of the empirical and cost analysis ordered by the Commission. According to Financial Marketers, the entire validity of the cost analysis methodology ordered by the Commission has been called into question. Financial Marketers state that according to the Midwest ISO the Commission's required study methodology is based on a misunderstanding of how the system actually operates and how generation units are selected; and that as a consequence, the directed study methodology produces flawed results.

83. Furthermore, Financial Marketers assert that the Midwest ISO failed to follow the Deficiency Order's directives since it failed to include additional study data errors and deficiencies noted by commenters. Financial Marketers also desire immediate action since they believe harm is occurring to the Midwest ISO market due to uncertainty over what RSG charge will be imposed on virtual supply transactions.

6. Discussion

84. The Commission requested an analysis so that it could determine the impact of virtual supply offers on the incurrence of RSG costs, and thereby formulate a basis to allocate RSG costs to virtual supply offers according to the principle that cost responsibility should follow cost incurrence. However, the analysis provided by the Midwest ISO does not shed any light on that relationship. As commenters note, the Midwest ISO filing simply assumes that there is an RSG cost impact in any hour in which net virtual supply offers are positive, and that the impact is proportional to the ratio of net virtual supply in the hour divided by the sum of the net virtual supply plus net deviations in the hour. The Midwest ISO provides no evidence to support its proposal. When asked again for an analysis, the Midwest ISO stated that while it is possible to identify the units required to replace virtual supply, such an analysis may not be definitive because there may be other units committed later in real time.

85. We agree with Edison Mission that this unit commitment analysis could provide the basis for a cost allocation. However, the Midwest ISO's reluctance to undertake any analysis that could not definitively identify committed units sets an insurmountable hurdle, because virtually no cost-causation analysis could do so.[24] As such, the Midwest ISO has effectively closed off any means of determining the impact of virtual offers on RSG costs.

86. It also appears that the Midwest ISO misinterpreted the analysis requirement. The Commission intended that the Midwest ISO do the analysis using "bid-in load," by which we meant physical, not virtual, demand that was scheduled a day ahead. (The term "load" generally means physical demand served by load-serving entities.) We agree with the Midwest ISO that such an analysis would not have made sense using both day-ahead virtual and physical demand. The objective of our proposed method was to identify physical generation units offered into the day-ahead market that were displaced by virtual supply but were then likely to be scheduled in the RAC. The Commission proposed, and the Midwest ISO agrees, that such units should be identified using the RAC method of minimizing start-up and no-load costs. Any real-time RSG picked up by units flagged in this manner could then be considered as likely due to the market impact of day-ahead virtual supply.

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[24] *Colorado Interstate Gas Co. v. FPC*, 324 U.S. 581, 589 (1945); *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, 118 FERC ¶ 61,119 at P 559 (2007). ("Allocation of costs is not a matter for the slide-rule. It involves judgment on a myriad of facts. It has no claim to an exact science.")

87. The Commission intended to suggest for the Midwest ISO a minimal analysis that would enable it to provide a reasonable calculation of how much real-time RSG cost is due to virtual supply. Of course, the Midwest ISO could refine such analysis – for example, by reviewing whether some units flagged in this fashion were scheduled in real-time due to real-time events, and not due to day-ahead market outcomes. Moreover, more complicated analytical methods are also conceivable. The Commission did not require the Midwest ISO to follow this simplified method, but it did require the Midwest ISO to develop some method to calculate the actual impact of virtual supply on real-time RSG.

88. Without any analysis or data on the relationship between virtual offers and RSG cost incurrence, we find ourselves in the same position the Commission found itself with respect to the Midwest ISO's initial RSG filing.[25] In both circumstances, the Midwest ISO proposed a tariff revision that would either not allocate costs to virtual supply offers or that would allocate costs to virtual supply offers without considering cost causation in the design of the rate. The instant proposal may result in unjust and unreasonable rates since it is not based on cost causation and therefore may be either over-allocating costs or under-allocating costs. We therefore must reject it.

