ORDER REJECTING AND CONDITIONALLY ACCEPTING TARIFF REVISIONS

(Issued September 17, 2015)

1. On May 20, 2015, as amended on June 3, 2015, in response to the Commission’s directives in a February 19, 2015 order, Midcontinent Independent System Operator, Inc. (MISO) submitted a compliance filing proposing a new System Support Resource (SSR) cost allocation method in new Rate Schedule 43A under MISO’s Open Access Transmission, Energy and Operating Reserve Markets Tariff (Tariff). MISO also filed revised rate schedules applicable to specific SSR Units located in Michigan’s Upper Peninsula (Presque Isle Unit Nos. 5-9 (the Presque Isle SSR Units), Escanaba Units No. 1 & 2 (the Escanaba SSR Units), and White Pine Unit No. 1 (the White Pine SSR Unit)), each providing that SSR cost allocation shall be calculated as stated in Rate Schedule 43A. In this order, we find that MISO’s proposed SSR cost allocation methodology generally complies with the directives of the February 2015 Order in that it assigns SSR costs directly to load-serving entities (LSEs) serving loads that would contribute to thermal or voltage reliability violations in the absence of the Presque Isle, Escanaba, and White Pine SSR Units under conditions that are representative of actual manual and/or automatic responses taken during reliability events. We reject proposed Rate Schedule 43A as a generally applicable rate schedule, but direct MISO, in a compliance filing due within 30 days of the date of this order, to incorporate its proposed SSR cost allocation methodology (modified as ordered herein) directly into the rate schedules applicable to

the Presque Isle, Escanaba, and White Pine SSR Units. We also conditionally accept revised Rate Schedule 43 (Allocation of SSR Costs Associated with Escanaba Units No. 1 &2), revised Rate Schedule 43G (Allocation of SSR Costs Associated with the Presque Isle Unit Nos. 5-9), and revised Rate Schedule 43H (Allocation of SSR Costs Associated with White Pine Unit No. 1), subject to MISO submitting a further compliance filing within 30 days of the date of this order, to be effective on the following dates, as requested: June 15, 2014 for Escanaba Rate Schedule 43; April 3, 2014 for Presque Isle Rate Schedule 43G; and April 16, 2014 for White Pine Rate Schedule 43H.

I. Background

2. Under MISO’s Tariff, market participants that have decided to retire or suspend a generation resource or Synchronous Condenser Unit (SCU) must submit a notice (Attachment Y Notice), pursuant to Attachment Y (Notification of Potential Resource/SCU Change of Status) of the Tariff, at least 26 weeks prior to the resource’s retirement or suspension effective date. During this 26-week notice period, MISO will conduct a study (Attachment Y Study) to determine whether all or a portion of the resource’s capacity is necessary to maintain system reliability, such that SSR status is justified. If so, and if MISO cannot identify an SSR alternative that can be implemented prior to the retirement or suspension effective date, then MISO and the market participant shall enter into an agreement, as provided in Attachment Y-1 (Standard Form SSR Agreement) of the Tariff, to ensure that the resource continues to operate, as needed. The SSR agreement is filed with the Commission and specifies the terms and conditions of the service, including the compensation to be provided to the resource. For each SSR agreement filed with the Commission, a separate rate schedule must be filed to provide for the costs identified in the SSR agreement to be recovered from the identified beneficiaries, consistent with section 38.2.7.k of MISO’s Tariff.

3. On July 25, 2012, in Docket No. ER12-2302-000, MISO submitted proposed Tariff revisions regarding the treatment of resources that submit Attachment Y Notices. On September 21, 2012, the Commission conditionally accepted MISO’s proposed Tariff revisions effective September 24, 2012, subject to two compliance filings due within 90 days.

2 The Tariff defines SSRs as “Generation Resources or [SCUs] 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 Section 38.2.7 of this Tariff.” MISO, FERC Electric Tariff, Module A, § 1.S “System Support Resource (SSR)” (39.0.0).

and 180 days of the date of the order. On July 22, 2014, the Commission conditionally accepted MISO’s compliance filing, subject to further compliance.

4. On April 3, 2014, in Docket No. EL14-34-000, the Public Service Commission of Wisconsin (Wisconsin Commission) submitted a complaint (Wisconsin Commission Complaint) pursuant to sections 206 and 306 of the Federal Power Act (FPA) and Rule 206 of the Commission’s Rules of Practice and Procedure. The Wisconsin Commission alleged that the SSR cost allocation provision in section 38.2.7.k of MISO’s Tariff was unjust, unreasonable, and unduly discriminatory or preferential. At the time the Wisconsin Commission Complaint was filed, section 38.2.7.k of MISO’s Tariff required that SSR costs allocated to the footprint of the American Transmission Company (ATC) within MISO must be allocated to all LSEs within the ATC footprint on a pro rata basis. According to this Tariff provision, MISO had submitted (and the Commission had accepted and suspended subject to refund and further order) an SSR agreement under its Tariff between MISO and Wisconsin Electric Power Company (Wisconsin Electric) for the purposes of providing compensation for the continued availability of Wisconsin Electric’s Presque Isle Units 5-9 as SSR Units. The associated rate schedule specified that Presque Isle SSR costs were to be allocated to all LSEs within the ATC footprint on a pro rata basis, consistent with section 38.2.7.k of MISO’s Tariff. The Wisconsin Commission argued that this cost allocation led to unjust and unreasonable results. The Wisconsin Commission stated that when MISO assigns SSR costs to LSEs outside of the

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5 SSR Compliance Order, 148 FERC ¶ 61,056.


8 Wisconsin Commission Complaint, Docket No. EL14-34-000, at 4 (filed Apr. 3, 2014).

9 In contrast, MISO’s general SSR cost allocation Tariff language under section 38.2.7.k of the Tariff, which applied to all SSR Units located outside of the ATC footprint, required MISO to allocate SSR costs to “the LSE(s) which require(s) the operation of the SSR Unit for reliability purposes.” See MISO, FERC Electric Tariff, Module C, § 38.2.7.i (37.0.0).

10 Presque Isle Units 5-9 are located in Marquette, Michigan within the footprint of the ATC and provide up to 344 MW of capacity.
ATC footprint, MISO conducts an optimal load-shed analysis to identify the Local Balancing Authorities (LBAs) benefitting from designating a unit as an SSR Unit. However, the Wisconsin Commission noted that such a load-shed study was not required once MISO determines that the load affected by the SSR designation lies within the ATC footprint. The Wisconsin Commission stated that, according to a voluntary preliminary load-shed analysis conducted by MISO during its assessment of the Attachment Y Notice submitted by Wisconsin Electric for the Presque Isle SSR Units, the majority of the costs associated with the Presque Isle SSR Units would be allocated to LSEs in Wisconsin, even though Wisconsin LSEs would not receive the majority of the reliability benefits associated with the units.

5. On July 29, 2014, the Commission granted the Wisconsin Commission Complaint and found that the Tariff was unjust, unreasonable, unduly discriminatory, or preferential because the ATC SSR pro rata cost allocation provision applied to the Presque Isle SSR Units did not follow cost causation principles. The Commission directed MISO to remove the ATC SSR pro rata cost allocation provision from section 38.2.7.k of its Tariff, thereby extending to the ATC footprint the general SSR cost allocation Tariff language, which requires MISO to allocate SSR costs to “the LSE(s) which require(s) the operation of the SSR Unit for reliability purposes.” The Commission also required MISO to conduct a final load-shed study and submit a compliance filing to align the allocation of Presque Isle SSR costs with the Commission’s determination on the Wisconsin Commission Complaint. Additionally, the Commission directed MISO to refund, with interest, any Presque Isle SSR costs allocated to LSEs from April 3, 2014 (the date of the Wisconsin Commission Complaint) until the date of the Wisconsin Commission Complaint Order that were in excess of the costs to be allocated to those LSEs under MISO’s final load-shed study. On August 11, 2014, in Docket No. ER14-1243-004, MISO submitted the results of its final load-shed study, a revised Presque Isle Rate Schedule 43G, and a refund report. The compliance filing allocated approximately 94 percent of the Presque Isle SSR costs to Wisconsin LSEs.

11 Wisconsin Commission Complaint at 12.

12 Id. at 14.


14 Id. P 66.

15 Id. P 118.

16 Id. P 68.
6. On August 12, 2014, the Commission conditionally accepted an agreement for the continued operation of the Escanaba SSR Units and an associated Rate Schedule 43 that authorized MISO to allocate Escanaba SSR costs, to be effective June 15, 2014. The Commission directed MISO to conduct a load-shed study identifying the LSEs which require the operation of the Escanaba SSR Units for reliability purposes and to file Tariff revisions adjusting the SSR cost allocation under Escanaba Rate Schedule 43 such that Escanaba SSR costs are allocated in accordance with the load-shed study, with such revised cost allocation to be effective as of June 15, 2014. The Commission further directed MISO to refund any costs allocated to LSEs from June 15, 2014 until the date of the August 2014 Escanaba Order that were in excess of the costs to be allocated to those LSEs under the forthcoming load-shed study, and to submit a refund report within 30 days after refunds are granted to affected customers. On September 10, 2014, in Docket No. ER14-2180-001, MISO submitted the results of its load-shed study, a revised Escanaba Rate Schedule 43, and a letter explaining that it settled monthly amounts according to the allocations stated in the August 2014 Escanaba Order, without refunds.

7. On August 21, 2014, the Commission conditionally accepted an agreement for continued operation of the White Pine SSR Unit and an associated Rate Schedule 43H that authorized MISO to allocate White Pine SSR costs, to be effective April 16, 2014. The Commission directed MISO to conduct a load-shed study identifying the LSEs which require the operation of the White Pine SSR Unit for reliability purposes and to file Tariff revisions adjusting the SSR cost allocation under White Pine Rate Schedule 43H such that White Pine SSR costs are allocated in accordance with the load-shed study, with such revised cost allocation to be effective as of April 16, 2014.


