

146 FERC ¶ 61,165  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Cheryl A. LaFleur, Acting Chairman;  
Philip D. Moeller, John R. Norris,  
and Tony Clark.

Midcontinent Independent System  
Operator, Inc.

Docket No. ER13-2124-000

ORDER CONDITIONALLY ACCEPTING IN PART AND REJECTING IN PART  
TARIFF REVISIONS AND REQUIRING COMPLIANCE FILING

(Issued March 7, 2014)

1. On August 7, 2013, Midcontinent Independent System Operator, Inc. (MISO) submitted a filing (August 7 Filing), pursuant to section 205 of the Federal Power Act (FPA), proposing revisions to its Open Access Transmission, Energy and Operating Reserve Markets Tariff (Tariff), regarding the allocation of real-time Revenue Sufficiency Guarantee (RSG) costs.<sup>1</sup> The Commission, by order dated October 16, 2013, accepted and suspended for five months MISO's August 7 Filing, subject to the outcome of a technical conference and further Commission order.<sup>2</sup> The Commission held a technical conference on November 19, 2013, and subsequently received comments and reply comments from the parties. In this order, we conditionally accept in part and reject in part MISO's proposed Tariff revisions, effective March 17, 2014, subject to a compliance filing due within 30 days of the date of this order and the outcome of the proceedings in Docket Nos. ER11-2275-003, ER12-678-002, ER12-678-003, ER12-1265-003, ER12-1266-003, and ER13-984-001.

**I. Background**

2. Under the existing MISO Tariff, a generation or demand response resource receives real-time RSG credits if MISO commits it through the Reliability Assessment

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<sup>1</sup> 16 U.S.C. § 824d (2012).

<sup>2</sup> *Midcontinent Indep. Sys. Operator, Inc.*, 145 FERC ¶ 61,044 (2013) (October 16 Order).

Commitment or Look-Ahead Commitment processes after the close of the day-ahead energy and operating reserve markets and if the resource then receives insufficient real-time energy and operating reserve revenues to cover its as-offered production costs. To fund these RSG credits, MISO assesses real-time RSG charges to certain market participants, pursuant to section 40.3.3 of the Tariff.<sup>3</sup>

**A. August 7 Filing**

3. In the August 7 Filing, MISO proposes several revisions to the allocation of real-time RSG costs via Constraint Management, Day-Ahead Schedule Deviation, and Headroom Charges, effective October 17, 2013. MISO states that it currently allocates real-time RSG costs in two steps or “passes.” According to MISO, in the RSG First Pass Distribution, MISO allocates real-time RSG costs directly to market participants that cause the incurrence of these costs based on four major reasons for unit commitments: (1) to manage an active transmission constraint (recovered via Constraint Management Charges); (2) to manage a voltage or local reliability concern (recovered via Voltage and Local Reliability (VLR) Charges); (3) to address deviations from Day-Ahead Schedules (recovered via Day-Ahead Schedule Deviation Charges); and (4) to address the need for headroom (recovered via Headroom Charges).<sup>4</sup> MISO states that, in the RSG Second Pass Distribution, it allocates any remaining real-time RSG costs to all market participants *pro rata* based on their market load-ratio share.

4. However, according to MISO’s Independent Market Monitor, this cost allocation methodology allocates a disproportionate share of real-time RSG costs to Day-Ahead Schedule Deviation and Headroom Charges, rather than Constraint Management Charges.<sup>5</sup> The Independent Market Monitor maintains that MISO allocated approximately 90 percent of the real-time RSG costs incurred during 2012 to Day-Ahead Schedule Deviation and Headroom Charges based on market-wide deviations, even though such deviations caused only approximately 50 percent of the costs. Conversely,

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<sup>3</sup> MISO, FERC Electric Tariff, [40.2.19, Real-Time Revenue Sufficiency Guarantee, 1.0.0](#), [40.3.3, Real-Time Energy and Operating Reserve Market Settlement Cal, 12.0.0](#), § 40.3.3.b.vi.

<sup>4</sup> MISO states that it allocates Headroom Charges to all market participants based on market load-ratio share. August 7 Filing at 2-3.

<sup>5</sup> MISO attached an affidavit of David B. Patton of Potomac Economics, MISO’s Independent Market Monitor, as Tab C to the August 7 Filing (Patton Test.). For purposes of this order, we will refer to Dr. Patton as the Independent Market Monitor.

the Independent Market Monitor indicates that an inappropriately low proportion of costs were allocated to Constraint Management Charges in 2012.<sup>6</sup>

5. To address the Independent Market Monitor's concerns, MISO proposes several revisions to the allocation of real-time RSG costs, as discussed in detail below. With regard to Constraint Management Charges, MISO proposes to improve the determination of the real-time RSG costs that should be allocated to these charges by applying a new Constraint Management Charge Allocation Factor, rather than the existing Constraint Contribution Factor.<sup>7</sup> MISO also proposes to allocate to the RSG Second Pass Distribution, rather than to Day-Ahead Schedule Deviation and Headroom Charges, any real-time RSG costs that cannot be allocated to Constraint Management Charges due to an existing rate cap.<sup>8</sup> With regard to Day-Ahead Schedule Deviation and Headroom Charges, MISO proposes to ensure that excessive real-time RSG costs are not allocated to these charges by netting deviations on a market-wide basis, rather than netting only by individual asset owners or administratively through financial schedules.<sup>9</sup> MISO also proposes to exempt from Day-Ahead Schedule Deviation Charges deviations that increase available capacity (i.e., supply-increasing deviations) that occur after the four-hour notification deadline for the real-time market.<sup>10</sup> In addition, MISO proposes to allocate real-time RSG costs to load zones based on net injections and withdrawals, rather than only net withdrawals.<sup>11</sup> MISO also proposes Tariff revisions to restore language that was inadvertently deleted in a previous filing and to make other corrections.<sup>12</sup>

## **B. October 16 Order and Technical Conference**

6. In the October 16 Order, the Commission found that MISO's proposal to revise its allocation of real-time RSG charges may be unjust, unreasonable, and unduly discriminatory or preferential. However, in order to provide an opportunity to expeditiously explore issues related to the allocation of real-time RSG costs under MISO's proposal and to supplement the existing record, the Commission accepted and

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<sup>6</sup> Patton Test. at 5-6.

<sup>7</sup> August 7 Filing at 6-9.

<sup>8</sup> *Id.* at 9-11.

<sup>9</sup> *Id.* at 11-17.

<sup>10</sup> *Id.* at 17-19.

<sup>11</sup> *Id.* at 19-20.

<sup>12</sup> *Id.* at 20.

suspended for five months MISO's proposal, subject to a technical conference and further order by the Commission.<sup>13</sup> Prior to the technical conference, on November 8, 2013, the Commission issued a supplemental notice setting forth an agenda for the technical conference, including questions for MISO and its Independent Market Monitor to address at the conference (November 8 Supplemental Notice).

7. The Commission held a technical conference on November 19, 2013, at which both MISO and the Independent Market Monitor made presentations, and in which stakeholders participated. On November 22, 2013, MISO filed a response to the Commission's questions given in the November 8 Supplemental Notice.<sup>14</sup>

## **II. Procedural Matters**

8. As stated in the October 16 Order, multiple parties filed timely motions to intervene.<sup>15</sup> Timely motions to intervene and comments were filed by MidAmerican Energy Company (MidAmerican) and Xcel Energy Services Inc. (Xcel).<sup>16</sup> A timely motion to intervene and protest was filed by Madison Gas & Electric Company (Madison). MISO filed an answer to the comments and protest. Madison filed an answer to MISO's answer.<sup>17</sup>

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<sup>13</sup> October 16 Order, 145 FERC ¶ 61,044 at PP 20-21.

<sup>14</sup> MISO, Response to November 8 Supplemental Notice (filed Nov. 22, 2013) (November 22 Response).