89. We will not require a technical conference. The Midwest ISO made its revised proposal, reiterated its justification, and we have rejected the proposal for the reasons discussed. It is not the purpose of this proceeding to arrive at a consensus among parties.

90. Since we are rejecting the proposal, we will consider neither the Midwest ISO net virtual offer proposal in detail[26] nor possible refinements raised by commenters such as allocations based on other factors such as loop flows and reliability planning. For the same reason, we will also not consider issues raised by commenters with respect to

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[25] *See* RSG Order.

[26] However, we note the Midwest ISO proposal does not explain how virtual bids have any bearing on how many additional units are required in the RAC process. Therefore, the Midwest ISO proposal to allocate RSG costs to net virtual offers is not supported by analysis relevant to the incurrence of real-time RSG costs, and does not provide information rebutting the Commission findings in the RSG Rehearing Order that virtual offers result in unit commitment and the incurrence of RSG costs irrespective of virtual bid activity.

calculation of the proposed RSG charge.[27] As we state elsewhere in this order, the issue before the Commission here in this section 205 proceeding is whether the Midwest ISO proposal results in just and reasonable rates. Having rejected that proposal, no other action is required in this proceeding. Issues regarding changes to the existing tariffs are beyond the scope of this proceeding, since the Commission can only consider changes to currently-effective tariffs in the context of a section 206 investigation.

91. With respect to comments, we disagree with the assertion that market participants with equivalent virtual offers and virtual bids should not be allocated RSG costs since they do not cause additional unit commitment. Even if a market participant has this equivalence, its virtual offers may cause unit commitment to the extent the virtual offer clears the market and must be replaced in the RAC process with a physical unit.

92. We repeat the argument in the RSG Rehearing Order that the presence of net benefits due to the participation of virtual suppliers does not relieve them of responsibility for costs that they cause in the market.[28] While a benefit analysis may have a bearing on the ultimate cost allocation, since we are rejecting the Midwest ISO proposal we are not addressing potential modifications to the proposal based on benefits arguments raised by commenters.

93. We clarify that since the Midwest ISO proposal is being rejected, the currently-effective tariff provisions relating to the real-time RSG charge in section 40.3.3 remain in effect. We clarify that the currently-effective tariff includes the provisions of section 40.3.3 approved by the Commission in March 2005[29] as adjusted for those provisions approved by Commission order in this docket, such as an allocation to imports and exports and various revisions relating to dispatch procedures. We clarify that the currently effective tariff assigns RSG charges to market participants withdrawing energy and the RSG cost allocation includes an allocation to virtual supply offers.

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[27] We are also not addressing the comments submitted by E.ON on January 16, 2007 regarding the future allocation of RSG costs to imports. That issue has been resolved in the RSG Order and RSG Rehearing Order and the time period for comments and rehearing requests has passed.

[28] RSG Rehearing Order at P 114.

[29] *Midwest Independent Transmission System Operator, Inc.*, 110 FERC ¶ 61,289 (2005).

F. Dispatch Instructions

1. Background and Midwest ISO Proposal

94. In the RSG Order, the Commission determined that the TEMT would benefit from additional language clarifying that the RSG charge is calculated based on the difference between actual output and the dispatch instruction as well as the difference between actual output and the set point, thereby addressing the circumstance in which the generator does not meet the initial conditions required to be certified as an on-line resource. In response, the Midwest ISO proposes additional language to section 403.3.a.ii of the TEMT to clarify that the RSG charge is calculated based on the difference: (1) between actual output and the Dispatch Instruction; and (2) between actual output and the set point.

95. As required by the RSG and the RSG Rehearing Orders,[30] the Midwest ISO proposes to revise the TEMT to state that market participants will not be assessed an RSG charge for differences caused by lags in the State Estimator and the Unit Dispatch System tracking of unit output that follows Dispatch Instructions, such as when a unit goes off-line.