18 Id. PP 34, 37.

19 Id. P 38.


22 Id. P 44.
further directed MISO to refund any costs allocated to LSEs from April 16, 2014 until the
date of the August 2014 White Pine Order that were in excess of the costs to be allocated
to those LSEs under the forthcoming load-shed study, and to submit a refund report
within 30 days after refunds are granted to affected customers. 23 On August 27, 2014, in
Docket No. ER14-1725-001, MISO submitted the results of its load-shed study, a revised
White Pine Rate Schedule 43H, and a refund report. 24

8. On September 26, 2014, in Docket No. ER14-2952-000, MISO filed revised rate
schedules for the Presque Isle SSR Units, the Escanaba SSR Units, and the White Pine
SSR Unit to revise SSR cost allocation to reflect the creation of a new LBA within
MISO’s footprint. 25 The creation of the new LBA adjusted the cost allocations for each
SSR, resulting in the vast majority of the SSR costs being allocated to LSEs in the
Michigan Upper Peninsula. On October 20, 2014, in Docket No. EL15-7-000, the
Michigan Public Service Commission (Michigan Commission) filed a complaint arguing
that MISO’s existing Tariff procedures for allocating SSR costs, when applied to the
boundaries of the newly created LBA, would produce unjust and unreasonable results. 26

9. On February 19, 2015, the Commission denied rehearing of and granted
clarification of the Wisconsin Commission Complaint Order. The Commission affirmed
its finding that it is unjust, unreasonable, unduly discriminatory, or preferential for MISO
to allocate SSR costs on a pro rata basis to all LSEs in the ATC footprint and for MISO
to require that, instead, SSR costs should be allocated to the LSEs that require the
operation of the SSR Units for reliability purposes. 27 The Commission affirmed its
finding that pro rata allocation of SSR costs in the ATC footprint is unjust and
unreasonable because the preliminary load-shed study conducted by MISO indicated that
the majority of the costs associated with the Presque Isle SSR Units would be allocated to
LSEs in Wisconsin, even though Wisconsin LSEs would not receive the majority of the
reliability benefits associated with the units. 28

23 Id. P 45.
24 MISO White Pine Rate Schedule 43H Compliance Filing, Docket No. ER14-
1725-001 (filed Aug. 27, 2014).
25 MISO Filing to Revise ATC Rate Schedules, Docket No. ER14-2952-000,
26 Two other complaints objecting to the creation of the new LBA were filed in
Docket Nos. EL14-103-000 and EL14-104-000.
27 February 2015 Order, 150 FERC ¶ 61,104 at PP 73-79.
28 Id. P 73.
10. The Commission granted clarification of the Wisconsin Commission Complaint Order and found that MISO’s general SSR cost allocation practice, when applied to the allocation of SSR costs associated with the Presque Isle, Escanaba, and White Pine SSR Units, failed to allocate SSR costs directly to the LSEs that benefit from those SSR Units. MISO’s general practice at the time of the February 2015 Order relied on LBA boundaries. Specifically, under its Transmission Planning Business Practice Manual (BPM), MISO employed an optimal load-shed methodology to determine the relative reliability impact to each MISO LBA of operation without the SSR Units by accumulating the LBA load shed values for each contingency to determine the corresponding share ratio used to allocate SSR costs to each LBA. The costs allocated to each LBA were then allocated to LSEs within the LBA based upon peak usage of transmission facilities in each month, as determined by each LSE’s actual energy withdrawals during the monthly peak hour for the LBA (the optimization-LBA approach). The Commission found that the optimization-LBA approach did not adequately identify the LSEs that require the operation of the Presque Isle, White Pine, and Escanaba SSR Units, because the LBA boundaries applicable to these SSR Units are inconsistent with the LSEs at risk of shedding load without operation of the SSR Units.

11. Due to the shortcomings of MISO’s general SSR cost allocation practice as applied to the Presque Isle, Escanaba, and White Pine SSR Units, the Commission rejected the proposed rate schedules filed in Docket Nos. ER14-1243-004, ER14-2180-001, and ER14-1725-001 and directed MISO to file, within 60 days of the date of the order, a new study methodology that will allocate the costs associated with these SSR Units directly to benefitting LSEs, as required by MISO’s Tariff. The Commission

29 Id. PP 83-86.

30 Id. P 81 (citing MISO Transmission Planning Business Practices Manual, BPM-020-r10 (dated Apr. 10, 2014) at § 6.2.6 (System Support Resource Agreement Cost Allocation Methodology)).

31 Id. P 83.

32 Id. PP 85, 86.

33 Id. PP 86, 89, 113, 132.
stated that, in order to assign SSR costs directly to LSEs based on the extent to which the loads that they serve benefit from the SSR Unit, MISO could determine the SSR benefits of specific LSEs based on their actual energy withdrawals at elemental pricing nodes (EPNodes) rather than commercial pricing nodes (CPNodes). The Commission stated that the revised study methodology should identify the LSEs that require the operation of these SSR Units for reliability purposes, as required by the Tariff, under conditions that are more representative of actual manual and/or automatic responses taken during reliability events, rather than the ideal conditions that are used by MISO in the optimal load-shed study. The Commission required MISO to describe the conditions, assumptions, and calculations underlying this revised study methodology. The Commission directed MISO to submit Tariff revisions adjusting the SSR cost allocation under the rate schedules associated with the Presque Isle, Escanaba, and White Pine SSR Units in accordance with the new study methodology, with such revisions effective as follows: on June 15, 2014 for the Escanaba SSR Units; on April 16, 2014 for the White Pine SSR Units; and on April 3, 2014 for the Presque Isle SSR Units. The Commission also rejected MISO’s Presque Isle compliance filing submitted in Docket No. ER14-1243-004 and MISO’s filing to reflect the LBA split submitted in Docket No. ER14-2952-000, as it found that the optimization-LBA approach applied by MISO in those two filings was not just and reasonable in that it is inconsistent with MISO’s Tariff.

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34 Id. P 87. MISO’s Tariff defines an EPNode as a single bus node where locational marginal price is calculated. See MISO, FERC Electric Tariff, Module A, § 1.E “Elemental Pricing Node (EPNode)” (38.0.0). MISO’s Tariff defines a CPNode as an EPNode or aggregate price node in the Commercial Model used to schedule and settle market activities. CPNodes include resources, hubs, load zones and/or interfaces. See MISO, FERC Electric Tariff, Module A, § 1.C “Commercial Pricing Node (CPNode)” (35.0.0). The Commercial Model is a financial representation of the relationships between MISO market participants and their resources, CPNodes, and the physical Network Model. See MISO, FERC Electric Tariff, Module A, § 1.C “Commercial Model” (35.0.0).

35 February 2015 Order, 150 FERC ¶ 61,104 at P 86.

36 Id. P 89. The effective dates for the White Pine and Escanaba SSR Units aligned with the effective dates of previous compliance filings conditionally accepted by the Commission, while the effective date for the Presque Isle SSR Units aligned with the refund effective date set in the Wisconsin Commission Complaint Order. See August 2014 Escanaba Order, 148 FERC ¶ 61,116, at P 37 (2014); August 2014 White Pine Order, 148 FERC ¶ 61,136 at PP 43-44; Wisconsin Commission Complaint Order, 148 FERC ¶ 61,071 at P 68.

37 February 2015 Order, 150 FERC ¶ 61,104 at PP 97, 113.
Commission similarly dismissed the complaints regarding the LBA split submitted in Docket Nos. EL14-103-000, EL14-104-000, and EL15-7-000 as moot.\textsuperscript{38}

12. The Commission also rejected requests for rehearing of its finding in the Wisconsin Commission Complaint Order that refunds of Presque Isle SSR costs are warranted back to the refund effective date of April 3, 2014.\textsuperscript{39} The Commission similarly found it appropriate to order refunds of SSR costs associated with the White Pine and Escanaba SSR Units, as these SSR applications took effect after the filing of the Wisconsin Commission Complaint and these SSR Units share common characteristics with the Presque Isle SSR Units and apply the same ATC-specific \textit{pro rata} SSR cost allocation methodology that was found to be unjust and unreasonable.\textsuperscript{40} Therefore, the Commission required MISO to refund any White Pine SSR costs allocated to LSEs that were higher than the costs to be allocated to those LSEs according to the forthcoming study for the White Pine SSR Unit, with such refunds to begin April 16, 2014. The Commission also required MISO to refund any Escanaba SSR costs allocated to LSEs that were higher than the costs to be allocated to those LSEs according to the forthcoming study for the Escanaba SSR Units, with such refunds to begin June 15, 2014. The Commission stated that implementation of the refund requirements for these SSR Units would be addressed in a future order addressing MISO’s new study methodology.\textsuperscript{41}

II. MISO’s Filings

13. On March 17, 2015, in Docket No. EL14-34-001, \textit{et al.}, MISO filed a request for an extension of time to fulfill the compliance requirements directed by the Commission in the February 2015 Order.\textsuperscript{42} MISO stated that developing a new SSR cost assignment methodology is a resource intensive process, and that additional compliance time would help to ensure the accuracy of the filing and the involvement of stakeholders.\textsuperscript{43} On

\begin{footnotesize}
\begin{enumerate}
\item \textit{Id.} P 168.
\item \textit{Id.} P 90.
\item \textit{Id.} P 93.
\item The Commission also noted that other issues raised in the rehearing requests with respect to refunds are more appropriately addressed once the Commission has addressed MISO’s new study methodology and MISO has filed a detailed refund report. \textit{Id.} P 93 n.231.
\item MISO Motion for Extension of Time, Docket No. EL14-34-001, \textit{et al.}, at 2 (filed Mar. 17, 2015).
\item \textit{Id.} at 3-4.
\end{enumerate}
\end{footnotesize}
March 26, 2015, the Commission granted the request and issued a notice extending the compliance deadline to May 20, 2015.\textsuperscript{44}

14. On May 20, 2015, in Docket No. ER14-2952-003, MISO submitted a compliance filing in response to the Commission’s directives in the February 2015 Order. MISO states that it conducted public stakeholder meetings on March 12, 2015 and April 20, 2015 to discuss a potential SSR cost assignment methodology and address stakeholder comments.\textsuperscript{45} MISO states that a conference call was held on May 18, 2015 to review the cost allocation methodology that MISO intended to file, and MISO subsequently addressed several follow-up inquiries.\textsuperscript{46}

15. MISO’s filing includes a generic Rate Schedule 43A that describes a new SSR cost allocation methodology that does not rely upon an optimal load-shed study or LBA boundaries.\textsuperscript{47} Instead, MISO proposes to base cost allocation on the impact of load on constraints that are identified in an Attachment Y Study.\textsuperscript{48} MISO explains that the method recognizes the physical location of the loads in relation to the issues that are caused by the units subject to SSR designation; thus, loads that would contribute to the thermal or voltage violations in the absence of the SSR Unit benefit by keeping the unit available as an SSR Unit to avoid the reliability issues.

16. For thermal reliability constraints, MISO states that a linear power flow analysis is used to calculate load distribution factors to determine the impact of each substation’s load (alternatively referred to as physical load buses or load substations herein) on constraints identified in the Attachment Y Study.\textsuperscript{49} MISO explains that this analysis is

\textsuperscript{44} Notice of Extension of Time, Docket No. ER14-34-001,\textit{ et al.}, (Mar. 26, 2015).


\textsuperscript{46} Id. at 3.