<sup>15</sup> October 16 Order, 145 FERC ¶ 61,044 at P 10. Motions to intervene were filed by Ameren Services Company, on behalf of Ameren Energy Generating Company, Ameren Energy Marketing Company, Ameren Illinois Company, AmerenEnergy Resources Generating Company, and Union Electric Company; American Municipal Power, Inc.; Consumers Energy Company; DC Energy Midwest, LLC; NRG Companies (including Bayou Cove Peaking Power LLC, Big Cajun I Peaking Power LLC, Cottonwood Energy Company LP, GenOn Energy Management, LLC, Louisiana Generating LLC, NRG Power Marketing LLC, NRG Sterlington Power LLC, and NRG Wholesale Generation LP); SESCO Enterprises, LLC; and Wisconsin Electric Power Company (Wisconsin Electric).

<sup>16</sup> Xcel filed on behalf of Northern States Power Company, a Minnesota corporation, and Northern States Power Company, a Wisconsin corporation.

<sup>17</sup> The Commission previously accepted Madison's and MISO's answers. October 16 Order, 145 FERC ¶ 61,044 at P 19.

9. After the November 19, 2013 technical conference, by supplemental notice dated November 25, 2013, the Commission stated that post-technical conference comments were due on or before December 3, 2013, and reply comments were due on or before December 13, 2013 (November 25 Supplemental Notice). MISO, together with its Independent Market Monitor, and Wisconsin Electric filed post-technical conference comments. MidAmerican, MISO, and Wisconsin Electric filed post-technical conference reply comments.

### **III. Discussion**

10. As discussed below, we conditionally accept in part and reject in part, effective March 17, 2014, MISO's proposed Tariff revisions regarding the allocation of real-time RSG costs, subject to a compliance filing due within 30 days of the date of this order and the outcome of the proceedings in Docket Nos. ER11-2275-003, ER12-678-002, ER12-678-003, ER12-1265-003, ER12-1266-003, and ER13-984-001. In particular, we reject MISO's proposal to exempt from Day-Ahead Schedule Deviation Charges supply-increasing deviations that occur after the four-hour notification deadline for the real-time market, without prejudice to MISO proposing this exemption based on appropriate evidentiary support in a future filing under FPA section 205. We conditionally accept the other revisions to the allocation of real-time RSG costs proposed in the August 7 Filing because they will help to ensure that MISO allocates these costs consistent with cost causation principles. We also direct MISO to submit, in the compliance filing ordered below, several Tariff revisions, including to remove the proposed exemption from Day-Ahead Schedule Deviation Charges for certain supply-increasing deviations.

#### **A. Constraint Management Charges**

##### **1. August 7 Filing**

11. MISO explains that it currently applies the Constraint Contribution Factor to determine the amount of real-time RSG costs that are attributable to constraint management and, thus, should be allocated to Constraint Management Charges.<sup>18</sup> However, MISO maintains that this factor does not accurately indicate the amount of real-time RSG costs associated with a resource commitment attributable to an active transmission constraint. MISO states, for example, that when there is sufficient available

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<sup>18</sup> MISO explains that the Constraint Contribution Factor for a resource committed to manage an active transmission constraint represents the amount by which a 1 MW change in output will help alleviate the flow on that constraint (e.g., if a resource with a ten percent Constraint Contribution Factor increases its output by 10 MWs, it will provide 1 MW of relief on the flow of the active transmission constraint). August 7 Filing at 7.

capacity to meet load, reserves, and headroom but an active transmission constraint exists on the system that must be managed, then the resource commitment was not needed to meet capacity requirements and, thus, any associated real-time RSG costs should not be allocated to the Day-Ahead Schedule Deviation Charge. MISO maintains that “[i]nstead, a greater amount of the associated RSG cost should be attributable to constraint management, and allocated to deviations that caused the congestion and the need for the commitment.”<sup>19</sup> The Independent Market Monitor explains that, under the current Tariff, the share of real-time RSG costs allocated to Constraint Management Charges cannot exceed the Constraint Contribution Factor of the resource committed to manage the active transmission constraint, which generally ranges from three to 15 percent. As a result, the Independent Market Monitor argues that only a small proportion of real-time RSG costs attributable to transmission congestion are allocated to Constraint Management Charges.<sup>20</sup>

12. To improve the allocation of real-time RSG costs, MISO proposes to instead determine the share of real-time RSG costs that should be allocated to Constraint Management Charges using a new Constraint Management Charge Allocation Factor, rather than the Constraint Contribution Factor. MISO proposes to determine this Constraint Management Charge Allocation Factor by conducting a quarterly study using the prior year’s data to evaluate unit commitments associated with all active transmission constraints, as described in new Schedule 46 of the Tariff.<sup>21</sup> MISO notes that this quarterly study is similar to the VLR Allocation Study in Schedule 44 of the Tariff. MISO maintains that the Constraint Management Charge Allocation Factor will serve as a better indicator of the real-time RSG costs that should be attributed to the management of active transmission constraints.<sup>22</sup>

13. To reflect this proposal in the Tariff, MISO proposes to define “Constraint Management Charge Allocation Factor” in new section 1.85a and to use this term in several parts of section 40.3.3.a.v.<sup>23</sup> MISO proposes to use this term in the description of the Constraint Management Charge rate in section 40.3.3.a.v so that the Constraint

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<sup>19</sup> *Id.* at 6-7.

<sup>20</sup> Patton Test. at 6.

<sup>21</sup> MISO, FERC Electric Tariff, [SCHEDULE 46, Constraint Management Charge Allocation Factor Study, 0.0.0.](#)

<sup>22</sup> August 7 Filing at 7-9.

<sup>23</sup> MISO, FERC Electric Tariff, [1.85a, Constraint Management Charge Allocation Factor, 0.0.0.](#)

Management Charge Allocation Factor is used when determining: (1) in the numerator of the rate, the share of real-time RSG costs associated with an active transmission constraint that will be allocated via Constraint Management Charges; and (2) in the denominator of the rate, whether the Constraint Management Charge rate cap will apply and, if so, the applicable rate cap. In addition, MISO proposes in section 40.3.3.a.v to insert two paragraphs indicating that any residual real-time Revenue Sufficiency Guarantee credits that cannot be allocated to Constraint Management Charges due to the application of the Constraint Management Charge Allocation Factor will be funded via Day-Ahead Schedule Deviation and Headroom Charges. MISO also proposes to revise section 40.3.3.a.vi accordingly, so that it indicates that any such residual costs will be allocated to Day-Ahead Schedule Deviation and Headroom Charges.<sup>24</sup>

14. MISO notes that, due to the existing rate cap portion of the formula, real-time RSG costs attributed to active transmission constraints by the Constraint Management Charge Allocation Factor may not be collected via Constraint Management Charges.<sup>25</sup> MISO proposes to revise section 40.3.3.a.v of the Tariff to reflect that it will allocate these residual real-time RSG costs to the RSG Second Pass Distribution, so that they are not allocated to Day-Ahead Schedule Deviation Charges.<sup>26</sup> MISO asserts that this approach is consistent with how the residual RSG costs from the Day-Ahead Schedule Deviation and Headroom Charges are treated. MISO contends that using the same approach for residual Constraint Management Charges would be more consistent with

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<sup>24</sup> *Id.* [40.3.3, Real-Time Energy and Operating Reserve Market Settlement Cal. 13.0.0](#), § 40.3.3.a.v.

<sup>25</sup> MISO states that, in order to avoid charging a given deviation an exorbitant Constraint Management Charge rate, the existing Tariff caps this rate by using as the denominator of the rate the greater of the MW amount of the deviations that caused the need for the commitments or the MW amount of capacity that was committed. August 7 Filing at 9-10.

