



Market Subcommittee (MSC)

February 20, 2025

Carmel, IN

10:00 am – 3:00 pm ET / 9:00 am – 2:00 pm CT

Dial-in and Webex information available at www.misoenergy.org

Minutes

1. Administrative Items (Tom Weeks)

a. Welcome / Roll Call

The meeting was called to order at 10:00am ET/9:00am CT.

The Public Meeting Announcement was referenced.

The Meeting Discussion Protocol was referenced.

Chair: Tom Weeks

Vice Chair: Bryan Garnett

MISO Liaison: Tim Aliff

Stakeholder Relations: Mandi McGirr

In Person Participants:

Aaron Martin, CMS

Jeffery Kelley, NIPSCO

Thomas Chamberlain,
Entergy

Arthur Iler, IN OUCC

Marguerite Wagner, ITC

David Harlan, Veriquest

Other Participants:

Adam McKinnie, PSC MO

Daniel Jagessar, Entergy

Jeff Wernert, The Prime
Group LLC

Adam Renfandt, NDSG

Darrell Newcomer, CMS

Jeremi Wofford, Ameren

Aditi Shah, Tenaska

Dave Stoltz, Hoosier

Jeremy Jones, Entergy

Alex Podolsky, PCE-Co

Energy

Jessica Burdette, MN PUC

Alexis Jackson, DTE

David Carlson, IGS

Jill Jones, NMPP

Amber Joyce, MDU

David Davis, Apex

Jim Dauphinais, BAI

Andrew Peterson,
MN PUC

David Johnston, IURC

Jim Holsclaw, Calfee

Angela Maiko, GRE

David Ricketts, Vistra

John Parker, Alliant

Anita Collier, ACES

David Sapper, CGA

Josh Byrnes, IA IUB

Annie Dellva, Xcel

David Savage, IURC

Josh Hubbard, Ameren

Art Iler, IN OUCC

David Sebenaler, MPC

Kara Briggs, NRG

Ashtin Massie, RMI

David Webb, Entergy

Karl Blaszkowski, CMS

Austin Hoekman, MRES

Dennis Kimm, MEC

Katie Ege, GRE

Barton Norfleet, PSC MS

Derek Miller, MGE

Katie Wilson, DTE

Becky Bradley, AECC

Derek Mosolf, GRE

Keith Parrott, MPPA

Bill Booth, Michael Best

DeWayne Todd, Alcoa

Kelly Bertholet, MB HYDRO

Bob German, DTE

Diane Janicki, BETM

Kelsey Tatum, Ameren

Brian Gibson, MEC

Diane Kearney, Potomac

Ken Foladare, Tangibl Inc

Brian Koz, Alphatarxia

Dylan Walski, MPC

Ken Kagy, CFU

Bridget Sparks, AES

Eddie Berry, Alcoa

Kevin Kingsley, MDU

Brock Ondayko, AEP

Eddie Decker, NIPSCO

Kevin Morris,

Carrie Milton, Potomac

Eric Thoms, Invenergy

CenterpointEnergy

Cayleigh Donahue,

Erica Miller, Potomac

Kristin Gaspar, Xcel

Daymark EA

Gabriel Ejebi, OATI

Kurt Vanderlick, Cleco

Cheryl Ray,

Gertrude Rivera, Entergy

Lane Sisung, LA PSC

CenterpointEnergy

Hallie Brodie, Xcel

Laura Mitchum, TEA

Chris Miller, FERC

Heidi Martinson, CMPAS

Leslie Hamby,

Chris Norton, AMP

Hunter Burgett, Strata

CenterpointEnergy

Chris Riley, DPC

Clean Energy

Lisa Barrett, Advanced

Christopher Plante, WEC

Jacob Strauss, MN PUC

Energy United

Cindy Hammarlund, CES

Jacob Vickers, FERC

Lise Trudeau, MN PUC

Cory Hetchler, Connex US

Jake Chapman, LA PSC

Luis de la Mora, Strom

Craig Markham, NuEnergen

Jason Fogarty, Potomac

Power

Craig Spencer, Alliant

Jason Mazigian, BEPC

Luke Anderson, Xcel

Dan Martin, DPC

Jay Rasmussen, Duke

Luke Dolan, MPPA

Post Only

Potential Voting Item

Feedback Requested

Verbal Report

Luke Metcalf, Voltus
 Maggie Kristian, NGR
 Maria Serratos, Entergy
 Mario Martinez, Xcel
 Mark Price, DC Energy
 Mark Volpe, COMPP
 Martin Steele, Xcel
 Matt Engels, WPSCI
 Maura Williams, AEP
 Melissa Swafford, Hitachi Energy
 Mike Fischette, LBWL
 Mike Schowalter, Fresh Energy
 Mitch Myhre, Alliant
 Nader Sobhani, Daymark EA
 Natalie McIntire, NRDC
 Nicholas Simon, MGE
 Nick Schroeder, MGE
 Noel Darce, Stone Pigman
 Pam Utley, CenterpointEnergy