\textsuperscript{47} Id. Tab A, MISO FERC Electric Tariff, Schedule 43A, Allocation of System Support Resources (“SSR”) Costs (31.0.0).

\textsuperscript{48} Id. Transmittal Letter at 3.

\textsuperscript{49} Id.
performed using the MISO Network Model\textsuperscript{50} in order to associate the physical load buses with the EPNodes in MISO’s Commercial Model.\textsuperscript{51} Loads that are responsible for an SSR Unit’s costs are determined by analyzing load distribution factors for all load buses in the MISO system, based on a cutoff threshold. MISO asserts that for each contingent event, load distribution factors are calculated for all the load buses in the MISO system. First, MISO states that it selects and maps to EPNodes only load substations with load distribution factors that are larger than one percent to eliminate the potential for including buses with low sensitivity (i.e. “noise”) that results due to the precision permitted by the algorithm. MISO then selects load substations that have the highest 80 percent effect on the constraint as beneficiaries of SSR Unit operation.\textsuperscript{52} MISO explains that the 80 percent level was chosen to ensure that loads associated with identified EPNodes significantly impact the constraint, and therefore benefit from operation of the SSR Units. MISO explains that SSR costs are allocated based on the ratio of their impact (load megawatts (MW) times load distribution factor) to the total impact of all the loads that are in the top 80 percent for each identified constraint.

17. For voltage violations or voltage stability issues, MISO proposes to perform voltage stability studies to identify load buses having voltage violations or participating in voltage collapse for each contingent event.\textsuperscript{53} From the set of load buses having voltage violations or participating in voltage collapse, MISO establishes a proxy interface based on an area where large bus voltage angle change results from the suspension or retirement of the SSR Units. MISO asserts that this proxy interface fully encloses the voltage constrained area and is used to identify all the impacting loads. The proxy interface is applied to the MISO Network Model to determine the physical loads that are responsible for SSR costs; i.e, all load buses in a voltage constrained area are selected

\textsuperscript{50} The Network Model is a physical representation of the Eastern Interconnection that contains generation, transmission, and load elements. See MISO, FERC Electric Tariff, Module A, § 1.N “Network Model” (33.0.0).

\textsuperscript{51} MISO SSR Compliance Filing, Transmittal Letter at 4. The Commercial Model is a financial representation of the relationships between MISO market participants and their resources, CPNodes, and the physical Network Model. See MISO, FERC Electric Tariff, Module A, § 1.C “Commercial Model” (35.0.0).

\textsuperscript{52} The EPNodes are ranked in descending order according to their load distribution factors, and the load distribution factors are summed to obtain a total. EPNodes with load distribution factors greater to or equal to the 80 percent threshold are selected for inclusion as being associated with loads that contribute to the constraint. See MISO SSR Compliance Filing, Transmittal Letter at 4.

\textsuperscript{53} Id.
and mapped to EPNodes. MISO states that loads at nodes within the identified proxy interface area contribute equally to the voltage support requirements and are considered to have the same sensitivity to the area voltages; therefore, MISO uses uniform load distribution factors for the purposes of cost allocation, and the load impacts are a function only of the load amounts.

18. MISO’s proposed methodology then allocates costs among the SSR beneficiaries identified in the above steps. MISO states that it continues to use energy withdrawals during monthly peak conditions to determine cost allocation shares, with adjustments for the more granular nature of the proposed methodology. MISO states that, once the thermal and voltage constraint load distribution factors are calculated, they are compiled into a list of EPNodes that are associated with the impacted load buses for use in cost allocation (“Impact EPNodes”). The Impact EPNodes are used to identify the impacted CPNodes for the billing month. For each impacted CPNode, MISO determines the non-coincident peak volume for the month based on the maximum hourly actual energy withdrawals during that month. To determine the portion of the impacted CPNode benefitting from the SSR Unit for the month, MISO multiplies the daily load weighting factor (calculated daily based on the prior seven-day State Estimator data) for each EPNode associated with the impacted CPNode by the monthly non-coincident peak volume for that CPNode. These values are then multiplied by the corresponding aggregate load distribution factor for each Impact EPNode to recognize both size and load sensitivity, and then these weighted loads (Impact Loads) are summed for each LSE to obtain a grand total. MISO states that the ratio of the LSE total Impact Loads to the grand total Impact Load of all LSEs is the share of SSR costs assigned to the LSE.

19. MISO contends that the proposed cost allocation methodology is based upon the contribution of loads such that loads that would contribute more to constraints are assigned greater costs. MISO asserts that the MISO Network Model provides a direct relationship of EPNodes to the physical load buses, such that physical location is the basis of cost assignments. MISO contends that the relative threshold for cost assignment avoids an arbitrary fixed cutoff, and provides reasonable assurance that costs are associated with loads that benefit from the SSR Units under a range of possible circumstances across the MISO footprint.

54 Id.

55 Id. at 4-5.

56 MISO states that the aggregate load distribution factor represents the sum of the load distribution factors for all constraints for an Impact EPNode. Id. at 5.

57 Id.
20. MISO states that files are posted on MISO’s website that contain EPNode designations and other information used in the assignment and calculation of SSR costs. MISO further notes that the costs of the three SSR agreements are allocated to loads in the Upper Peninsula, and includes schematic maps showing the impacted areas for each SSR agreement.

21. MISO’s filing also includes Tariff revisions adjusting the SSR cost allocation under Escanaba Rate Schedule 43, Presque Isle Rate Schedule 43G, and White Pine Rate Schedule 43H, such that SSR costs under each rate schedule are to be allocated according to the proposed methodology in generic Rate Schedule 43A. In accordance with the February 2015 Order, MISO requests effective dates as follows: June 15, 2014 for Escanaba Rate Schedule 43; April 3, 2014 for Presque Isle Rate Schedule 43G; and April 16, 2014 for White Pine Rate Schedule 43H. MISO requests an effective date of April 3, 2014 for new Rate Schedule 43A, the earliest of the effective dates for the other rate schedules, in order to completely implement the revision of the SSR cost allocations. MISO asks the Commission to waive its 60-day notice requirement under 18 C.F.R. § 35.3(a) (2015) in order to implement the revised rate schedules. To the extent that the Commission determines that any other requirement of 18 C.F.R. § 35 (2015) applies, MISO asks for waiver of such provision.

22. On June 3, 2015, in Docket No. ER14-2952-004, MISO filed an amendment to correct typographical errors in its proposed Rate Schedule 43A.

III. Notice and Responsive Pleadings


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58 Id. at 6.

59 Id.

60 Id. at 7.

Commission issued an errata notice shortening the comment date in Docket No. ER14-2952-004 to June 10, 2015.\textsuperscript{62}


25. On May 27, 2015, Verso Corporation (Verso) filed a motion for access to information, an extension of time to comment on MISO’s May 20 compliance filing, a shortened answer period for answers to its motion, and expedited Commission action on its motion.\textsuperscript{63} On May 28, 2015 and June 1, 2015, respectively, the Tilden Mining Company L.C. and the Empire Iron Mining Partnership (the Mines) and the Michigan Commission filed motions for access to information, an extension of time to comment on MISO’s May 20 compliance filing, a shortened answer period for answers to their motions, expedited Commission action, and answers in support of the Verso Motion for Access to Information.\textsuperscript{64} On June 1, 2015, MISO filed a motion to answer the motions of

\textsuperscript{62} Errata Notice Shortening Comment Date, Docket No. ER14-2952-004 (June 5, 2015).

\textsuperscript{63} Motion of Verso Corporation for Access to Information Subject to an Appropriate Protective Order and for an Extension of Time, a Shortened Answer Period, and Expedited Commission Action, Docket No. ER14-2952-003 (filed May 27, 2015) (Verso Motion for Access to Information).

\textsuperscript{64} Motion of the Tilden Mining Company L.C. and Empire Iron Mining Partnership for Access to Information, an Extension of Time, a Shortened Answer Period, and Expedited Commission Action, and Answer in Support of Verso Corporation, Docket No. ER14-2952-003 (filed May 28, 2015) (The Mines Motion for Access to Information); Motion of the Michigan Public Service Commission for Access to Information and Answer in Support of Motion of Verso Corporation for Access to Information, Docket No. ER14-2952-003 (filed June 1, 2015) (Michigan Commission Motion for Access to Information).
Verso and the Mines. On June 4, 2015, Verso filed an answer to MISO’s answer. On June 8, 2015, the Michigan Citizens Against Rate Excess filed a motion to answer out-of-time in support of the motions for access to information.

26. The Marquette Board of Light and Power (Marquette) filed a timely motion to intervene and protest. Timely comments or protests were filed by: Verso; the Michigan Commission; Cloverland Electric Cooperative (Cloverland); the City of Escanaba, Michigan (The City of Escanaba); Wisconsin Electric; the Upper Peninsula Power Company (UPPCo); Wisconsin Power and Light Company (Wisconsin Power); the Coalition of MISO Transmission Customers; the City of Mackinac Island; and WPPI Energy.

27. Answers to the protests were filed by: Constellation Energy Services, Inc. (Constellation Energy); the Wisconsin Commission; Verso; and MISO. Answers to the answers to the protests were filed by: the City of Escanaba; Marquette; Verso; the Coalition of MISO Transmission Customers; and the Wisconsin Commission.

A. Motions for Access to Information and Answers

28. In their motions for access to information, Verso, the Mines, the Michigan Commission, and the Michigan Citizens Against Rate Excess state that MISO’s compliance filing does not include any studies, work papers, or other materials showing how that methodology was applied, nor does it show how costs will actually be allocated under the proposed methodology, such that an affected party may not compare allocations under the proposed methodology to the previous rejected methodology. Verso and the Mines note that, although MISO indicates in its filing that certain

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65 Answer of MISO to the Motions of Verso Corporation and the Mines for Access to Information, Docket No. ER14-2952-003 (filed June 1, 2015) (MISO Answer to the Motions for Access to Information).


68 Verso Motion for Access to Information at 3; The Mines Motion for Access to Information at 3; Michigan Commission Motion for Access to Information at 2; Michigan Citizens Against Rate Excess Answer to Motions for Access to Information at 5-6.
information is publicly available, in the links provided, the contingency events causing the thermal or voltage constraint are redacted and only made available to MISO members. Verso states that it attempted to obtain further information from MISO under an appropriate protective order, but MISO informed Verso that work materials would be available only to MISO members and that allocations under the proposed methodology would be provided only to the individual LSEs, as MISO considers this information to be settlement information. Verso, the Mines and the Michigan Commission ask the Commission to order MISO to make available, subject to an appropriate protective order, all information supporting MISO’s May 20 compliance filing that MISO would provide to its members regarding how SSR costs for maintaining the Presque Isle, Escanaba, and White Pine SSR Units were assigned, including, but not limited to, all work materials related to the allocation of SSR costs that would be available upon request to individual LSEs within MISO (MISO Member-Only Information). They ask that the Commission extend the deadline for filing comments on MISO’s May 20 compliance filing until 21 days after they are provided access to the MISO Member-Only Information.