<sup>26</sup> To demonstrate the application of the Constraint Management Charge rate cap, as proposed, MISO explains that, if a resource's 1 MW deviation necessitates a 100 MW commitment that resulted in a \$1,000 real-time RSG credit and the Constraint Management Charge Allocation Factor is 90 percent, then \$100 (i.e., \$1,000 x (1-.90)) will be allocated to the real-time Day-Ahead Schedule Deviation Charge, and only \$9 (i.e., \$900 / (maximum of 1 or 100 MW)) of the remaining \$900 will be allocated to the resource via Constraint Management Charges. Under MISO's proposal, it would allocate the remaining \$891 via the RSG Second Pass Distribution. *Id.* at 10.

cost causation “by consistently allocating only the appropriate amount of [real-time RSG costs] to each bucket, or set of deviations.”<sup>27</sup>

## 2. Comments and Subsequent Pleadings

### a. Constraint Management Charge Rate and Schedule 46

15. In their post-technical conference comments, MISO and the Independent Market Monitor provide an overview of how MISO’s proposed Tariff language reflects certain explanations provided at the technical conference regarding the allocation of real-time RSG costs.<sup>28</sup> MISO also proposes to submit further Tariff revisions in section 40.3.3.a.v and Schedule 46 to reflect the discussion at the technical conference. In particular, MISO proposes to revise the description of the *denominator* of the Constraint Management Charge rate in section 40.3.3.a.v so that both the Constraint Management Charge Allocation Factor and Constraint Contribution Factor, rather than only the Constraint Management Charge Allocation Factor, are used when determining whether the Constraint Management Charge rate cap will apply and, if so, the applicable rate cap.<sup>29</sup> MISO maintains that this change would reflect its proposal, at the technical conference, “to multiply the Hourly Economic Maximum Dispatch in the *numerator* of the Constraint Management Charge [ . . . ] Rate by both the C[onstraint] M[engagement] C[harge] Allocation Factor and the Constraint Contribution Factor,” rather than only the Constraint Management Charge Allocation Factor.<sup>30</sup>

16. MISO proposes to submit several revisions to Schedule 46 to provide additional clarity and consistency by better aligning the terminology within Schedule 46 with the terminology used in other Tariff sections.<sup>31</sup> MISO proposes to revise the first sentence of Schedule 46 so that it refers to real-time RSG “Credits,” rather than “Make-Whole Payments,” and applies only to resources committed by MISO in the Reliability Assessment Commitment or Look-Ahead Commitment processes.<sup>32</sup> MISO states that

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<sup>27</sup> *Id.*

<sup>28</sup> MISO Post-Technical Conference Comments at 3-5.

<sup>29</sup> *Id.* at 7-8.

<sup>30</sup> *Id.* at 7 (emphasis added).

<sup>31</sup> MISO attached a version of Schedule 46 showing the revisions that it proposes to submit as Tab A of its post-technical conference comments.

<sup>32</sup> As revised, the first sentence of Schedule 46 would read, in part, “. . . the share of Real-Time Revenue Sufficiency [sic] (RSG) Credits attributable to Resources

these revisions are consistent with terminology used in other Tariff sections. MISO also proposes to submit revisions to define or rename certain terms consistent with other sections of the Tariff, including to: (1) replace the term “MWP” with “Credits” to better align with the term “Real-Time [RSG] Credit” defined in section 1.538; (2) define the terms “Basepoint (BP),” “Resource Load Profiled Volume (RES\_LP\_VOL),” “RT\_BLL\_MRT<sub>GEN</sub>,” “TP\_Current\_Hour,” and “TP\_Next\_Hour;” and (3) clarify that “[i]f the Resource is not online or not injecting energy, the RES\_HR is set equal to zero.”<sup>33</sup> The revisions also clarify the location of the formula showing the calculation of the “RES\_HR.”<sup>34</sup>

17. In its post-technical conference reply comments, MidAmerican requests that MISO and the Independent Market Monitor determine whether the Tariff revisions proposed in their post-technical conference comments should trigger corresponding changes in other Tariff sections. MidAmerican argues that several of the proposed Tariff revisions are largely patterned after existing Tariff language. MidAmerican contends, for example, that the proposed revisions in Schedule 46 (for congestion-related commitments) are nearly identical to existing language in Schedule 44 (for VLR-related commitments). MidAmerican questions whether similar changes are needed in Schedule 44.<sup>35</sup> In addition, MidAmerican contends that Schedules 44 and 46 appear to have conflicting definitions of “hour Load change.” MidAmerican states that, to the extent that revisions are advisable in Schedule 44, it leaves the determination of whether those changes are best made on compliance or in a new proceeding to MISO and the Commission.<sup>36</sup>

18. MISO acknowledges in its post-technical conference reply comments that certain inconsistencies exist between the current provisions of Schedule 44 and the proposed provisions of Schedule 46. However, MISO states that the proposed revisions to Schedule 46 are appropriate. MISO adds that it “intends to address any inconsistencies

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committed in any R[eliability] A[ssessment] C[ommitment] processes or the L[ook-]A[head]Commitment process for Active Transmission Constraints pursuant to Section 40.3.3.a.v.” *Id.* at 6.

<sup>33</sup> *Id.* at 6-7.

<sup>34</sup> *Id.* Tab A, § 2.a.

<sup>35</sup> MidAmerican Post-Technical Conference Reply Comments at 2-3.

<sup>36</sup> *Id.* at 3.

with Schedule 44, as well as additional changes to Schedule 44 that may be appropriate, in a future Section 205 filing.”<sup>37</sup>

**b. Constraint Management Charge Allocation Factor**

19. In its post-technical conference comments, Wisconsin Electric asserts that MISO should allocate System Support Resource (SSR) costs to the broader market, rather than to only local entities, because the commitment of SSRs benefits the overall market by potentially reducing real-time RSG costs.<sup>38</sup> Wisconsin Electric notes that SSR commitments may defer the need for capacity commitments needed to ensure power balance, as do resource commitments for VLR and the management of active transmission constraints. According to Wisconsin Electric, these deferred resource commitments would have a high probability of necessitating make-whole payments, which are avoided due to the commitment of other resources, including SSRs. Wisconsin Electric maintains that MISO is now, or soon will be, committing hundreds of MWs from SSRs on a daily basis, and that the market benefits from increased supply at no cost via reduced make-whole payments and market prices.<sup>39</sup>

20. Wisconsin Electric states that the proposed Constraint Management Charge Allocation Factor methodology perpetuates a flaw in the current VLR Allocation Ratio methodology because both methodologies are largely identical. Wisconsin Electric contends, for example, that the VLR Allocation Ratio for its Presque Isle Power Plant of 100 percent incorrectly suggests that the commitment of this unit *never* displaces any resources needed for power balance and any associated make-whole payments, even though MISO commits 275 to 300 MW of generation through the VLR process on a daily basis. According to Wisconsin Electric, the flaw in both allocation factor methodologies is exacerbated by considering only real-time commitments of resources for headroom, rather than also considering day-ahead commitments for capacity or power balance. Wisconsin Electric contends that it is unjust and unreasonable to allocate all costs of a commitment to only a subset of the cost causers, which is the effect of ignoring day-ahead commitments for power balance or headroom.<sup>40</sup> Wisconsin Electric contends that

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<sup>37</sup> MISO Post-Technical Conference Reply Comments at 5.

<sup>38</sup> The MISO Tariff defines SSRs as “Generation Resources or Synchronous Condenser Units that have been identified in Attachment Y – Notification to this Tariff and are required by the Transmission Provider for reliability purposes, to be operated in accordance with the procedures described in [s]ection 38.2.7 of th[e] Tariff.” MISO, FERC Electric Tariff, [1.643, System Support Resource \(SSR\):, 0.0.0.](#)

<sup>39</sup> Wisconsin Electric Post-Technical Conference Comments at 3-4.

<sup>40</sup> *Id.* at 4-5.

MISO's current allocation process for VLR costs – which MISO proposes to apply to Constraint Management Charges – is unjust and unreasonable because it fails to consider day-ahead market commitments for power balance in the cost allocation study process, and instead only considers headroom needs in the real-time market, thus allocating excessive costs to local entities.