Peter Dotson-Westphalen, CPower Energy
 Presley Reed, Dentons
 Ray McCausland, Ameren
 Rhett Edward Trease, Duke
 Robert Frank, NDSG
 Robert Vosberg, LPSC
 Staff Consultant
 Roberto Paliza, Paliza
 Ryan Lowe, MB HYDRO
 Ryan Wernette, WPSCI
 Ryan Wilhelmus, Big Rivers
 Ryan Yeoman, MI PSC
 Sahar Bahmani, PSCW
 Sarah Horner, MPC
 Sawyer McClure, WPSCI
 Seth Cochran, Vitol
 Shawn White, NIPSCO
 Shelby Riese, WPPI
 Sherian Krause, MEC
 Simon Mahan, SREA

Srijan Karim, MEC
 Stacie Hebert, OTP
 Steve Dowell, Alcoa
 Tanya K Kelm, OTP
 Taylor Carpenter, Calfee
 Taylor Martin, Potomac
 Terry Jarrett, Healy Law
 TJ Cochran, Ameren
 Tom Dostal, MPC
 Tom Siegrist, SMXB Law
 Tyler Bergman, CGA
 Tyronne Tillis, Jr., Entergy
 Valy Goepfrich, WPPI
 Vince Vandaveer, Ameren
 Walt Cecil, PSC MO
 Werner Roth, TX PUC
 William Rader, OTP
 Yichun Shi, SESCO LLC
 Zach Fjestad, OTP
 Zachary Callen, ICC

b. Review Agenda

The agenda was accepted as posted.

c. Review Meeting Minutes / Action items

The minutes were accepted as posted.

Action Item	Owner	Date	Status
MSE Issues - MISO agreed to provide a list of issues that are waiting for Market System Enhancement (MSE) to be completed in the next MSC Liaison Report.	MISO	1/16/2025	Closed
Item 04b MSE Quarterly Report - update and repost presentation, re: Look Ahead Commitment (LAC)	MISO	1/16/2025	Closed
MISO requested feedback on Demand Response Participation Rules (MSC-2024-6) by January 31, 2025.	MISO	1/16/2025	Closed
MISO requested feedback on Elimination of Dual LMR/EDR Registration Option by January 31, 2025.	MISO	1/16/2025	Closed

d. Review Management Plan

The management plan was reviewed.

e. Call for Leadership nominations

The MSC is currently accepting nominations for the positions of Chair and Vice Chair for the term of April 2025 – March 2026. Incumbents, Tom Weeks (chair) and Bryan Garnett (vice chair) have expressed their interest in serving again. Interested candidates should email a short biography to Stakeholder Relations at stakeholderrelations@misoenergy.org for consideration by March 7, 2024. MISO will send a notice to the MSC distribution list requesting nominations. The leadership election for the MSC is expected to be held either in the April meeting, or by email ballot if necessary.

f. DERTF Sunset Date Extension ✓

The group reviewed a proposal from the DERTF Leadership and then the MSC voted on the proposal. Next steps are for this discussion to move to the Steering Committee (SC).

Motion	Status	Outcome
The Market Subcommittee (MSC) recommended extending the sunset date of the Distributed Energy Resources Task Force (DERTF) for a period of one-year past the sunset date listed in the DERTF Charter, from July 31, 2025 to July 31, 2026, pursuant to MISO Stakeholder Governance Guide (SGG).	Decided	Motion passed by general consent.

g. DERTF 2025 Charter and Management Plan review and approval ✓

The 2025 DERTF Charter and 2025 DERTF Management Plan were reviewed and approved by general consent at the MSC. The charter will move on to the Steering Committee (SC) on March 12, 2025.

h. SMWG 2025 Charter and Management Plan review and approval ✓

The 2025 SMWG Charter and 2025 SMWG Management Plan were reviewed and approved by general consent at the MSC. The charter will move on to the Steering Committee (SC) on March 12, 2025.

2. Status Updates (Tom Weeks)

- a. **Steering Committee Update**
- b. **Seams Management Working Group (SMWG)**
- c. **Settlements User Group (SUG)**
- d. **Distributed Energy Resources Task Force (DERTF)**

3. Liaison Report (Tim Aliff)

- January 16 Action Item: Issues waiting for Market System Enhancement (MSE) to be completed – MISO shared that the only issue waiting for MSE is MSC-2018-9 and that other issues were not prioritized. MSC-2018-9 is currently inactive and will not become active until the following MSE priorities are taken care of: MSE instruments, Order 2222, and Order 881. Contact: Zhaoxia Xie
- Winter Storm Enzo (January 20-22, 2025) – *Update: Slide 5 was corrected, and the Liaison Report was reposted; System Peak Load changed from 105.8 GW to 107.9 GW.*
 - MISO reviewed the Day-Ahead Medium-Term Load Forecast (MTLF) Performance 1/20 to 1/22, 2025 – Contact: Adam Simkowski
 - MISO shared that members served near all time peak winter loads during Enzo despite the cold icy conditions without emergency declarations or expensive out of market actions. MISO declared conservative operations but did not have to implement emergency procedures and had good market outcomes. – Contact: Dustin Grethen
- Seasonal Outlook – Spring 2025 – MISO is forecasting sufficient capacity for the spring. Contact: John DiBasilio
- Settlements System Enhancements Project - MISO shared this project will begin in Q1 2025 and there should not be any impact to market participants as enhancements are implemented. Contact: Daric Moenter
- Market Implementation and Continuing Error Relationship (MSC-2022-2) – The MSC agreed to change the status of issue to completed. BPM-005 redlines are posted with meeting materials. Contact: Daric Moenter
- Upcoming Workshops and Announcements
 - March Board of Directors Registration – reminder to register by March 3
 - MISO Website Redesign – follow up survey occurring through February and March
 - Annual Auction Revenue Rights (Annual ARR) Allocation Workshop – February 25
 - Futures Redesign Workshop – February 28
 - Annual Customer Survey – available March 18 – April 8
 - Customer Readiness Symposium – March 19
 - Uninstructed Deviation Enhancement (UDE) Flag Q&A Workshop – April 22