29. Verso and the Mines state that MISO has not filed the MISO Member-Only information with the Commission in its May 20 compliance filing, and has deprived the Commission of a full and complete record upon which to evaluate the justness and

69 Verso Motion for Access to Information at 4; The Mines Motion for Access to Information at 3.

70 Verso Motion for Access to Information at 4. The Mines state that they requested access to the same information under MISO’s universal non-disclosure agreement, but were informed by MISO that it would not execute the agreement because the Mines are neither market participants nor MISO members. See The Mines Motion for Access to Information at 3. The Michigan Commission states that it requested a list of all LSEs that require the operation of the SSR Units, the percentage allocation of SSR costs to each LSE, and load information with respect to the various CPNodes utilized by MISO to allocate SSR costs, but MISO refused to provide this information. See Michigan Commission Motion for Access to Information at 1-2.

71 Verso Motion for Access to Information at 4, 9; The Mines Motion for Access to Information at 2, 4, 9; Michigan Commission Motion for Access to Information at 2-3.

72 Verso Motion for Access to Information at 10; The Mines Motion for Access to Information at 9-10; Michigan Commission Motion for Access to Information at 3. Verso and the Mines also ask the Commission to shorten the time period for answering their motions to five days, and ask the Commission to act on their motions no later than June 8, 2015. See Verso Motion for Access to Information at 2-3; The Mines Motion for Access to Information at 2.
reasonableness of the filing.\textsuperscript{73} They argue that by providing the MISO Member-Only Information to some parties and not others, MISO is depriving the parties’ rights to participate meaningfully in the proceeding and to assess whether the proposed SSR cost allocation methodology is just and reasonable.\textsuperscript{74} They argue that MISO has not shown that the MISO Member-Only Information is confidential, and even if it is found to be confidential, MISO has not demonstrated that providing such information under a protective order does not adequately protect its interest.\textsuperscript{75}

30. Verso and the Mines state that the problem cannot be solved by obtaining the requested information directly from their LSEs, because (1) by granting their interventions, the Commission has found that no other entity can adequately represent their interests in the proceedings and (2) as they will ultimately be responsible for a portion of the SSR costs that their LSEs would receive (or be entitled to a refund), they have a right to review all relevant information that has been made available to others.\textsuperscript{76} They state that they are not seeking market-sensitive information, such as bids or market revenues, but merely request the amount of SSR costs that will be allocated to them under the new methodology.\textsuperscript{77}

31. In its answer, MISO notes that its May 20 compliance filing included schematic maps showing the cost allocation results of the new methodology, and coverage at the EPNode level was publicly displayed in files that were linked in the compliance filing.\textsuperscript{78} MISO states that model representations of its transmission system and raw data used to formulate its proposed SSR cost allocation methodology is confidential, because pursuant to the Standards of Conduct under the MISO Transmission Owners Agreement, MISO must keep confidential all non-public information that it receives from its transmission

\begin{itemize}
\item \textsuperscript{73} Verso Motion for Access to Information at 5; The Mines Motion for Access to Information at 5.
\item \textsuperscript{74} Verso Motion for Access to Information at 5-6; The Mines Motion for Access to Information at 5, 6.
\item \textsuperscript{75} Verso Motion for Access to Information at 6; The Mines Motion for Access to Information at 6.
\item \textsuperscript{76} Verso Motion for Access to Information at 7-8; The Mines Motion for Access to Information at 7-8.
\item \textsuperscript{77} Verso Motion for Access to Information at 8; The Mines Motion for Access to Information at 8.
\item \textsuperscript{78} MISO Answer to the Motions for Access to Information at 3.
\end{itemize}
Thus, MISO argues that this information is accessible only to MISO members and market participants that execute appropriate non-disclosure agreements to protect Critical Energy Infrastructure Information (CEII). MISO states that the remaining information requested was financial information on individual LSEs, and that it does not have authority under its Tariff to disclose to a third-party, even under a protective agreement, the confidential information pertaining to a specific market participant without the market participant’s express consent to do so. MISO notes that the Tariff does not prevent an LSE from sharing that information with its own members, and thus MISO advised Verso and the Mines to work with their LSEs to obtain this information. MISO asks that any Commission order requiring more widespread dissemination of such information should authorize the waiver of MISO Tariff provisions that exist to protect such information.

B. Comments, Protests, and Answers to Protests of MISO’s Compliance Filing

32. Wisconsin Power, WPPI Energy, and Wisconsin Electric support the proposed methodology as complying with the Commission’s directives in the February 2015 Order and the Commission’s cost causation principles. They ask the Commission to accept MISO’s proposed SSR cost allocation methodology, effective on the dates requested.

1. Justification for MISO’s Compliance Filing

33. Many parties protest the filing and argue that MISO fails to describe adequately the conditions, assumptions, and calculations underlying the new methodology, and

79 Id. at 4-5.

80 Id. at 5.

81 Id. at 5-6.

82 Id. at 7. In its response to MISO’s Answer, Verso asks the Commission to grant its motion for access to information and grant a waiver of any MISO Tariff provision that might require non-disclosure of the requested information. See Verso Answer to MISO Answer to Motions for Access to Information at 7-8.

absent such information, parties have no way of determining whether the new methodology is just and reasonable.\(^{84}\) They state that MISO failed to include any underlying studies, work papers, testimony, affidavits, data, or model inputs supporting the methodology or showing how the methodology is to be applied.\(^{85}\) In its answer, MISO responds that it complied with the Commission’s directives by submitting a proposed cost allocation methodology that allocates costs directly to benefitting LSEs through the use of EPNodes, without reliance on an optimal load-shed methodology or LBA boundaries, as directed by the Commission in the February 2015 Order.\(^{86}\) MISO states that new Rate Schedule 43A contains a level of detail not present in its prior SSR provisions, and provides a thorough step-by-step formulaic process.\(^{87}\)

34. Protesters argue that MISO did not explain how Presque Isle, Escanaba, and White Pine SSR costs would be allocated under the new methodology, nor did MISO disclose the rate consequences of the proposed methodology, and that this information is necessary to determine whether the proposed methodology is just and reasonable.\(^{88}\) Cloverland and the City of Escanaba state that the meetings MISO held did not provide an adequate basis for the parties to understand the revised methodology; for example, the final methodology was posted the Friday before the final Monday meeting, and the final


\(^{85}\) Michigan Commission Protest at 5; Protest of the Mines at 5-6; Cloverland Protest at 3; Protest of the Upper Peninsula Power Company, Docket Nos. ER14-2952-003 and ER14-2952-004, at 4-5 (filed June 10, 2015) (UPPCo Protest).

\(^{86}\) Motion for Leave to Answer and Answer to the Protests of MISO, Docket No. ER14-2952-003, et al., at 9-10 (filed June 25, 2015) (MISO Answer to Protests of the Compliance Filing).

\(^{87}\) Id. at 10.

\(^{88}\) Protest of the Mines at 5; Verso Protest at 6; Protest of the City of Escanaba at 5-6, 10.
meeting was only two days before MISO filed the revised methodology. In its answer, MISO responds that these arguments overlook the premise of the compliance filing, which is to implement a granular analysis to determine the LSEs that benefit from SSR Unit operation. MISO states that the protesters are conflating the proposed methodology, which is a formulaic allocation process, with the dollar amounts that result from the proposed methodology. MISO states that it will only provide dollar figures from the settlement of SSR costs to the LSEs that benefit from operation of the SSR Units, and only with respect to each LSE’s own information. In its answer, the City of Escanaba argues that it is proper for protesters to focus on the rate impact of the proposed methodology, because it is not theory but the impact of the rate order that counts.

35. Protesters argue that MISO failed to justify its decision to provide information regarding how SSR costs will be assigned to MISO members, but to refuse that same information to parties that are not MISO members under an appropriate non-disclosure agreement with CEII redacted or with sensitive market information redacted. In its answer, MISO reiterates that it does not have the authority under its Tariff to disclose to a third party the confidential information of a market participant without the written permission of the market participant. In addition, MISO states that the MISO Transmission Owners Agreement requires MISO to keep confidential all non-public information that it receives from its transmission owners. MISO further notes that, although it recognizes that the Commission has a policy of balancing the interests of parties seeking confidential information with the interest of the parties withholding confidential information, MISO did not include any privileged materials in its compliance

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89 Cloverland Protest at 3; Protest of the City of Escanaba at 5.

90 MISO Answer to Protests of the Compliance Filing at 19.

91 Id. at 19-20.

92 Motion for Leave to Answer and Answer of the City of Escanaba, Michigan, Docket No. ER14-2952-003, et al., at 2 (filed July 1, 2015) (citing FPC v. Hope Natural Gas Co., 320 U.S. 591, 602 (1944)).

93 Protest of the Mines at 7; UPPCo Protest at 5-6; Protest of the City of Mackinac Island at 1-2.

94 MISO Answer to Protests of the Compliance Filing at 6.

95 Id. at 7.
filing; therefore, use of a protective agreement in conjunction with the release of
privileged material is not triggered here.\textsuperscript{96}

36. The Coalition of MISO Transmission Customers argues that MISO’s filing goes
beyond the scope of the Commission’s February 2015 Order by adopting a new broad-
based SSR cost allocation methodology that would apparently apply to all future SSR
Units.\textsuperscript{97} In its answer, MISO responds that this concern is premature, because MISO has
not applied its proposed methodology more broadly than required by the Commission in
the February 2015 Order.\textsuperscript{98}

2. \textbf{Technical Concerns}

37. Protesters also take issue with several technical aspects of MISO’s proposed cost
allocation methodology. The Michigan Commission contends that MISO did not explain
the relationship of conditions in the new methodology to actual responses taken during
reliability events, or base its models on actual or anticipated power flows during
reliability events; for instance, the Michigan Commission protests MISO’s calculation of
thermal constraints using hypothetical power flows in the MISO Network Model in order
to associate physical load buses with the EPNodes in MISO’s Commercial Model.\textsuperscript{99} The
Coalition of MISO Transmission Customers argues that MISO did not explain why it
uses EPNodes rather than CPNodes.\textsuperscript{100} In its answer, MISO responds that EPNodes have
a one-to-one relationship with the electrical buses connecting all of the load and