21. Wisconsin Electric argues that MISO's current and proposed real-time RSG cost allocation methodologies do not properly allocate costs to all cost causers, but to only a subset of cost causers.<sup>41</sup> Wisconsin Electric proposes that the flaw can be corrected for VLR in the Day-Ahead market – and applied to SSR commitments as well – in the following way:

First, determine the Marginal Uplift [...] Rate for each hour in the Day-Ahead market. For each unit with a MISO Day-Ahead commitment period (where a MISO commitment period consists of contiguous hours of a MISO commitment), determine the average uplift rate by dividing the M[ake-]W[hole] P[ayment] by the sum of the Hourly Economic Dispatch Maximums for the given unit during the commitment period [. . .] For each hour, the highest average uplift rate of all units receiving an uplift payment becomes the M[arginal] U[p]l[ift] Rate for that hour. Finally, allocate M[arginal] U[p]l[ift] Rate x EcoMax of VLR or SSR to the Day-Ahead RSG Numerator (not to exceed the M[ake-]W[hole] Payment] for the VLR or SSR unit).[<sup>42</sup>]

Wisconsin Electric maintains that its proposal would reflect actual system conditions, as opposed to MISO's current and proposed real-time RSG cost allocation methodologies that rely on average historical impact. Wisconsin Electric maintains that, therefore, its proposal would allocate costs to those actually causing the costs to be incurred rather than to those who caused costs to be incurred in the past. Wisconsin Electric adds that, when MISO makes commitments for power balance, its proposal “would appropriately allocate some allocation of M[ake-]W[hole] Payment [sic] for resources not committed specifically for power balance (i.e., VLR, SSR, and C[ongestion] M[anagement]).”<sup>43</sup>

22. In its post-technical conference reply comments, Wisconsin Electric states that it does not take issue with any of MISO's proposed Tariff revisions, except with regard to:

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<sup>41</sup> *Id.* at 8.

<sup>42</sup> *Id.* at 5. Wisconsin Electric provides two numerical examples to illustrate how its proposed real-time RSG rate methodology would apply. *Id.* at 5-7.

<sup>43</sup> *Id.* at 7-8.

(1) the Constraint Management Charge Allocation Factor, (2) the VLR Allocation Ratio, and (3) the lack of an allocation factor or ratio for SSRs. Wisconsin Electric reiterates several of its objections. Wisconsin Electric also maintains that MISO should allocate the costs associated with congestion management, VLR, and SSRs on a consistent basis, and that its alternative methodology for adjusting the allocation of real-time RSG costs would accomplish this. With regard to the modifications to Schedule 46 proposed in MISO's post-technical conference comments, Wisconsin Electric argues that these revisions are only minor modifications to a methodology that does not appropriately assign costs. Wisconsin Electric requests that the Commission direct MISO to substantially modify or replace its existing methodology or accept Wisconsin Electric's alternative methodology.<sup>44</sup>

23. In response to Wisconsin Electric, MISO argues in its post-technical conference reply comments that Wisconsin Electric's concerns are beyond the scope of this proceeding. MISO contends that neither Wisconsin Electric nor any other party raised these issues prior to the technical conference. MISO also maintains that these issues were not identified as topics for discussion at the technical conference or subsequent comments and reply comments in the October Order, November 8 Supplemental Notice, and/or November 25 Supplemental Notice. With regard to the alleged flaw in the allocation of VLR costs, MISO states that this issue was not previously raised by Wisconsin Electric or any other party and notes that the Commission previously found MISO's allocation of these costs to be just and reasonable.<sup>45</sup> MISO argues that Wisconsin Electric cannot raise objections to the justness and reasonableness of MISO's current VLR provisions, as they are beyond the scope of this proceeding under FPA section 205. MISO notes, however, that Wisconsin Electric is free to raise its concerns for consideration in the MISO stakeholder process.<sup>46</sup>

24. MidAmerican argues that MISO's proposal aligns the allocation of real-time RSG costs more closely with cost causation and reflects an incremental improvement over the existing allocation. MidAmerican believes that, while there are likely various just and reasonable methods to allocate RSG costs, MISO's proposal represents one such just and reasonable method, and it appears to be an improvement over the existing RSG allocation. MidAmerican contends that MISO's proposal recognizes, among other things, that real-time RSG costs can originate from various causes (e.g., the need to manage transmission congestion), and that interdependencies exist among these factors

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<sup>44</sup> Wisconsin Electric Post-Technical Conference Reply Comments at 2-3.

<sup>45</sup> MISO Post-Technical Conference Reply Comments at 4 (citing *Midwest Indep. Transmission Sys. Operator, Inc.*, 140 FERC ¶ 61,171 (2012) (August 31 Order)).

<sup>46</sup> *Id.*

(e.g., a commitment made to relieve a transmission constraint may avoid a commitment that would otherwise be required to ensure headroom).<sup>47</sup>

### 3. Commission Determination

25. We will conditionally accept MISO's proposed revisions to the allocation of real-time RSG costs to Constraint Management Charges, subject to further Tariff revisions on compliance, as discussed below. MISO's proposal to apply the Constraint Management Charge Allocation Factor, rather than the current Constraint Contribution Factor, when determining the share of real-time RSG costs associated with an active transmission constraint that should be allocated to Constraint Management Charges will better ensure that these costs are allocated consistent with cost causation principles. As MISO explains, under Schedule 46 of the Tariff, it will determine the applicable Constraint Management Charge Allocation Factor using historical data regarding unit commitments associated with all active transmission constraints, which should better indicate the real-time RSG costs that should be attributed to the management of active transmission constraints. MISO's proposal will also ensure that residual real-time RSG costs that cannot be allocated to Constraint Management Charges due to the application of the existing Constraint Management Charge rate cap are not allocated to Day-Ahead Schedule Deviation and Headroom Charges based on deviations that did not cause the incurrence of the underlying RSG costs. MISO's proposal to instead allocate these residual costs to the RSG Second Pass Distribution is consistent with the treatment of residual RSG costs found when determining Day-Ahead Schedule Deviation and Headroom Charges.

26. In its post-technical conference comments, MISO states that it proposes to submit further Tariff revisions in section 40.3.3.a.v and Schedule 46 to reflect the discussion of these sections at the technical conference.<sup>48</sup> At the technical conference, MISO explained that the revisions to section 40.3.3.a.v are necessary to reflect that the applicable hourly economic maximum dispatch in the denominator of the Constraint

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<sup>47</sup> MidAmerican Post-Technical Conference Reply Comments at 2.

<sup>48</sup> There is an apparent discrepancy in MISO's description of its revisions to sections 40.3.3.a.v. While MISO indicated at the technical conference, in the November 22 Response, and in the Tariff revisions provided as part of its post-technical conference comments that the revisions would apply to the *denominator* of the Constraint Management Charge rate, MISO's description of these Tariff revisions in its post-technical conference comments indicate that the revisions would instead apply to the *numerator* of the rate. We infer that the latter reference was in error and that MISO proposes to revise the description of the Constraint Management Charge rate cap in the *denominator* of the Constraint Management Charge rate.

Management Charge rate should be adjusted for both the Constraint Management Charge Allocation Factor and the Constraint Contribution Factor, rather than only the Constraint Management Charge Allocation Factor as proposed in the August 7 Filing. MISO stated that continuing to apply the Constraint Contribution Factor, consistent with the existing Tariff, is necessary in order to calculate the Constraint Management Charge rate cap on the basis of the flow relief over the active transmission constraint provided by the committed resource.<sup>49</sup> Further, as discussed at the technical conference, MISO's proposed revisions to Schedule 46 would ensure that terms are appropriately defined and that the terminology used is more consistent with other Tariff sections. Therefore, we will require MISO to submit, in the compliance filing ordered below, Tariff revisions to reflect MISO's proposed revisions to section 40.3.3.a.v and Schedule 46, consistent with MISO's post-technical conference comments.<sup>50</sup>

27. In the August 7 Filing, MISO did not propose any revisions to the allocation of real-time RSG costs to VLR Charges, including the determination of VLR Allocation Ratios under Schedule 44. Therefore, we find that MidAmerican's concerns regarding whether the Tariff revisions to Schedule 46 that MISO proposes to submit should also apply to similar Tariff language in Schedule 44 are beyond the scope of this proceeding.<sup>51</sup> We note, however, that MISO states that it intends to address any inconsistencies between Schedules 44 and 46, as well as any additional changes to Schedule 44 that may be appropriate, in a future filing under FPA section 205.<sup>52</sup>

28. We find Wisconsin Electric's argument that SSR costs should be allocated to the broader market because they reduce real-time RSG costs, as well as its proposed alternative cost allocation methodology to address its SSR-related concerns, to be beyond the scope of this proceeding. MISO did not propose any revisions to the allocation of

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<sup>49</sup> See, e.g., MISO November 22 Response at 11.