96. As required by the RSG Order and the RSG Rehearing Order,[31] the Midwest ISO further proposes to revise section 40.3.3.b of the TEMT in order to provide a tolerance band for the restriction on RSG credit eligibility. The Midwest ISO notes that the tolerance band is the same as the one currently defined in section 40.3.4.a of the TEMT for Uninstructed Deviation Penalties (UDPs). The Midwest ISO has determined that it is appropriate to subject eligibility for RSG credits to the same standard for following dispatch instructions already established by the TEMT for UDPs. In light of the introduction of a tolerance band into the RSG calculation, the Midwest ISO proposes to adjust the placement of the phrase "equal to or" in section 40.3.3.b.iii. Midwest ISO asserts that this relocation clarifies that the provision of section 40.3.3.b.iii (a) means that when a Resource exceeds the instructed quantity by not more than the tolerance band, the Resource will be eligible to receive RSG credits for Production Costs up to the full amount of its output.

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[30] RSG Order at P 80 and RSG Rehearing Order at P 177.

[31] RSG Order at P 120 and RSG Rehearing Order at P 180.

2. **Comments and Protests**

97. For the purposes of determining refunds for generators denied RSG credits, Split Rock believes that only revenue received in the real-time energy market for the instructed megawatts should be used to offset the production cost payment. With respect to the additional megawatts, which the generator was essentially a price taker in the market at the Locational Marginal Price (LMP), Split Rock states that the energy revenue should not be used to offset the production cost payment in determining the refund. This clarification, according to Split Rock, would ensure that the megawatts used to determine the production cost payment are equal to the megawatts used to determine offsetting energy revenue. Split Rock further notes that an alternative clarification that would achieve a similarly reasonable outcome would be to clarify that in the calculation of refunds, to the extent that a generator has received RSG credits when performing within the tolerance band, the RSG credits will remain in place. Split Rock maintains that it is not reasonable to use different megawatt values for the cost and revenue sides of this calculation, and Midwest ISO should not artificially reduce production costs in this manner. Split Rock believes that Midwest ISO can avoid this mismatch in the calculation of production costs by maintaining the previous settlements for generator hours in which actual output fell within the tolerance band.

98. WEPCO contends that the proposed revisions to section 40.3.3.b.iii.a do not make it clear how production costs will be calculated outside the tolerance band and states the tariff should be revised to state that if resource output (as measured by the State Estimator) exceeds the tolerance band limits, production costs will be calculated at the lesser of actual or the as-dispatched costs.

99. Midwest ISO agrees with Split Rock that it would be consistent with the RSG Rehearing Order to "maintain existing settlements for Resources that over-generated but stayed within the tolerance band."[32] Midwest ISO asserts that this is how it intends to implement the resettlements for refunds and has discussed this proposed refund approach in several stakeholder meetings. However, Midwest ISO argues that Split Rock's request to deduct revenue for the same quantity of megawatts as is used to determine the production cost with respect to retroactive and prospective settlement of RSG payments must be rejected because it amounts to a new protest that should have been made against the initial Section 205 filing. Midwest ISO also believes that it should also be denied as a belated request for rehearing of the October 26 Rehearing Order's directive "[t]o avoid the infirmities associated with the term 'commitment period'" by "replac[ing] the phrase

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[32] RSG Rehearing Order at P 173.

"'during the relevant commitment period' with 'during the relevant SCUC-instructed hours of operation' in both subsections (a) and (b)" of section 40.3.3.[33]

100. In its answer, Midwest ISO states that the proposed tariff language sufficiently indicates that the "Production Costs will be calculated based on the MW quantity set forth in the Dispatch Instruction" if output exceeds the tolerance band. Midwest ISO notes that the Commission only directed the Midwest ISO to add a tolerance band to this provision, but did not impose any additional associated compliance requirements regarding the other portions of section 40.3.3. Midwest ISO affirms that the details of how this calculation will be implemented, however, are more appropriately documented in Business Practices Manual, which has been provided to market participants in draft format ahead of implementation.