\textsuperscript{96} Id. at 8.
\textsuperscript{97} Protest of the Coalition of MISO Transmission Customers, Docket Nos. ER14-
2952-003 and ER14-2952-004, at 3-4 (filed June 10, 2015) (Protest of the Coalition of
MISO Transmission Customers).
\textsuperscript{98} MISO Answer to Protests of the Compliance Filing at 10-11. MISO also notes
that the Commission in the February 2015 Order did not require the new methodology to
be limited exclusively to the Presque Isle, Escanaba, and White Pine SSR Units.
\textsuperscript{99} Michigan Commission Protest at 6-7.
\textsuperscript{100} Protest of the Coalition of MISO Transmission Customers at 5.
\textsuperscript{101} MISO Answer to Protests of the Compliance Filing at 13. MISO explains that
its market systems run on the Network Model, with energy injections and withdrawals at
the EPNode level used to provide energy balance, manage congestion, and allocate scarce
transmission capacity.
in contrast, a CPNode represents the commercial relationship between assets and market participants. MISO states that a CPNode can be comprised of multiple EPNodes that may or may not contribute to the reliability issues that are observed without an SSR Unit in service, and thus, MISO has basied its methodology on EPNodes in order to recognize the physical location of loads that benefit from the operation of SSR Units.\footnote{Id. at 13-14.}

38. The Michigan Commission argues that MISO’s new methodology is based solely on two factors: the extent to which load contributes to thermal reliability constraints and the extent to which load would cause voltage violations in the absence of the SSR Unit.\footnote{Michigan Commission Protest at 6.} The Michigan Commission asserts that MISO has failed to identify other factors that could be used to identify LSEs that require operation of the SSR Units. Cloverland argues that MISO has not explained why the determination of “load shifts” represents a better measure of benefitting loads associated with thermal constraints than the previous methodology.\footnote{Cloverland Protest at 10.}

39. The City of Escanaba argues that MISO’s methodology erroneously assumes that all load within the identified proxy interface for voltage constraints benefit the same from the SSR Units, and therefore MISO did not justify the use of uniform distribution factors for cost allocation purposes.\footnote{Protest of the City of Escanaba at 11.} In its answer, MISO responds that the proxy interface enclosing the voltage constrained area is a product of careful analysis of the voltage stability analysis results and examination of the transmission system topology in the vicinity of the voltage collapse area.\footnote{MISO Answer to Protests of the Compliance Filing at 17.} MISO explains that there is no simple method to determine a linear relationship between the load and the area voltages, and contends that its proposed proxy interface provides a reasonable means of defining the boundary of the voltage constrained area where load contributions to the voltage constraints are considered equal.\footnote{Id. at 17-18.} MISO notes that a voltage collapse condition would result in interruption of service for the entire area, and the effect is the same for all loads that contribute to the voltage support requirements within the boundary; thus, all loads within the boundary benefit the same, regardless of geographical proximity to the generator, by keeping the SSR Unit available to maintain area voltage stability.
40. The City of Escanaba and the City of Mackinac Island state that MISO’s proposed allocation appears engineered to confine Presque Isle SSR costs to Michigan and will cause severe rate shock to Michigan customers. MISO responds that the proposed methodology is based on electrical analysis of the transmission system, and is therefore not influenced by state boundaries.

41. Cloverland argues that MISO modeled temporary and atypical operational conditions that do not reflect historical or future power flows within the Upper Peninsula, thereby skewing the SSR cost allocations. As background, Cloverland explains that it has been served by an undersized transmission system that cannot reliably accommodate west-to-east transmission flow without causing overload. Due to these conditions, Cloverland states that MISO opened the circuits at the ATC Hiawatha substation located on the western edge of its system, splitting the transmission system and forcing eastern Cloverland load to be served from the Lower Peninsula. Due to this transmission system configuration, Cloverland states that it received no benefits from being tied to the western portion of the Upper Peninsula; hence, none of the SSR Units located in the Upper Peninsula supplied benefits to Cloverland. Cloverland states that ATC began construction of an HVDC transmission project at the Straits of Mackinac in 2013, which was designed to allow Cloverland to be served from the Lower Peninsula and the west simultaneously (without the split at Hiawatha), but that this project was not operational until 2014. Cloverland asserts that, during construction, the Transmission Operator changed how it typically operated the transmission system by moving the open point from Hiawatha to the Straits of Mackinac, which temporarily broke the connection to the Lower Peninsula. Cloverland argues that, when determining SSR benefits, MISO apparently modeled system conditions present during construction of the HVDC project.

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108 Protest of the City of Escanaba at 12-13; Protest of the City of Mackinac Island at 2.

109 MISO Answer to Protests of the Compliance Filing at 12. MISO states that standard powerflow techniques that are used throughout the electric power industry are employed in order to determine the location of loads that benefit from the SSR Units.

110 Cloverland Protest at 5.

111 Id. at 6.

112 Id. at 7.

113 Id. at 7-8.
transmission project, ignoring periods where Cloverland was served from the Lower Peninsula (i.e., when the system split was at Hiawatha). 114

42. In its answer, MISO responds that its modeling in the Upper Peninsula was based on actual conditions present, which included the relocation of the transmission system split from the western end to the eastern end of the Upper Peninsula. 115 MISO notes that the Hiawatha system split was in place prior to March 20, 2013, which caused the Upper Peninsula’s eastern end to be serviced via the Lower Peninsula. After that time (i.e., after March 20, 2013), MISO states that the Transmission Operator (not MISO) closed the Hiawatha circuits and moved the system split farther east to the Straits of Mackinac while some transmission projects were being completed and while the HVDC project was being constructed. 116 MISO states that, although the circuits at the Hiawatha substation were periodically opened for construction and maintenance (thereby causing Cloverland to be served by the Lower Peninsula), the circuits were returned to their closed configuration. 117 MISO states that the operating data shows that eastern Upper Peninsula load was regularly being served from the western Upper Peninsula transmission system during the modeling period. Thus, MISO asserts that Cloverland benefitted from SSR service in the Upper Peninsula.

43. Verso also answers Cloverland’s protest, arguing that MISO properly modeled the system consistent with conditions during the time period that the Presque Isle SSR Agreement was in effect (from February 1, 2014 through January 31, 2015), and not based on “historical or future” power flows. 118 Verso states that Cloverland did benefit from the operation of the Presque Isle SSR Units during that time period, because Cloverland received power from the Upper Peninsula when the open position of the transmission system was moved from the Hiawatha substation to the Straits of Mackinac. 119 Verso argues that even after the HVDC project entered operation in August 2014, Cloverland benefitted from the operation of the Presque Isle SSR Units because it was able to receive power from both the western Upper Peninsula and the Lower

114 Id. at 8.

115 MISO Answer to Protests of the Compliance Filing at 11.

116 Id. at 11-12.

117 Id. at 12.

118 Answer of Verso Corporation, Docket Nos. ER14-2952-003 and ER14-2952-004, at 4-6 (filed June 25, 2015).

119 Id. at 6.
Peninsula; thus, the SSR Units served as a source of emergency backup power (1) when the system was closed at the Hiawatha substation and (2) in the event of an outage of the HVDC ties from the Lower Peninsula.

44. Verso argues that the Commission should direct MISO to provide retail access providers (such as Constellation Energy, the retail access provider that serves Verso) with the cost information at the EPNode level of detail to ensure that retail access providers do not bill retail access customers for SSR costs where such customers do not benefit from operation of the SSR Units. Verso is concerned that if Constellation Energy only receives information by CPNode, it will bill all retail access load in Michigan (including Verso) on a pro rata basis. In its answer, MISO rejects Verso’s request and states that such a directive would fall outside the bounds of the February 2015 Order. MISO further clarifies that it does not have settlement level metered data by EPNode. In its answer, Constellation Energy states that MISO should not allocate SSR costs at the retail customer level by EPNode, because EPNodes do not directly correlate to a customer’s meter data, and are not intended to be used to allocate costs at the retail/meter level. Constellation Energy explains that EPNodes are used for pricing purposes, and the flow models that are built using EPNode data do not determine an LSE’s overall load share. Constellation Energy states that it is not reasonable for MISO to settle prices at the EPNode level because the MISO system is not designed to reflect physical metered load in the pricing models; thus, a particular EPNode is not a physical location that benefits or does not benefit from the operation of SSR Units. In answer to Constellation Energy’s answer, Verso states that it merely seeks information from MISO to help determine whether Constellation Energy should charge Verso SSR costs under the non-Commission jurisdictional retail access contract between Constellation Energy and Verso. Verso

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120 Verso Protest at 8.

121 Id. at 9.

122 MISO Answer to Protests of the Compliance Filing at 20.

123 Motion for Leave to Answer and Answer of Constellation Energy Services, Inc. to Protests, Docket No. ER14-2952-004, et al., at 4-5 (filed June 23, 2015).

124 Id. at 6.

125 Answer of Verso Corporation, Docket No. ER14-2952-004, et al., at 2-3 (filed July 8, 2015).
states that its request was not intended to affect state commission authority over the allocation of costs at the retail level.126

45. Cloverland contends that MISO fails to provide an explanation for how it will calculate load distribution factors to identify benefitting load; instead, MISO only describes the tools that will be used to calculate the load distribution factors (i.e., linear load flow analysis).127 Cloverland states that MISO should describe the points in time to be analyzed, because any point in time modeled will be associated with a particular system configuration.128 Cloverland further argues that MISO’s proposal to rank EPNodes based solely on load distribution factors, without any consideration of the corresponding load at those nodes, means that a large node having a significant impact on one or more constraints could be easily excluded, whereas a smaller load with a minimally higher load distribution factor (but receiving fewer overall benefits) could be included.129 Cloverland contends that this practice discriminates against LSEs with many delivery points serving a number of small loads. Cloverland contends that this bias against LSEs serving many small loads at multiple delivery points is further exacerbated by MISO’s arbitrary decision to exclude EPNodes with load distribution factors that do not exceed the 80 percent threshold of the total of all such factors.130 In its answer, MISO responds that the term “load distribution factor” represents the amount of change in flow on a facility that results from an incremental change in the amount of energy injection or load withdrawal.131 MISO clarifies that its proposed methodology allocates costs based on the impact of load to the constraints identified. Specifically, for thermal constraints, MISO states that the incremental impact of the load on the constraint is a function of both the load distribution factors and the value of the load (the load MW amount). For voltage constraints, MISO explains that the identified area containing loads associated with buses that contribute to the voltage constraint is defined as a closed interface that fully encloses the voltage constrained area in order to differentiate between

126 Id. at 4.
127 Cloverland Protest at 10.
128 Id. at 10-11.
129 Id. at 11.
130 Id. at 11-12.
131 MISO Answer to Protests of the Compliance Filing at 14. MISO states that this factor is widely used in computing information for electricity transition impacts on transmission facilities, market flow, and transfer capability studies.
impacting loads that contribute to the voltage constraint from loads outside the area (non-impacting loads).\(^{132}\)

46. Protesters argue that MISO did not provide any information to justify either its 80 percent impact factor to cut-off the allocation of SSR costs for load that significantly impacts the constraint or its one percent cut-off for “noise.”\(^{133}\) UPPCo states that underlying studies and data indicating the cost allocation percentages for each LSE at different threshold levels is needed to determine whether the 80 percent threshold is just and reasonable.\(^{134}\) In its answer, MISO explains that 80 percent provides a reasonable threshold for allocation of costs to loads that have the most impact, regardless of constraint location, voltage level, or network topology.\(^{135}\) MISO notes that the calculation of load distribution factors includes load buses with minimal load distribution factors that are electrically distant from the constraint, and the threshold establishes a cut-off for load distribution factors below which the impact is considered significant, thereby avoiding the allocation of SSR costs to non-beneficiaries. MISO explains that the one percent threshold is included to eliminate buses that have a low sensitivity.\(^{136}\) MISO states that the one percent cut-off eliminates the noise caused by the imprecision of the numerical calculation of distribution factors and provides a practical means of reducing the initial data set for selection of buses.