<sup>50</sup> In MISO's post-technical conference comments, the first sentence of the proposed language in Schedule 46 refers to "Revenue Sufficiency" rather than "Revenue Sufficiency Guarantee." In the compliance filing ordered below, MISO should ensure that its Tariff revisions correct this error.

<sup>51</sup> We note that, while MidAmerican stated in its initial comments that it opposes two paragraphs of MISO's proposed revisions to section 40.3.3.a.v of the Tariff, it later stated that it no longer objects to these revisions based on MISO's answer and presentation at the technical conference. See MidAmerican Post-Technical Conference Reply Comments at 3. Therefore, we need not address MidAmerican's initial objections to this language.

<sup>52</sup> See *supra* n.37.

SSR costs in the August 7 Filing, nor did it propose any adjustments to the allocation of real-time RSG costs due to the commitment of SSRs. As MISO notes, if Wisconsin Electric believes that adjustments to the allocation of SSR costs are needed, it may present its concerns in the MISO stakeholder process.

29. We note that, in the August 31 Order, the Commission conditionally accepted MISO's proposed allocation of real-time RSG costs to VLR Charges, including the determination of VLR Allocation Ratios under Schedule 44.<sup>53</sup> Wisconsin Electric's allegation that this cost allocation is unjust and unreasonable constitutes an impermissible collateral attack on the August 31 Order. Therefore, we will consider Wisconsin Electric's arguments narrowly, only as they relate to whether MISO's proposed determination of Constraint Management Charge Allocation Factors under Schedule 46 is just and reasonable, consistent with section 205 of the FPA.

30. In this regard, we find Wisconsin Electric's concerns regarding MISO's proposed determination of Constraint Management Charge Allocation Factors to be unfounded. As Wisconsin Electric notes, MISO's methodology for determining these factors is largely similar to its current methodology for determining VLR Allocation Ratios under the existing Tariff, which the Commission already found to be just and reasonable in the August 31 Order. Wisconsin Electric presents only a single example – the 100 percent VLR Allocation Ratio for its Presque Isle Power Plant – to support its contention that this methodology is flawed, and it does not explain why its VLR-related concerns would apply in the context of Congestion Management Charges. As MISO's Independent Market Monitor explains, it would be appropriate to allocate 100 percent of the real-time RSG costs associated with a resource commitment to Constraint Management Charges in certain circumstances.<sup>54</sup> Therefore, a Constraint Management Charge Allocation Factor of 100 percent is not inconceivable if, for example, those circumstances were to apply at an active transmission constraint during the 12-month period studied under Schedule 46.

31. Finally, we will not consider Wisconsin Electric's proposed alternative methodology for ameliorating the alleged flaws in the allocation of real-time RSG and SSR costs. We find that MISO's proposal represents a just and reasonable method of allocating real-time RSG costs. As the courts have noted, the Commission's review is limited to determining whether a proposal is just and reasonable and not unduly

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<sup>53</sup> August 31 Order, 140 FERC ¶ 61,171.

<sup>54</sup> Patton Test. at 6-7 (stating that, if real-time RSG costs are incurred due to the commitment of a resource solely to manage an active transmission constraint, “[i]t is, therefore, appropriate for the C[onstraint] M[anagement] C[harge] rate to include all of the costs in this scenario, even if there are additional capacity benefits from the resource commitment to the market”).

discriminatory or preferential, not “whether a proposed rate schedule is more or less reasonable than alternative rate designs.”<sup>55</sup> As MISO notes, if Wisconsin Electric believes that adjustments to the allocation of real-time RSG costs are needed, it may present its concerns in the MISO stakeholder process.

## **B. Day-Ahead Schedule Deviation and Headroom Charges**

### **1. August 7 Filing**

32. MISO explains that market-wide deviations are often allocated real-time RSG costs in hours when such deviations are not likely to cause any additional unit commitments or associated real-time RSG costs. MISO explains that its current Tariff allows it to net deviations by asset owner or by administrative netting between asset owners through financial schedules, which causes MISO to allocate real-time RSG costs to Day-Ahead Schedule Deviation and Headroom Charges based on the sum of all asset owner deviations. MISO states that its current practice of netting deviations across a single asset owner has a very minor impact on these charges, and the administrative netting through financial schedules has never been used. MISO maintains that this is inconsistent with cost causation because market-wide net deviations, not the sum of all individual asset owner deviations, may cause the need to commit additional resources in the real-time market and any associated RSG costs.<sup>56</sup> MISO indicates that, according to its Independent Market Monitor, MISO allocates 90 percent of real-time RSG costs to market-wide deviations even though such deviations are likely causing approximately one-third of the costs.<sup>57</sup>

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<sup>55</sup> See, e.g., *Cities of Bethany, et al. v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984); see also *Oxy USA, Inc. v. FERC*, 64 F.3d 679, 692 (D.C. Cir. 1995) (finding that, under the FPA, as long as the Commission finds a methodology to be just and reasonable, that methodology “need not be the only reasonable methodology, or even the most accurate one”); *Louisville Gas & Electric Co.*, 114 FERC ¶ 61,282, at P 29 (finding that “the just and reasonable standard under the FPA is not so rigid as to limit rates to a ‘best rate’ or ‘most efficient’ rate standard. Rather a range of alternative approaches often may be just and reasonable.”), *order on reh’g*, 116 FERC ¶ 61,020 (2006).

<sup>56</sup> August 7 Filing at 11-12 (citing Patton Test. at 8).

<sup>57</sup> *Id.* (citing Independent Market Monitor for MISO, *2011 State of the Market Report for the MISO Electricity Markets* at iv-v (June 2012) available at [http://www.potomaceconomics.com/uploads/midwest\\_reports/2011\\_SOM\\_Report.pdf](http://www.potomaceconomics.com/uploads/midwest_reports/2011_SOM_Report.pdf); Independent Market Monitor for MISO, *2012 State of the Market Report for the MISO*

33. MISO proposes that, before allocating real-time RSG costs to Day-Ahead Schedule Deviation and Headroom Charges based on deviations that decrease available capacity, it will first ensure that the initial amount of real-time RSG costs to be allocated is appropriate based on the market-wide conditions in each hour. To do this, MISO proposes to use the sum of the market-wide net deviations and headroom need to determine the extent to which real-time RSG costs associated with capacity commitments should be allocated to Day-Ahead Schedule Deviation and Headroom Charges prior to applying its existing rate for these charges.<sup>58</sup> In particular, MISO explains that when the sum of market-wide net deviations and headroom need are negative or equal to zero, they do not cause any real-time RSG costs associated with capacity commitments and the associated costs are not allocated to Day-Ahead Schedule Deviation and Headroom Charges. MISO states that when the sum of market-wide net deviations and headroom need are positive but less than the amount of economically-committed capacity, they cause only a portion of any real-time RSG costs associated with capacity commitments and only a portion of the associated costs are allocated to Day-Ahead Schedule Deviation and Headroom Charges.<sup>59</sup> MISO avers that only when the sum of market-wide net deviations and headroom need is greater than or equal to the economically-committed capacity will they be entirely responsible for any real-time RSG costs associated with capacity commitments and these costs will be allocated to Day-Ahead Schedule Deviation and Headroom Charges.<sup>60</sup> MISO proposes to revise section 40.3.3.a.ix of the Tariff to reflect its market-wide netting process.<sup>61</sup> In addition, MISO proposes to revise section 40.3.3.a.x to reflect that, to the extent that MISO determines through market-wide netting that any real-time RSG costs associated with capacity commitments should not be

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*Electricity Markets at 73* (June 2013) available at [http://www.potomaceconomics.com/uploads/reports/2012\\_SOM\\_Report\\_final\\_6-10-13.pdf](http://www.potomaceconomics.com/uploads/reports/2012_SOM_Report_final_6-10-13.pdf)).

<sup>58</sup> *Id.* at 13.