101. Split Rock also states that prospectively it is not appropriate to include revenue earned prior to the commitment period as an offset to production cost payments. Split Rock argues that including such revenue is an artificial reduction of the RSG credit due such a generator merely because the commitment period included a partial hour. According to Split Rock, section 40.3.3.c.ii provides that production costs are to be calculated be subtracting energy revenue earned during the commitment periods for the committed resources. Split Rock affirms that the term "commitment period" cannot rationally be interpreted to mean one time frame for production costs and another time frame for energy revenue. Split Rock argues that a commitment period must be the same amount of time on both sides of the RSG costs/revenue equation. Split Rock maintains that megawatts produced outside the commitment period should not factor into the calculation of production cost payments that are due.[34]

3. <u>Discussion</u>

102. There is no basis in the currently-effective tariff to limit revenues to the revenues generated from the instructed megawatts. The tariff language references revenue, with no modifications, and therefore we interpret the tariff to mean actual revenues. We do not consider it illogical to limit the RSG credit to the amount of megawatts instructed and allow for revenue deductions based on actual revenues. The purpose of the RSG credit is

[33] *Id.* at P 177.

[34] Split Rock also proposes an amendment to the tariff to clarify that the same commitment period should be used to calculate production cost and revenue offsets would add the phrase "within SCUC instructed hours of operation" after the words "…real-time Metered quantity of Energy…." in section 40.3.3.b.

to compensate resources for start-up, no-load and production costs not recovered in the LMP charge. To the extent a resource generated revenues, the amount of the credit should be deducted by the actual revenues generated and not a smaller amount that results in resources receiving amounts greater than their costs for the hours and megawatts instructed.

103. We find no basis in the currently-effective tariff that supports refunds of RSG credits based on amounts produced by resources above the instructed megawatts. While Split Rock and the Midwest ISO make reference to a tolerance band, none was in effect at market start through the effective date of the prospective tariffs implementing a tolerance band. Accordingly, as the Commission stated in the RSG Rehearing Order and affirmed in this order, RSG credit refunds should be based on the megawatts instructed or the actual amount produced, whichever is lower.[35] This formulation ensures that production cost recovery is subject to the SCUC instructions.[36] With respect to prospective treatment, we agree that the new tolerance band references in the tariff would allow for compensation of production costs to the extent they are within the tolerance band megawatts of the dispatch instruction. We also clarify that in the event the resource produces an amount greater than the tolerance band, the amount of production costs eligible for the RSG credit should be limited to the dispatch instruction, per Commission finding in the RSG Order.[37] We note the proposed Midwest ISO tariff complies with this formulation.

104. We agree that, to the extent the SCUC instruction instructs a generator to provide energy for a partial hour, the revenues used to determine the value of energy in the RSG credit analysis should reflect revenues earned over the partial hour, rather than the entire hour. However, we also recognize that revenues are based on metered quantities and

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[35] RSG Rehearing Order at P 175 ("We further clarify that production costs eligible for RSG credits are the lesser of those MW amounts specified in the SCUC schedule, or, if the generator produced an amount less than the SCUC schedule, the amount actually produced. Inasmuch as the purpose of security constrained unit commitment is to minimize production costs, to allow for cost recovery for volumes produced over the specified MW requirements would defeat the purpose of security constrained unit commitment and deny market participants an important benefit of the Midwest ISO.").

[36] *Id.*

[37] RSG Order at P 119 ("Hence, it is reasonable to restrict RSG eligibility to production costs that result from the dispatch instruction or state estimator.").

therefore a partial-hour revenue analysis may not be possible. We require the Midwest ISO to either revise the tariff language to reflect partial hour SCUC-instructions or to provide an explanation of its efforts to incorporate this refinement in its software development in the compliance filing the Commission is directing in this order.

G. Definitions

1. Background and Midwest ISO Proposal

105. In the RSG Order, the Commission noted that economic minimum dispatch and economic maximum dispatch are capitalized in section 40.3.3.a.ii, and, therefore, should be defined terms in the tariff. The Midwest ISO proposes the definitions to be:

> **Economic Maximum Dispatch**: The maximum MW level at which a Generation Resource may be dispatched, not including Regulation or Operating Reserve MWs, under normal system conditions on a particular Operating Day.
>
> **Economic Minimum Dispatch**: The minimum MW level at which a Generation Resource may dispatched, not including Regulation or Operating Reserve MWs, under normal system conditions on a particular Operating Day.