47. Protesters argue that MISO did not justify its use of non-coincident peak hourly energy withdrawals at the CPNode level to allocate costs to LSEs.\(^{137}\) The Coalition of MISO Transmission Customers notes that, when evaluating SSR needs pursuant to an Attachment Y Study, MISO examines transmission system flows during system (coincident) peak conditions to determine whether reliability concerns arise; reliability

\(^{132}\) Id. at 15.

\(^{133}\) Michigan Commission Protest at 6; Protest of the City of Escanaba at 11-12; Cloverland Protest at 12.

\(^{134}\) UPPCo Protest at 7-8.

\(^{135}\) MISO Answer to Protests of the Compliance Filing at 15.

\(^{136}\) Id. at 16.

\(^{137}\) Protest of the Coalition of MISO Transmission Customers at 5; Motion to Intervene and Protest of the Marquette Board of Light and Power, Docket No. ER4-2952-004, at 4 (filed June 10, 2015) (Marquette Protest); Motion for Leave to Answer and Answer of the Marquette Board of Light and Power, Docket No. ER14-2952-004, at 3 (filed July 7, 2015) (Marquette Answer).
violations are then determined based on total flows at a particular point in time.\textsuperscript{138} Marquette explains that system costs are typically allocated based on the loads at the time of the transmission system peak, because that approach recognizes each LSE’s contribution to the system peak.\textsuperscript{139} Marquette further states that an LSE’s non-coincident peak can occur at a different time than the system peak. By only measuring each LSE’s non-coincident peak, and not determining which LSEs contribute to the system peak, Marquette argues that MISO is proposing to allocate costs disproportionately to customers that are not benefitting from SSR Units. Marquette argues that MISO should identify each LSE’s actual energy withdrawals at the time of the monthly system peak, which is when the SSR Unit is most likely needed for reliability purposes, in order to identify LSEs that contribute to the monthly system peak and are therefore relying on and benefitting from SSR Units.\textsuperscript{140} Cloverland further argues that MISO’s approach discriminates against rural-serving utilities with many small loads at numerous delivery points, because these LSEs’ share of costs will be based on an aggregate load greater than it will experience during the billing period.\textsuperscript{141}

48. Marquette argues that in prior SSR orders, the Commission has required MISO to justify its failure to use a monthly coincident peak methodology and recognized that allocating transmission-related costs based on off-peak usage is inappropriate.\textsuperscript{142} The Coalition of MISO Transmission Customers adds that MISO’s proposed use of non-coincident peak is inconsistent with the informally agreed-upon SSR cost allocation methodology that the coalition negotiated with MISO following MISO’s filing of Escanaba Rate Schedule 43 in Docket No. ER13-1695-000.\textsuperscript{143} Specifically, the Coalition of MISO Transmission Customers states that the Commission accepted a revised Escanaba Rate Schedule 43 in which the percentage of costs allocated to each LSE vary each month based on the LSE’s monthly actual energy withdrawals during the coincident peak hour.\textsuperscript{144} The Coalition of MISO Transmission Customers states that MISO agreed

\begin{footnotes}
\item[138] Protest of the Coalition of MISO Transmission Customers at 5.
\item[139] Marquette Answer at 4.
\item[140] Marquette Protest at 5-7; Marquette Answer at 4.
\item[141] Cloverland Protest at 12-13.
\item[142] Marquette Protest at 8 (citing \textit{Midcontinent Indep. Sys. Operator, Inc.}, 144 FERC ¶ 61,127, at PP 45-46 (2013)).
\item[143] Protest of the Coalition of MISO Transmission Customers at 8.
\item[144] \textit{Id.} (citing \textit{Midcontinent Indep. Sys. Operator, Inc.}, 146 FERC ¶ 61,164, at P 7 (2014)).
\end{footnotes}
to use this cost allocation method in all SSR agreements on a going-forward basis, and now MISO is abandoning this agreement by failing to maintain a peak-hour, coincident demand-based cost allocation methodology in its May 20 compliance filing.\footnote{Id. at 8-9.}

49. MISO does not respond to the arguments against using non-coincident peak load, but notes that it has modified its use of peak withdrawal information to adjust for the more granular nature of the new methodology; specifically, it now uses peak hourly energy withdrawals at the CPNode level instead of at the LBA level, in accordance with the Commission’s directive to discontinue the use of LBA boundaries in the SSR cost allocation methodology.\footnote{MISO Answer to Protests of the Compliance Filing at 16-17.} In answer to MISO’s answer, the Coalition of MISO Transmission Customers states that MISO’s proposal is not a continuation of its current peak period allocation methodology.\footnote{Motion for Leave to Answer and Answer of Coalition of MISO Transmission Customers, Docket Nos. ER14-2952-003 and ER14-2952-004, at 2 (filed July 10, 2015).} The Coalition of MISO Transmission Customers states that MISO’s current SSR cost allocation methodology assigns costs to an LSE based on the LSE’s actual energy withdrawals at CPNodes for the monthly peak hour within the LBA, while MISO’s proposal would assign SSR costs to each CPNode based on the highest hour of demand for that CPNode during the billing month, irrespective of whether this hour is the same hour of the highest demand in the affected reliability area.\footnote{Id. at 3.} The Coalition of MISO Transmission Customers states that costs assigned to each CPNode are then assigned to LSEs based on the load served by the LSE during the highest non-coincident hour of demand from the prior billing month at that CPNode. The Coalition of MISO Transmission Customers states that MISO has not offered a reasonable explanation for the departure from the coincident peak methodology.

50. Protesters assert that MISO’s use of the non-coincident peak to allocate SSR costs to identified beneficiaries is further complicated by the vagueness of the terms in proposed Rate Schedule 43A. Marquette states that MISO uses a Daily Load Weighting Factor to allocate a portion of the CPNode’s monthly peak load to each EPNode, but it is unclear how this factor is calculated, or whether it incorporates distance from the facility into the equation.\footnote{Marquette Protest at 5-6.} The Coalition of MISO Transmission Customers requests further information on how the aggregate load distribution factor is calculated.\footnote{Protest of the Coalition of MISO Transmission Customers at 6.}
MISO states that the Daily Load Weighting Factor and the aggregate load distribution factor are both used to determine the portion of the CPNode that benefits from the SSR Unit. MISO states that the Daily Load Weighting Factor represents an EPNode’s MW portion of a CPNode, and is calculated daily based on State Estimator data seven days prior. MISO further explains that the aggregate load distribution factor is the sum of all load distribution factors for any EPNode across all constraints identified in the Attachment Y Reliability Study.

51. In response to the protests, the Wisconsin Commission argues that MISO’s proposed methodology complies with the directives of the February 2015 Order and satisfies the Commission’s cost causation principle. The Wisconsin Commission states that MISO’s methodology properly assigns SSR costs directly to LSEs serving loads that would contribute to the thermal or voltage violations in the absence of the SSR Unit, and allows the beneficiaries of those SSR Units to be identified on a more granular level. The Wisconsin Commission notes that, although protesters take issue with the details of the revised methodology, none have proposed an alternative methodology that would satisfy the Commission’s directives.

3. Requested Relief

52. Some protesters ask the Commission to reject MISO’s filing until MISO provides all underlying data supporting the proposed methodology, subject to confidentiality requirements, so that parties may evaluate MISO’s proposal. Some protesters ask the Commission to reject the entire compliance filing as deficient, or reject at least those

151 MISO Answer to Protests of the Compliance Filing at 18.

152 MISO states that State Estimator data results from a software program used by MISO to create a real-time assessment of the condition of MISO’s region. Id. n.66.


154 Id. at 4-5.

155 Id. at 5.

156 Cloverland Protest at 14; Michigan Commission Protest at 17; Protest of the Mines at 6; Protest of the City of Mackinac Island at 2.
aspects of the filing that they find unjust and unreasonable.\(^{157}\) The City of Escanaba suggests that the Commission could have MISO engage in further discussion with stakeholders, or order a technical conference to discuss the support for the filing.\(^{158}\) The Mines ask the Commission to order MISO to develop an SSR methodology that reflects cost causation principles while balancing those principles with the historical socialization of reliability costs on MISO’s system.\(^{159}\) The Michigan Commission argues that the filing should be subject to the outcome of court review of the Wisconsin Commission Complaint Order and the February 2015 Order.\(^{160}\)

53. Some protesters state that the compliance filing raises disputed issues of material fact that require hearing and settlement judge procedures, and note that a hearing will allow them access to discovery procedures in order to provide the parties with enough information to properly assess the justness and reasonableness of MISO’s proposed methodology.\(^{161}\) The Michigan Commission and Verso state that hearing procedures will also provide an opportunity for MISO to support its denial to parties other than MISO transmission owners of access to information concerning power flows, monthly market data, and other data inputs into MISO’s allocation of SSR costs.\(^{162}\) The Wisconsin Commission objects to these requests, stating that a hearing is not necessary because there are no material issues of fact in dispute, as the issues disputed are primarily issues of policy.\(^{163}\) The Wisconsin Commission asks the Commission to instead direct MISO to make further filings to correct any deficiencies found in the record. Should the Commission find that material facts are in dispute, the Wisconsin Commission urges the Commission to hold a paper hearing, rather than a trial-type hearing, as any issues would be of a technical nature better suited to efficient paper hearing procedures.\(^{164}\)

\(^{157}\) Cloverland Protest at 14; Protest of the Coalition of MISO Transmission Customers at 5, 9; Protest of the City of Escanaba at 10; Marquette Protest at 10; UPPCo Protest at 8; Verso Protest at 7.