<sup>59</sup> When only a portion of the real-time RSG costs associated with capacity commitments are allocated to Day-Ahead Schedule Deviation and Headroom Charges, MISO proposes to apportion costs to these charges using a new real-time RSG market-wide net rate, which estimates the dollar per MW cost for each MW of economically committed capacity. MISO will multiply this rate by the market-wide deviations to determine the amount of real-time RSG costs associated with capacity commitments that should be allocated to Day-Ahead Schedule Deviation and Headroom Charges. *Id.* at 15-16.

<sup>60</sup> *Id.* at 14-15.

<sup>61</sup> *Id.* at 16-17.

allocated to Day-Ahead Schedule Deviation and Headroom Charges, it will allocate these costs via the RSG Second Pass Distribution based on load ratio share.<sup>62</sup>

34. MISO proposes to revise section 40.3.3.a.viii of the Tariff to exempt from Day-Ahead Schedule Deviation Charges supply-increasing deviations that occur after the four-hour notification deadline for the real-time market. MISO maintains that, for purposes of allocating costs consistent with cost causation, the “most relevant” causes of real-time RSG costs are the commitment of additional resources in the Reliability Assessment Commitment process. MISO states that “the operative fact is the commitment of additional Resources in R[eliability] A[ssessment] C[ommitment] [sic], not the pricing circumstances of the market into which those Resources will be committed.”<sup>63</sup> MISO notes that the Commission previously found that the MISO Tariff “allocates Revenue Sufficiency Guarantee costs based on market participants’ activities that *cause unit commitment* and can cause the incurrence of Revenue Sufficiency Guarantee costs.”<sup>64</sup> MISO argues that supply-increasing deviations that occur after the notification deadline may “impact the pricing circumstances of the market (because of a shift to the left along the aggregate supply curve),” but do not cause the need for additional unit commitments.<sup>65</sup> Because these deviations do not necessitate unit commitments, MISO contends that they should not be considered when allocating real-time RSG costs via Day-Ahead Schedule Deviation Charges. In addition, MISO explains that it is not feasible to net supply-increasing deviations against deviations that decrease available supply (i.e., supply-decreasing deviations) if they occur after the notification deadline because MISO cannot determine whether a supply-increasing deviation occurred in time to avoid the need for a commitment caused by the supply-decreasing deviation. Therefore, MISO proposes to exempt these supply-increasing deviations, rather than netting them against supply-decreasing deviations.<sup>66</sup>

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<sup>62</sup> *Id.* at 15, 17.

<sup>63</sup> *Id.* at 17.

<sup>64</sup> *Id.* (citing *Ameren Services Co. v. Midwest Indep. Transmission Sys. Operator, Inc.*, 125 FERC ¶ 61,161, at P 109 (2008) (italics added by MISO); *Midwest Indep. Transmission Sys. Operator, Inc.*, 134 FERC ¶ 61,264, at P 103 (2011) (accepting MISO’s proposal to allocate real-time RSG costs to operating reserve deviations because “operating reserve deviations result in unit commitment in real time and can cause [RSG] costs.”)).

<sup>65</sup> *Id.* at 18.

<sup>66</sup> *Id.* at 18-19.

## 2. Protest and Subsequent Pleadings

### a. Market-Wide Netting

35. In its post-technical conference comments, MISO proposes to submit Tariff revisions to correct an error in its proposed revisions to the determination of Day-Ahead Schedule Deviation and Headroom Charges to implement the market-wide netting process, which was discussed at the technical conference. In particular, MISO proposes to revise the formulation of the numerator of the Day-Ahead Schedule Deviation and Headroom Charge rate so that it appropriately considers headroom need in certain circumstances. MISO indicates that section 40.3.3.a.ix of the Tariff should read, in part:

If the sum of (i) the Market-Wide Net Deviations; and (ii) Headroom Need is greater than zero, but less than the Economic Committed Capacity, the Day-Ahead Schedule Deviation and Headroom Credit is equal to the product of (i) the sum of (a) the Market-Wide Net Deviations and (b) Headroom Need; and (ii) the Real-Time Revenue Sufficiency Guarantee Market-Wide Net Rate.<sup>67]</sup>

### b. Exemption for Certain Supply-Increasing Deviations

36. Madison contends that MISO's proposal to exempt from the allocation of real-time RSG costs supply-increasing deviations that occur after the notification deadline for the real-time market is based on the erroneous premise that only the unit commitment process should be considered in determining the causation of real-time RSG costs. Madison contends that these deviations can reduce locational marginal prices, thereby increasing the likelihood that generators will be unable to recover their production costs via market revenue and necessitating real-time RSG credits. In response to MISO's assertion that the key factor in determining the cause of real-time RSG costs is unit commitment, rather than market prices, Madison argues that unit commitment must be paired with a market price below the profitability threshold of the generator; otherwise, MISO will not need to provide real-time RSG credits.<sup>68</sup>

37. In its answer, MISO argues that the Commission should reject Madison's protest because the proper basis for allocating RSG costs is the direct causation of additional unit commitments in the Reliability Assurance Commitment and Look-Ahead Commitment processes, not the pricing environment in which the additional commitments could result in RSG credits. MISO contends that unit commitment is the rationale that the

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<sup>67</sup> MISO Post-Technical Conference Comments at 8-9.

<sup>68</sup> Madison Protest at 3-5.

Commission articulated in finding appropriate the allocation of RSG costs to certain deviations.<sup>69</sup> MISO points out that, according to the Independent Market Monitor, the cost causation principles that underlie the Tariff's RSG cost allocation require costs to be assigned to deviations that directly cause RSG by contributing to MISO's need to commit peaking resources.<sup>70</sup> MISO asserts that Madison unreasonably dissociates direct responsibility for deviations that are the primary cause of additional unit commitments, and the locational marginal price situation that could result in RSG payments to the committed units. MISO further argues that it is inappropriate to attempt to allocate RSG costs to the "myriad of potential actions that could indirectly affect RSG by influencing LMPs" as these are merely "secondary effects," which are "difficult to estimate and unpredictable."<sup>71</sup> MISO maintains that Madison has given no reason why capacity-increasing deviations should be singled out among other price-reducing factors, to be allocated real-time RSG costs. Therefore, MISO argues that post-notification deadline capacity-increasing deviations should not be allocated real-time RSG costs because they do not cause the need for additional capacity commitments, and their potential secondary price effects are not a valid basis for such allocation.<sup>72</sup>

38. In its answer, Madison argues that, contrary to MISO's assertion, the Commission did not find unit commitment to be the only factor that causes the incurrence of RSG costs and expressly approved MISO's proposal to allocate a portion of real-time RSG costs to supply-increasing deviations.<sup>73</sup> Madison maintains that MISO has the burden of proof in this proceeding and has failed to demonstrate that supply-increasing deviations should be exempted from real-time RSG charges. According to Madison, MISO's argument that the effects of supply-increasing deviations on the ability of market prices to allow resources to recover their commitment costs are difficult to estimate does not

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<sup>69</sup> MISO Answer at 5 (citing *Midwest Indep. Transmission Sys. Operator, Inc.*, 134 FERC ¶ 61,264, at P 103 (2011)).

<sup>70</sup> MISO attached an answering affidavit of David B. Patton of Potomac Economics as Attachment 1 to MISO's Answer (Patton Answering Aff.).

<sup>71</sup> MISO Answer at 7-8 (citing Patton Answering Aff. at P 5).

<sup>72</sup> *Id.* at 5-9.