106. In the RSG Order, the Commission also affirmed that a defined term for production costs would clarify the costs eligible for guaranteed recovery and required the Midwest ISO to add this term to the TEMT. In order to comply, the Midwest ISO proposes to adopt the definition of that term proposed in Docket No. ER06-1552, regarding Manual Redispatch and Price Volatility Make-Whole Payment.[38]

107. In addition, the Midwest ISO proposes a definition of the term "'Unit Dispatch System" in light of the Commission's reference to the term "UDS" in the RSG Order's tariff revision directive regarding section 40.3.3.a of the TEMT.[39]

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[38] The proposed definition of “Production Costs” in Docket No. ER06-1552: **Production Costs**: The Start Up, No-Load and incremental Energy cost components, set forth in an Offer submitted by a Generation Resource, which may be eligible for compensation pursuant to sections 33.8, 40.3.3.b.ii or 40.3.5 of the tariff.

[39] RSG Order at P 80.

108. In its December 26 Compliance Filing, the Midwest ISO proposes a definition for Real-Time RSG Charge based on its analysis of virtual transactions:

> **Real-Time Revenue Sufficiency Guarantee Charge:** A charge to Market Participants based on payments made to Resources that are committed in the Real-Time Energy Market as set forth in Section 40.3.3.c.ii of this Tariff and assessed to Market Participants based on Market Activities described in Section 40.3.3.a of this Tariff.

109. As directed by the RSG Rehearing Order,[40] the Midwest ISO proposes to replace the phrase "during the relevant commitment period" with the phrase "during the relevant SCUC-instructed Hours of operation," in section 40.3.3.a of the TEMT. The Midwest ISO notes that although the RSG Rehearing Order states that the phrase "commitment period- appears in both sub-sections "a- and "b" of section 40.3.3, that phrase in fact appears only in sub-section "b," where it has two occurrences. Consistent with the Commission's directives concerning lag time, the Midwest ISO also proposes to provide appropriate adjustments for the use of the State Estimator in the first or last hour of an SCUC-instructed period, or in the case of zero hourly Dispatch Instruction.

110. As directed by the RSG Rehearing Order,[41] the Midwest ISO proposes to add the phrase "Real-Time" before "Internal Bilateral Transactions" in section 40.3.3.a.i of the TEMT.

2. Comments and Protests

111. WEPCO states that a number of definitions remain imprecise and that the definitions need further clarification by Midwest ISO. WEPCO believes that the terms Economic Maximum Dispatch and Economic Minimum Dispatch could be interpreted to apply to offer parameters rather than billing determinants. WEPCO also requests that the definition of Unit Dispatch System be amended to include the abbreviation “UDS.”

112. WEPCO also avers that the phrase “that complies with Dispatch Instructions” should be removed from tariff sheet No. 578.01 as amended by Midwest ISO. If the Commission decides to accept the language as filed, WEPCO asks that Midwest ISO be directed to clarify how it intends to implement this language.

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[40] RSG Rehearing Order at P 177.

[41] *Id.* at P 150.

113. WEPCO believes that the Commission's directive and Midwest ISO's subsequent compliance filing adding a phrase to section 40.3.3 of the TEMT is problematic. WEPCO does not contend that Midwest ISO has not complied with the Commission's directive, but rather WEPCO claims that the Commission's compliance directive is actually contrary to the RSG Order.

114. In its answer, Midwest ISO partially agrees with WEPCO's perception that the proposed definitions contemplate, not Offer parameters, but the values that are calculated for settlement purposes. However, Midwest ISO believes the inclusion of the word "Dispatch" in the proposed terms, and the use of the word "dispatched" in the proposed definitions, adequately differentiate the mentioned megawatt levels from the Offer components, and instead identify them as results or products of the Unit Dispatch System. In contrast, Midwest ISO notes that the existing parallel terms "Hourly Economic Maximum Level" and "Hourly Economic Minimum Level," which relate to Offers, do not contain the word "dispatch," but rather focus on the megawatt level at which Resources may operate. Moreover, Midwest ISO argues that the tariff need not enumerate or elaborate on all the factors that could potentially affect the calculation of these values. Midwest ISO maintains that the details of how the calculations are performed are more suitable for Business Practice Manuals and System Specifications.