\(^{158}\) Protest of the City of Escanaba at 10.

\(^{159}\) Protest of the Mines at 15.

\(^{160}\) Michigan Commission Protest at 16.

\(^{161}\) Id. at 11; Verso Protest at 5-6; UPPCo Protest at 7-8.

\(^{162}\) Michigan Commission Protest at 12; Verso Protest at 7.

\(^{163}\) Wisconsin Commission Answer at 6.

\(^{164}\) Id. at 6-7.
4. **Refunds and the Previous Rejection of the ATC SSR Pro Rata Cost Allocation Method**

54. Some parties also argue against the provision of retroactive refunds. They argue that retroactive application of MISO’s new SSR cost allocation methodology is contrary to Commission precedent, section 206 of the FPA, and the filed rate doctrine. The Mines state that proposed Rate Schedules 43A and 43G reference determination of the “net charge or credit” assigned to each LSE, effective April 3, 2014, which they argue is an attempt to establish a tariff basis for retroactive surcharges for prior periods, in contravention of the filed rate doctrine and FPA section 206. The Mines also argue that reference to these net charges and credits is inconsistent with the Commission’s decision in the February 2015 Order to reserve a ruling on implementation of the refund requirement until a future order.

55. The Michigan Commission and the Mines argue that the justness and reasonableness of the new methodology must be analyzed in the context of MISO’s long-standing allocation of transmission project costs on a zone-wide basis in the ATC footprint. The Michigan Commission states that it would not be just and reasonable to make Michigan ratepayers responsible for 100 percent of the costs of SSR Units that are needed because no transmission upgrades have been constructed in the Upper Peninsula after requiring Michigan ratepayers over the past decade to pay a pro rata share of the costs of transmission upgrades that benefit Wisconsin.

56. In its answer, MISO states that all arguments related to the justness and reasonableness of changing the previous ATC SSR pro rata cost allocation method and the ability of the Commission to order refunds of SSR costs are untimely or repetitive requests for rehearing or collateral attacks on prior orders that go beyond the scope of compliance. The Wisconsin Commission argues that the Commission has already in several prior orders rejected the protesters’ arguments, and states that the Commission

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165 Michigan Commission Protest at 12-16; Protest of the City of Escanaba at 6-9.

166 Protest of the Mines at 10-12.

167 *Id.* at 9-10.

168 Michigan Commission Protest at 8-10; Protest of the Mines at 12-15.


170 MISO Answer to Protests of the Compliance Filing at 20-21.
should reaffirm its prior decisions rejecting the ATC SSR pro rata cost allocation methodology and ordering refunds.\textsuperscript{171}

IV. Commission Determination

A. Procedural Matters

57. Pursuant to Rule 214 of the Commission’s Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2015), the notice of intervention and timely, unopposed motions to intervene in Docket Nos. ER14-2952-003 and ER14-2952-004 serve to make the entities that filed them parties to the proceeding. Pursuant to Rule 214(d) of the Commission’s Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2015), the Commission will grant the late-filed motions to intervene of Great Lakes Utilities, Michigan Attorney General Bill Schuette and the Michigan Agency for Energy, given their interest in the proceedings and the absence of undue prejudice or delay. However, the interventions granted in this order are limited to these compliance subdockets and all future subdockets, and do not grant party status with respect to prior subdockets.\textsuperscript{172}

58. Rule 213(a)(2) of the Commission’s Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2015), prohibits an answer to a protest or answer unless otherwise ordered by the decisional authority. We will accept the answers filed because they have provided information that assisted us in our decision-making process.

B. Substantive Matters

59. We agree with the Coalition of MISO Transmission Customers that, as drafted, Rate Schedule 43A could be automatically applied by MISO to allocate the costs of SSR Units in the future. In the February 2015 Order, the Commission directed MISO to submit an alternative methodology to the optimization-LBA approach specifically for the Presque Isle, Escanaba, and White Pine SSR Units.\textsuperscript{173} The Commission also noted that it made no findings as to whether the optimization-LBA approach outlined in MISO’s BPM might produce just and reasonable cost allocations for other SSR Units, and that if MISO proposes to apply the optimization-LBA approach in future filings, MISO must address the concerns with the methodology identified in the February 2015 Order and show that the methodology allocates SSR costs to those LSEs that require the operation of the SSR

\textsuperscript{171} Wisconsin Commission Answer at 7.


\textsuperscript{173} February 2015 Order, 150 FERC ¶ 61,104 at P 86.
We therefore reject proposed Rate Schedule 43A and direct MISO, in a compliance filing due within 30 days of the date of this order, to incorporate its proposed SSR cost allocation methodology outlined in rejected Rate Schedule 43A (with the modifications discussed below) directly into the rate schedules applicable to the Presque Isle, Escanaba, and White Pine SSR Units. We also conditionally accept proposed Escanaba Rate Schedule 43, Presque Isle Rate Schedule 43G, and White Pine Rate Schedule 43H, subject to the requirement that MISO incorporate the SSR cost allocation methodology from rejected Rate Schedule 43A (with the modifications discussed below) directly into those rate schedules. We grant waiver of the prior notice requirement and allow MISO’s revised Tariff language to be effective as requested: June 15, 2014 for Escanaba Rate Schedule 43; April 3, 2014 for Presque Isle Rate Schedule 43G; and April 16, 2014 for White Pine Rate Schedule 43H.  

1. Justification for MISO’s Compliance Filing

Based upon a review of MISO’s filing and the responsive pleadings, we find that MISO’s proposed SSR cost allocation methodology generally complies with the directives of the February 2015 Order in that it assigns SSR costs directly to LSEs serving loads that would contribute to the thermal or voltage violations in the absence of the Presque Isle, Escanaba, and White Pine SSR Units. In the February 2015 Order, the Commission stated that, in order to assign SSR costs directly to LSEs based on the extent to which the loads that they serve benefit from the SSR Unit, MISO could determine the SSR benefits of specific LSEs based on their actual energy withdrawals at EPNodes.

The Commission also stated that the revised study methodology should identify the LSEs that require the operation of the Presque Isle, Escanaba, and White Pine SSR Units for reliability purposes under conditions that are more representative of actual manual and/or automatic responses taken during reliability events, rather than the ideal conditions that were used by MISO in the optimal load-shed study. We find that MISO’s proposed methodology largely achieves this result for thermal reliability constraints by analyzing power flows in MISO’s Network Model to calculate load distribution factors that indicate the change in flow on constraints caused by load, and using those load distribution factors to identify EPNodes that are associated with load that significantly impacts the constraint.

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175 See Midwest Indep. Transmission Sys. Operator, Inc., 142 FERC ¶ 61,170, at PP 84-86 (waiver of prior notice rule granted in order accepting an SSR agreement and associated rate schedule), order on reh’g, 144 FERC ¶ 61,128 (2013).

176 February 2015 Order, 150 FERC ¶ 61,104 at P 87.

177 Id. P 86.
We agree with MISO that this method recognizes the physical location of the loads in relation to the issues that are caused by the unit subject to SSR designation, because EPNodes have a one-to-one relationship with the electrical buses connecting all of the load and generators represented in MISO’s Network Model. We further find it just and reasonable for MISO to identify load that contributes to voltage stability issues by using voltage stability studies in conjunction with examination of transmission system topology in the vicinity of the voltage collapse area to identify a proxy interface that fully encloses the voltage constrained area. This proxy interface defines the boundary where load contributes to the voltage constraints, and all load buses in the voltage constrained area are selected and mapped to EPNodes for cost allocation.

61. We also generally find it just and reasonable for MISO to identify impacted CPNodes associated with the impacted EPNodes, and then to use energy withdrawals during peak conditions to determine the portion of the impacted CPNode, and subsequently the LSEs, that should be allocated SSR costs for the month. We find that MISO’s proposed methodology avoids the shortcomings of the previous optimization-LBA approach, as it no longer relies upon LBA boundaries that are inconsistent with the LSEs at risk of shedding load without operation of the SSR Units. In addition, MISO’s proposed methodology provides a more inclusive identification of load that can be reasonably expected to benefit from the operation of the Presque Isle, Escanaba, and White Pine SSR Units under conditions that are more representative of actual manual and/or automatic responses taken during reliability events, as it maps impacted load buses to EPNodes using MISO’s Network Model and measures actual energy withdrawals at CPNodes associated with impacted EPNodes, rather than basing cost allocation on idealized system conditions.

62. We reject arguments that MISO must show the actual allocation of Presque Isle, Escanaba, and White Pine SSR costs resulting from the new methodology. This information is not required to show that MISO’s proposal is just and reasonable. As discussed above, we find that MISO’s formulaic cost allocation is properly designed so as to identify the LSE beneficiaries of the SSR Units and allocate costs directly to those beneficiaries, as required by the February 2015 Order. The SSR cost allocation amounts resulting from this methodology are irrelevant to whether the methodology itself meets the requirements of the February 2015 Order and the Tariff.

63. We reject requests that the Commission refrain from accepting MISO’s proposed methodology without requiring the submission of further workpapers, testimony, affidavits, or underlying studies, such that parties that are affected can compare the allocations under the proposed methodology to those allocations under the previous (rejected) methodology.\footnote{178 See, e.g., Protest of the Mines at 5.} We generally find that MISO’s explanation of its proposed
methodology in its filing and in its answer to the protests, along with its submission of a thorough, step-by-step formula for the allocation of SSR costs in its proposed Tariff language, is sufficient to show that the new methodology avoids the shortcomings of MISO’s optimization-LBA approach and allocates SSR costs directly to the LSEs that benefit from the operation of the Presque Isle, Escanaba, and White Pine SSR Units, consistent with February 2015 Order and the Tariff. Thus, we find that MISO has sufficiently described the conditions, assumptions, and calculations underlying its revised study methodology, and further data submissions or development of the record are not necessary to show that MISO’s proposed methodology is just and reasonable.

64. We reject requests that the Commission require MISO to provide CEII or settlement information to non-MISO members under an appropriate protective order. Several parties contend that MISO provided certain information supporting its May 20 compliance filing to MISO members, but refused to provide this same information to non-MISO members, including: contingency events causing thermal or voltage constraints, a list of all LSEs that require the operation of the SSR Units, the percentage allocation of SSR costs to each LSE, load information with respect to the various CPNodes used by MISO to allocate SSR costs, and all work materials related to the allocation of SSR costs that would be available upon request to individual LSEs within MISO. We will not require MISO to provide underlying information to non-MISO members that MISO considers confidential under its Tariff and the MISO Transmission Owners Agreement. As discussed above, we find that that the requested information is not necessary in order to make a finding that MISO’s proposed cost allocation methodology is just and reasonable, and therefore non-MISO members have not demonstrated a need for this information. We further note that non-MISO members may seek financial information pertaining to a specific LSE directly from that LSE.