<sup>73</sup> Madison Answer at 3-5 (citing *Midwest Indep. Transmission Sys. Operator, Inc.*, 117 FERC ¶ 61,113, at P 147 (2006)).

justify exempting these deviations from real-time RSG charges, as the Commission found in a previous order regarding the allocation of RSG costs to virtual transactions.<sup>74</sup>

39. In their post-technical conference comments, MISO and the Independent Market Monitor state that supply-increasing deviations that occur after the notification deadline can impact real-time RSG costs by decreasing real-time market prices and reducing the need to commit additional generation. They contend, however, that the effect of these deviations on real-time market prices is “a secondary effect that should not be considered a cause of real-time RSG costs for allocation purposes.”<sup>75</sup> MISO and the Independent Market Monitor maintain that they were unable to develop a feasible methodology for quantifying these potential secondary effects but that, given the size and scope of the MISO market, these effects are “generally very small and would likely be much smaller than the RSG benefits of these deviations.”<sup>76</sup> They argue that the supply-increasing deviations that occur after the notification deadline have the direct effect of reducing real-time RSG costs by reducing the need to commit resources through the Reliability Assessment Commitment and Look-Ahead Commitment processes that would otherwise require real-time RSG credits. They add that the implementation of the Look-Ahead Commitment process has likely increased these direct RSG benefits because MISO is able to commit resources closer to the operating hour and, thereby, better account for supply-increasing deviations that occur after the notification deadline.<sup>77</sup>

40. MISO and the Independent Market Monitor believe that considering secondary effects when allocated real-time RSG costs would “be highly inappropriate and distort the economic incentives that the cost allocation is intended to provide.”<sup>78</sup> First, they argue that incorporating secondary effects into the RSG cost allocation would produce counter-intuitive and inefficient results. They state, for example, that supply-decreasing deviations that cause MISO to commit additional resources and to incur any associated real-time RSG costs could also raise market prices slightly, thereby potentially reducing real-time RSG costs. They contend that, to consider secondary effects, MISO would need to potentially reduce the allocation of RSG costs to supply-decreasing deviations. Second, MISO and the Independent Market Monitor argue that continuing to allocate

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<sup>74</sup> *Id.* at 5-7 (citing *Ameren Servs. Co. v. Midwest Indep. Transmission Sys. Operator, Inc.*, 125 FERC ¶ 61,161, at PP 113, 115 (2008)).

<sup>75</sup> MISO Post-Technical Conference Comments at 9.

<sup>76</sup> *Id.*

<sup>77</sup> *Id.*

<sup>78</sup> *Id.* at 10.

costs to supply-increasing deviations that occur after the notification deadline will substantially reduce the incentive for participants to fully schedule the system's needs in the day-ahead market. They maintain that this, in turn, will reduce the efficiency of the day-ahead commitment and raise overall costs to MISO customers. They add that the real-time RSG cost allocation plays a key role in minimizing harmful deviations that require MISO to resort to out-of-market actions that result in RSG costs.<sup>79</sup>

### 3. Commission Determination

41. We will conditionally accept MISO's proposal to net market-wide net deviations and headroom need to determine the extent to which real-time RSG costs associated with capacity commitments should be allocated to Day-Ahead Schedule Deviation and Headroom Charges, subject to further Tariff revisions on compliance. MISO's proposed market-wide netting process is consistent with cost causation principles because, as MISO and its Independent Market Monitor have explained, market-wide net deviations cause the need to commit additional resources in the real-time market and any associated real-time costs. At the technical conference and in its post-technical conference comments, MISO proposed to submit further revisions to section 40.3.3.a.ix to correct an error in the formulation of the Day-Ahead Schedule Deviation and Headroom Charge rate. We agree that this correction is necessary and will require MISO to submit, in the compliance filing ordered below, Tariff revisions to reflect MISO's proposed revisions to section 40.3.3.a.ix, consistent with its post-technical conference comments.

42. With regard to MISO's proposal to exempt from Day-Ahead Schedule Deviation Charges supply-increasing deviations that occur after the notification deadline for the real-time market, we find that MISO has not provided sufficient evidence that these deviations do not cause the incurrence of real-time RSG costs. MISO and its Independent Market Monitor concede that these deviations can cause real-time RSG costs by reducing real-time prices and rendering some production costs unrecoverable. Further, MISO has not addressed the extent to which supply-increasing deviations that occur after the notification deadline could cause MISO to dispatch other resources downward, potentially reducing the revenues received by other resources and causing the incurrence of real-time RSG costs. While MISO and its Independent Market Monitor maintain that any real-time RSG costs caused by these deviations would "likely" be offset by a corresponding reduction in unit commitment and associated RSG costs, this assertion is speculative and unsupported by record evidence using actual data.

43. We disagree with MISO's position that, for cost allocation purposes, only unit commitment, and not real-time price changes or other "secondary effects," should be considered when determining the causes of real-time RSG costs. We note that, in a

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<sup>79</sup> *Id.*

previous proceeding, the Commission considered whether certain deviations cause the incurrence of real-time RSG costs by reducing real-time prices, specifically when rejecting MISO's proposed exemptions from real-time RSG costs for resources in test, start-up, and shut-down mode.<sup>80</sup> It is unclear why MISO and its Independent Market Monitor found that explaining the extent to which supply-increasing deviations that occur after the notification deadline caused the incurrence of real-time RSG costs using actual 2012 data, as requested in the November 8 Supplemental Notice, would be infeasible.<sup>81</sup> While quantifying the impact of real-time price reductions and other secondary effects may be difficult, we note that the Independent Market Monitor successfully conducted a study and provided evidence in this regard for other proposed exemptions.<sup>82</sup>

44. MISO's contention that inefficient market results will occur absent the proposed exemption from real-time RSG charges for supply-increasing deviations that occur after the notification deadline is speculative. As the MISO Tariff currently does not exempt these deviations, any such market impacts should already be evident; however, MISO did not provide actual market data to support its claims. MISO also does not address whether the proposed exemption could instead cause market inefficiencies. For example, MISO does not address whether, by exempting certain supply-increasing deviations from the allocation of real-time RSG costs, MISO would remove an implicit penalty for deviating from resources' dispatch instructions. Moreover, while MISO maintains that counter-intuitive results would occur if it were to try to quantify the RSG benefits associated with real-time price effects or other secondary effects, MISO does not explain why the RSG benefits that it describes – the hypothetical avoidance of RSG costs that are never actually incurred or allocated – should be considered when allocating other RSG costs that are actually incurred.<sup>83</sup>

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<sup>80</sup> *Midwest Indep. Transmission Sys. Operator, Inc.*, 132 FERC ¶ 61,184, at PP 108-109 (2010) (August 2010 Order) (finding that any must-run volumes associated with resources in test mode and the operation of resources in start-up or shut-down mode prior to their scheduled start time “may reduce real-time prices and render some production costs unrecoverable,” thereby causing real-time RSG costs).

<sup>81</sup> November 8 Supplemental Notice at 5.

<sup>82</sup> *See, e.g.*, August 2010 Order, 132 FERC ¶ 61,184 at P 96.

<sup>83</sup> For example, after the notification deadline, if Resource A has a supply-decreasing deviation of 10 MW and Resource B has a supply-increasing deviation of 150 MW, then Resource B's supply-increasing deviation could allow MISO to avoid committing an additional unit to offset Resource A's 10 MW supply-decreasing deviation, thereby avoiding any associated real-time RSG costs. However, as these *hypothetical* costs are never actually incurred, it is unclear why MISO proposes to

(continued...)

45. Therefore, we will reject MISO's proposal to exempt from Day-Ahead Schedule Deviation Charges supply-increasing deviations that occur after the four-hour notification deadline for the real-time market, without prejudice to MISO proposing to exempt certain supply-increasing deviations from the allocation of real-time RSG costs based on appropriate evidentiary support in a future filing under FPA section 205. We will require MISO to submit, in the compliance filing ordered below, Tariff revisions to remove this proposed exemption from the Tariff.

**C. Allocation of Real-Time Revenue Sufficiency Guarantee Costs to Load Zones**

**1. August 7 Filing**

46. Under the existing Tariff provisions describing the allocation of real-time RSG costs to Constraint Management and Day-Ahead Schedule Deviation Charges, the calculation of load deviations that occur after the notification deadline for the real-time market accounts for net energy withdrawals but not net energy injections. MISO asserts that these net energy injections impact the management of congestion and may result in deviations that cause real-time RSG costs. Accordingly, MISO proposes to account for deviations due to both net energy withdrawals and injections by load zones when allocating real-time RSG costs to Constraint Management and Day-Ahead Schedule Deviation Charges. MISO proposes to implement these changes by revising the calculation of post-notification deadline deviations for load zones in sections 40.3.3.a.iii(4) and 40.3.3.a.viii(6) of the Tariff.<sup>84</sup>

**2. Commission Determination**

47. We will accept MISO's proposal to consider net energy injections, as well as net energy withdrawals, when calculating load deviations that occur after the four-hour notification deadline for the real-time market. We find that these Tariff revisions are consistent with cost causation principles because, as MISO explains, net energy

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consider them for cost allocation purposes. Meanwhile, the remaining 140 MW of Resource B's supply-increasing deviation could cause a reduction in other resources' output and/or in real-time prices, thereby reducing the revenues of other resources and, potentially, causing the incurrence of real-time RSG costs. In this scenario, the only *actual* real-time RSG costs that are incurred are those caused by the supply-increasing deviation of Resource A. It is unclear why Resource A should be exempt from the associated cost allocation, as MISO proposes.