115. Midwest ISO acknowledges that the proposed definitions may be improved though typographical correction and some clarification. Specifically, Midwest ISO notes that, in the proposed definition of "Economic Minimum Dispatch," the phrase "may dispatched" should be corrected to "may be dispatched." In addition, Midwest ISO is willing to supplement the proposed definitions with the italicized language below:

> **<u>Economic Maximum Dispatch</u>**: The maximum *achievable* MW level at which a Generation Resource may be dispatched *by the UDS in Real Time*, not including Regulation or Operating Reserve MWs, under normal system conditions *for an Hour* on a particular Operating Day.

116. In its answer, Midwest ISO asserts that it is amenable to WEPCO's suggestion that the definition of "Unit Dispatch System" incorporate the abbreviation "UDS."

117. In response to WEPCO's uncertainty on how the language added to sections 40.3.3.a and .b pursuant to the RSG Rehearing Order[42] affects the calculation of production costs and WEPCO's belief that the Commission-required language should be added only to the last of the three references to "State Estimator" in section 40.3.3.b,

[42] *Id.* at P 177.

Midwest ISO notes that this revision involves Commission-required additional tariff language. As a result, Midwest ISO asserts in its answer that WEPCO's argument amounts to a belated rehearing request. In addition, Midwest ISO clarifies that the tariff revision was not intended to predicate the calculation of incremental energy costs on metered data.

118. In its answer, Midwest ISO notes that the language WEPCO wants to remove was specifically required to be added to the TEMT.[43] Midwest ISO asserts that requirement did not include any directive to describe the manner of determining compliance with Dispatch Instructions. According to Midwest ISO, WEPCO's argument amounts to a belated rehearing request and an impermissible collateral attack. Midwest ISO, however, clarifies that it intends to continue exempting Generation Resources from charges during unit start-up and shutdown hours as specified in the Midwest ISO's Operating Procedures and Business Practices Manuals, in order to prevent charges from being assessed due to lags in the UDS and State Estimator.

3. **Discussion**

119. While we find the proposed definition of real-time revenue sufficiency guarantee to be acceptable, we note the definition cites a tariff subsection that does not exist (section 40.3.3.c.ii). We require the Midwest ISO to correct the citation and refile the tariff provision within 30 days of the date of this order.

120. The Midwest ISO proposed definitions of economic maximum and minimum dispatch clearly specify that they refer to an amount that can be dispatched, and the additional modifications provided by the Midwest ISO in its answer further clarify that the RSG charge will be based on the difference between the amount actually scheduled and the economic maximum or economic minimum amount that could actually be achieved by the unit in the hour of real time. We find this explanation and proposed modification an acceptable basis for assessing the charge, and it provides the necessary clarity for market participants. We require the Midwest ISO to provide its revisions, including the reference to UDS, in a compliance filing within 30 days of the date of this order. We agree with the Midwest ISO that the deletion revisions recommended by WEPCO are contrary to specific Commission instructions and therefore we will not require the revisions. We do not consider the required language "and adjusted to reflect actual production within SCUC-instructed hours of operation" to be contrary to the RSG Order, and we expect that the Midwest ISO is fully explaining the dispatch confirmation process, in conformance with the tariff and the requirements of our orders, and the

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[43] RSG Order at P 80.

characteristics of compliance in its Business Practices Manual. Also, we consider the Midwest ISO explanation that the phrase “actual production” is not the same as “metered production” to be responsive to WEPCO’s concerns.

The Commission orders:

(A) The Midwest ISO’s proposed tariff revisions are hereby accepted in part and rejected in part, as detailed in the body of this order.

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

By the Commission. Commissioner Moeller not participating.

(S E A L)

Philis J. Posey,
Acting Secretary.