2. Technical Concerns

65. With respect to the specific technical critiques of MISO’s proposed SSR cost allocation methodology, we find that, except for specific elements further discussed below, MISO’s proposed methodology is just and reasonable. For instance, we reject the Michigan Commission’s generic criticism that MISO’s new methodology is based solely on two factors (the extent to which load contributes to thermal reliability constraints and the extent to which load would cause voltage violations in the absence of the SSR Unit) and is therefore unjust and unreasonable by failing to identify other factors that could be used to identify LSEs that require operation of the SSR Units. The Michigan Commission has not made a showing that these two factors are insufficient to identify LSEs that benefit from the operation of the SSR Units, nor has it identified other factors that MISO should have considered. We also reject the argument that MISO has not explained why the determination of load distribution factors represents a better measure of benefitting loads associated with thermal constraints than the previous methodology. To the contrary, as discussed above, we find that MISO has explained that it based its
new methodology on EPNodes, as suggested by the Commission in the February 2015 Order, in order to allocate SSR costs based on the physical location of loads that actually benefit from the operation of SSR Units. We find that MISO’s proposed methodology corrects the problems found in the previous methodology by identifying impacted load buses and associated EPNodes and assigning costs to LSEs that serve load on those load buses and associated EPNodes.

66. We reject the argument that MISO did not justify the use of uniform distribution factors to identify load that contributes to voltage violations or voltage stability issues. We accept MISO’s answer that there is no simple method to determine a linear relationship between the load and the area voltages, and find that MISO’s proposed proxy interface provides a reasonable means of defining the boundary of the voltage constrained area where load contributions to the voltage constraints are considered equal. We agree with MISO that a voltage collapse condition would result in interruption of service for the entire area, and the effect is the same for all loads that contribute to the voltage support requirements within the boundary; thus, all loads within the boundary benefit the same, regardless of geographical proximity to the generator, by keeping the SSR Units available to maintain area voltage stability.

67. We reject the argument that MISO’s proposed cost allocation method is engineered to confine Presque Isle SSR costs to Michigan. MISO has explained that its methodology is based on electrical analysis of its transmission system, and is designed to identify the location of the loads that require the operation of the Presque Isle SSR Units without reliance on state boundaries.

68. We reject Cloverland’s argument that MISO modeled temporary and atypical operating conditions that do not reflect historical or future power flows within the Upper Peninsula. Cloverland appears to argue that MISO should have taken into account a transmission system split that was in place prior to March 2013, which effectively caused Cloverland to be served from the Lower Peninsula, such that Cloverland did not receive benefits from the Presque Isle SSR Units located in the Upper Peninsula. However, as Verso and MISO note, the Presque Isle SSR Agreement was in effect from February 1, 2014 through January 31, 2015, during which time Cloverland was regularly being served from the western Upper Peninsula (where the Presque Isle SSR Units are located). We find it proper for MISO to model the system conditions present during the time that the Presque Isle SSR Agreement was actually in effect in order to determine appropriate allocation of Presque Isle SSR costs to those LSEs that benefitted from the operation of the SSR Units.

69. We reject Verso’s request that the Commission direct MISO to provide retail access providers with the cost information at the EPNode level of detail to facilitate the billing of retail access load, as MISO indicates that it does not have settlement level metered data by EPNode.
70. Although we find that MISO’s proposed methodology generally complies with the Commission’s directives in the February 2015 Order, certain aspects of the methodology have not been shown to be just and reasonable. First, MISO’s proposed methodology does not provide an explanation for how MISO will calculate load distribution factors to identify benefitting load. MISO provides some clarification on this point in its answer, explaining that the term “load distribution factor” represents the amount of change in flow on a facility that results from an incremental change in the amount of energy injection or load withdrawal. MISO states that this factor is widely used in computing information for electricity transition impacts on transmission facilities, market flow, and transfer capability studies. Given the importance of the load distribution factor calculation in identifying loads that require the operation of the SSR Unit, we direct MISO, in a compliance filing due within 30 days of the date of this order, to include in the SSR cost allocation methodology that will be incorporated into Presque Isle Rate Schedule 43G, Escanaba Rate Schedule 43, and White Pine Rate Schedule 43H the clarification provided by MISO in its answer and describe how load distribution factors will be calculated, including the point in time to be analyzed.

71. Second, we find that MISO has not justified its proposal to select load buses that have the highest 80 percent effect on the constraint as beneficiaries of SSR Unit operation. MISO’s proposed methodology first applies a minimum load distribution factor cutoff of one percent, to eliminate the potential for including buses with low sensitivity. MISO selects from the remaining load buses those that significantly impact the constraint first by ranking them in order of their load distribution factor, and then selecting the top load buses for which the sum of their load distribution factors equals 80 percent of the sum of the load distribution factors for the entire list. SSR costs are allocated to these loads based on the impact of the load to the identified constraint. Although we find it reasonable to use a one percent minimum load distribution factor threshold to eliminate noise caused by the imprecision of the numerical calculation of load distribution factors, we find that MISO has not demonstrated that its proposed 80 percent threshold ensures that load buses that significantly impact the constraint will be allocated the costs of the SSR Units from which they benefit. Although MISO states that 80 percent establishes a cut-off for load distribution factors below which the impact on the constraint is considered insignificant, MISO does not explain how it came to this determination, nor does it show that applying an 80 percent threshold ensures that all load buses with significant impacts on the constraint are allocated the SSR costs that they cause. Therefore, we direct MISO, in a compliance filing due within 30 days of the date of this order, to remove the 80 percent threshold from the SSR cost allocation methodology that will be incorporated into Presque Isle Rate Schedule 43G, Escanaba Rate Schedule 43, and White Pine Rate Schedule 43H. Thus, MISO will remove load

179 MISO Answer to Protests of the Compliance Filing at 14.
buses that fall under the one percent threshold, and then allocate SSR costs to the remaining load buses based on the impact of the load to the identified constraint (load distribution factor times the MW amount of the load at those buses).

72. Third, we find that MISO has not justified its proposal to allocate SSR costs at the CPNode level based on a non-coincident monthly peak volume for each CPNode. We find that this approach does not represent the actual conditions studied that caused the constraints, because MISO’s Attachment Y Study identifies constraints during the coincident system peak volume, as this is when the SSR Unit is most likely needed for reliability purposes. Both thermal and voltage constraints are most likely to bind on system peak days, ultimately necessitating the SSR Units for reliability. By instead measuring energy withdrawals at a CPNode’s non-coincident monthly peak, MISO’s proposed methodology does not adequately allocate costs to those LSEs that rely upon and benefit from the operation of SSR Units. Accordingly, we direct MISO, in a compliance filing due within 30 days of the date of this order, to revise the SSR cost allocation methodology that will be incorporated into Presque Isle Rate Schedule 43G, Escanaba Rate Schedule 43, and White Pine Rate Schedule 43H such that SSR costs are assigned based on the actual energy withdrawals during the coincident peak volume for the system, rather than the non-coincident peak volume for each CPNode.

73. Fourth, we find that MISO has not adequately explained the terms “Daily Load Weighting Factor” and “aggregate distribution factor” in its proposed Tariff language. MISO’s proposed methodology uses the Daily Load Weighing Factor to allocate a portion of the CPNode’s monthly coincident peak load to each impacted EPNode, but it is unclear how this factor is calculated, other than a reference to the calculation being performed daily based on prior seven-day State Estimator data. Furthermore, MISO states that load values for impacted EPNodes are multiplied by the corresponding aggregate load distribution factors for impacted EPNodes to recognize both load size and sensitivity, but there is no description of how the aggregate load distribution factor is calculated. MISO provides some clarification on these points in its answer, noting that:

(1) the Daily Load Weighting Factor and the aggregate load distribution factor are both

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180 We note that this approach addresses Cloverland’s concern that ranking the load buses in order of their load distribution factor, without taking into account the MW amount of the load at those buses, may discriminate against LSEs with many delivery points serving a number of small loads.

used to determine the portion of the load zone CPNode that benefits from the SSR Unit; (2) the Daily Load Weighting Factor represents an EPNode’s MW portion of a CPNode; and (3) the aggregate load distribution factor is the sum of all load distribution factors for any EPNode across all constraints identified in the Attachment Y Reliability Study. Assuming that these terms are still in use after MISO revises the methodology to allocate costs based on the coincident system peak volume, we direct MISO, in a compliance filing due within 30 days of the date of this order, to include in the SSR cost allocation methodology that will be incorporated into Presque Isle Rate Schedule 43G, Escanaba Rate Schedule 43, and White Pine Rate Schedule 43H the clarifications given in its answer and describe how the Daily Load Weighting Factor and the aggregate load distribution factor are calculated.

3. **Refunds and the Previous Rejection of the ATC SSR Pro Rata Cost Allocation Methodology**

74. We reject all arguments related to the justness and reasonableness of changing the previous ATC SSR *pro rata* cost allocation method as untimely requests for rehearing. In the February 2015 Order, the Commission rejected requests for rehearing of its findings in the Wisconsin Commission Complaint Order that it is unjust, unreasonable, unduly discriminatory, or preferential for MISO to allocate SSR costs on a *pro rata* basis to all LSEs in the ATC footprint. We reject all arguments related to the ability of the Commission to order refunds of SSR costs as beyond the scope of compliance. In addition, we will not address implementation of the refund requirement for the Presque Isle, Escanaba, and White Pine SSR Units until we have approved MISO’s new study methodology in its entirety and MISO has filed a detailed refund report.

The Commission orders:

(A) MISO’s proposed Rate Schedule 43A is hereby rejected, as discussed in the body of this order.

(B) MISO’s proposed Rate Schedules 43, 43G, and 43H are hereby conditionally accepted, subject to a further compliance filing, as discussed in the body of this order, to be effective on the following dates, as requested: April 3, 2014 for the Presque Isle Rate Schedule 43G; June 15, 2014 for the Escanaba Rate Schedule 43; and April 16, 2014 for the White Pine Rate Schedule 43H.

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182 MISO Answer to Protests of the Compliance Filing at 18.

183 February 2015 Order, 150 FERC ¶ 61,104 at P 90.

184 *Id.* P 93 n.231.
(C) MISO is hereby directed to submit a compliance filing, due within 30 days of the date of this order, revising its proposed SSR cost allocation methodology and incorporating this methodology directly into Presque Isle Rate Schedule 43G, Escanaba Rate Schedule 43, and White Pine Rate Schedule 43H, as discussed in the body of this order.

By the Commission. Commissioner Honorable is not participating.

( S E A L )

Nathaniel J. Davis, Sr.,
Deputy Secretary.