<sup>84</sup> August 7 Filing at 19-20.

injections impact the management of congestion and may result in deviations that cause real-time RSG costs.

**D. Miscellaneous Issues**

**1. August 7 Filing**

48. MISO requests that its proposed Tariff revisions be made effective on October 17, 2013. MISO also requests Commission action on the August 7 Filing by October 7, 2013, because MISO needs approximately ten days to “finalize system adjustments that would enable MISO to include the proposed Tariff revisions in the first billing cycle for the October 17, 2013 effective date.”<sup>85</sup>

49. MISO proposes several Tariff changes to correct inadvertent deletions and typographical errors. In particular, MISO proposes to: (1) restore references to “net” in section 40.3.3.a.i, which were inadvertently omitted in a previous filing; (2) capitalize Load “Zone” in section 40.3.3.a.iii(4); (3) refer to “Dispatchable Intermittent Resources” in section 40.3.3.a.ii; and (4) refer to “Transmission Provider,” rather than “MISO,” in section 40.3.3.d.<sup>86</sup>

**2. Comments and Subsequent Pleadings**

50. MidAmerican requests several Tariff revisions to use consistent terms and section references. First, MidAmerican notes that in section 40.3.3.a.iv.b of the Tariff, MISO proposes to refer to the “Constraint Management Charge Rate,” rather than to the “Constraint Management Charge deviation rate.”<sup>87</sup> MidAmerican maintains that this correction should also be made in section 40.3.3.a.iv.a. Second, MidAmerican notes that section 40.3.3.a.vi.a refers to the “Real-Time [RSG] Day-Ahead Schedule Deviation Charge . . . calculated and allocated under Sections 40.3.3.a.vi, 40.3.3.a.vii and 40.3.3.a.viii.”<sup>88</sup> MidAmerican believes that this section should instead refer to sections 40.3.3.a.vi through 40.3.3.a.ix. Finally, MidAmerican notes that section 40.3.3.a.vi.b refers to “the Real-Time [RSG] Day-Ahead Schedule Deviation and Headroom Rate determined in section 40.3.3.a.viii.”<sup>89</sup> MidAmerican contends that this section should

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<sup>85</sup> *Id.* at 21.

<sup>86</sup> *Id.* at 20.

<sup>87</sup> MidAmerican Comments at 4.

<sup>88</sup> *Id.*

<sup>89</sup> *Id.*

instead refer to section 40.3.3.a.ix.<sup>90</sup> In its answer, MISO agrees with MidAmerican and states that it would be amendable to making such corrections if so ordered by the Commission.<sup>91</sup> In its post-technical conference reply comments, MidAmerican argues that the Commission should order MISO to make the agreed-upon Tariff revisions in a compliance filing.<sup>92</sup>

### **3. Commission Determination**

51. We will accept MISO's proposal to correct several inadvertent deletions and typographical errors in the existing Tariff provisions describing the allocation of real-time RSG costs, as these revisions will improve Tariff clarity. We note that MISO is also amenable to making the Tariff corrections proposed by MidAmerican to use consistent terms and section references, if so ordered by the Commission. We will require MISO to submit, in the compliance filing ordered below, Tariff revisions to make the corrections requested by MidAmerican.

52. MISO also states that its proposed Tariff revisions reflect language proposed in Docket Nos. ER11-2275-003, ER12-678-002, and ER12-678-003. MISO also states that its proposed Tariff revisions reflect language proposed in Docket Nos. ER12-1265-003 and ER12-1266-002 that was previously rejected by the Commission and that it intends to remove in a subsequent compliance filing.<sup>93</sup> Therefore, we conditionally accept MISO's filing, in part, subject to the outcome of those proceedings.

53. We note that the proposed revisions to section 40.3.3 reflect MISO's proposal in Docket No. ER13-984-001 to revise section 40.3.3.a.ii to omit the phrase "to the extent that they increase the flow on the Active Transmission Constraint" effective April 24,

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<sup>90</sup> *Id.*

<sup>91</sup> MISO Answer at 12.

<sup>92</sup> MidAmerican Post-Technical Conference Reply Comments at 4. We also note that Xcel filed a comment requesting that the Commission issue an order ten days prior to MISO's requested effective date of October 17, 2013, and consider an effective date 40 days after a Commission order (i.e., November 16, 2013). Xcel Comments at 2-5. MISO stated that it agreed with Xcel's requests. MISO Answer at 13. In the October 16 Order, the Commission accepted and suspended MISO's proposed Tariff revisions for five months, to be effective March 17, 2014. Therefore, Xcel's request is now moot.

<sup>93</sup> August 7 Filing at n.36. We assume that MISO's reference to Docket No. ER12-1266-002 was in error and that it intended to refer to Docket No. ER12-1266-003.

2013.<sup>94</sup> As this proposed Tariff revision is currently pending before the Commission, we conditionally accept MISO's filing, in part, subject to the outcome of that proceeding.

54. We note that MISO's proposed revisions to section 40.3.3 reflect MISO's proposed Tariff revisions in Docket Nos. ER12-668-000,<sup>95</sup> which was previously conditionally accepted by the Commission,<sup>96</sup> as well as MISO's proposed Tariff revisions in Docket No. ER12-668-002,<sup>97</sup> which was previously accepted by the Commission.<sup>98</sup> These filings are not effective until October 1, 2014, which is after the March 17, 2014 effective date of MISO's August 7 Filing. Therefore, we will require MISO to submit, in the compliance filing ordered below, Tariff revisions to remove the Tariff revisions that MISO proposed in Docket Nos. ER12-668-000 and ER12-668-002, effective March 17, 2014.

55. To the extent that any of MISO's proposed Tariff revisions are not specifically addressed in this order, we accept them. In addition, we will require MISO to submit, in the compliance filing ordered below, further explanation and/or Tariff revisions to address the following issues:

- 1) In Schedule 46, MISO should define the following terms, or replace them with terms that are already defined in the Tariff: "RSG eligible commitments," "commitment costs," and the subscript "TP."
- 2) In section 40.3.3.a.xi, MISO should refer to "Transmission Provider" rather than "MISO," consistent with its proposal to use the term "Transmission Provider" consistently.

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<sup>94</sup> MISO May 24, 2013 Filing, Docket No. ER13-984-001, FERC Electric Tariff, [40.3.3, Real-Time Energy and Operating Reserve Market Settlement Cal, 11.0.0](#), § 40.3.3.a.ii.

<sup>95</sup> MISO December 22, 2011 Filing, Docket No. ER12-668-000, FERC Electric Tariff, 40.3.3, Real-Time Energy and Operating Reserve Market Settlement Cal, 3.0.0, §§ 40.3.3, 40.3.3.a.i, 40.3.3.a.xvi, 40.3.3.b.i-vi, 40.3.3.c.i-iii.

<sup>96</sup> *Midwest Indep. Transmission Sys. Operator, Inc.*, 140 FERC ¶ 61,067 (2012).

<sup>97</sup> MISO April 11, 2013 Filing, Docket No. ER12-668-002, FERC Electric Tariff, 40.3.3, Real-Time Energy and Operating Reserve Market Settlement Cal, 10.0.0, § 40.3.3.a.xvii.

<sup>98</sup> *Midwest Indep. Transmission Sys. Operator, Inc.*, Docket Nos. ER12-668-000, ER12-668-001, ER12-668-002 (July 30, 2013) (delegated letter order).

The Commission orders:

(A) MISO's proposed Tariff revisions are hereby conditionally accepted in part and rejected in part, effective March 17, 2014, as discussed in the body of this order.

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

By the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.