4. MISO Posted Items (Tim Aliff)

- a. FERC Monthly Status Report
- b. BPM-005 Redlines (MSC-2022-2) – supplemental file to support liaison slide

5. Order 881 Update (RSC-2018-54A) (Brian Kiefer)

MISO provided an update on Order 881 efforts and an overview of MISO's request for an extension of the deadline for their compliance filing. MISO is continuing to make progress on the Order 881 program and is implementing as soon as viable. MISO will request an extension for Order 881 compliance until December 2028, which will also cover MISO Transmission Owners (TOs). MISO intends to file with FERC in March 2025 and request a response by end of May 2025.

MISO discussed challenges which make the July 2025 deadline unattainable, insights from the TO Order 881 readiness survey, a proposed timeline, and next steps. MISO is seeking an extension to allow for more flexibility, testing, and allow value to be delivered as it is ready; so that MISO can bring things online when they are ready and have been properly vetted. MISO clarified it is requesting the extension through December 2028.

Next Steps

- MISO will file Order 881 compliance extension in March 2025 - with an expected response in May
- MISO will continue to manage vendors and collaborate with TOs to establish practical dates for operational compliance
- MISO will update regulators and stakeholders as MISO becomes compliant with the various aspects of Order 881

Update: Slide 6 formatting of timeline corrected and presentation reposted.

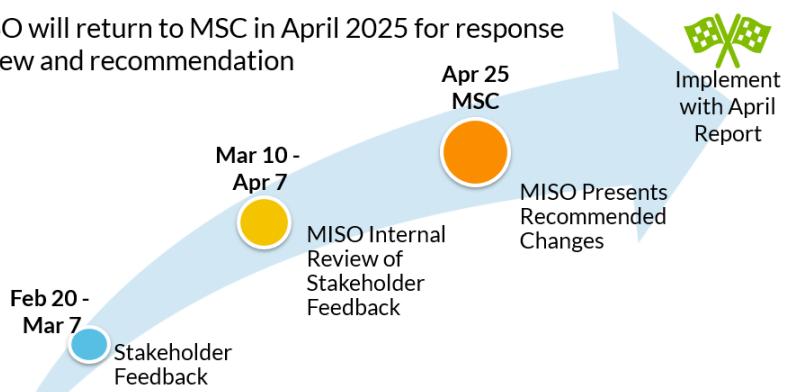
6. MISO Monthly Operations Report[^] (Patti Grattenthaler)

Kick off stakeholder review process on monthly Operations Report

MISO initiated the stakeholder review process on the Monthly Operations Report. MISO's Monthly Operations Report contains information on MISO markets and operations performance and outcomes. The report is reviewed and enhanced annually to better reflect the rapidly changing energy landscape, processes, and tools. The focus of the annual review will be on targeted, value-add information, streamlined processes, and effective communication to provide continued value to MISO stakeholders.

Next Steps and Timeline

- MISO will return to MSC in April 2025 for response review and recommendation



MISO requested feedback on the value, format, and content of the MISO **Monthly Operations Report** by March 14, 2025.

7. Adoption of Multiday Gas Purchase Requirement or (Jason Howard)

Unit Commitment Process During Extreme Cold (MSC-2024-3)

Review next steps on feedback received

MISO reviewed next steps on stakeholder feedback received on the Multi-day Forward Reliability

Assessment and Commitment (MD FRAC) Commitments and Prorated Start-up Costs (MSC-2024-3) proposal. MISO shared that stakeholder feedback generally supports moving MD FRAC commitments into the Day Ahead (DA) solution for the effective operating day, as well as modifications to the existing start-up cost recovery construct for cancelled commitments. MISO provided clarifying information and reviewed examples to illustrate how the construct might work in certain scenarios. MISO plans to move forward with proposed changes. MISO answered stakeholder questions.

Next Steps

- Draft Tariff redlines for review at May 2025 MSC
- File Tariff changes by end of Q2 2025
- Plan to implement process and software changes by end of 2025

8. Uninstructed Deviation Enhancement Flag (MSC-2024-7) (John Harmon)

Provide update on UDE implementation

MISO provided clarity on the intent and implementation details of the Uninstructed Deviation Enhancement (UDE) Flag. The Flag provides clarity to Generation Resources by indicating the reason the five minute Setpoint should be followed for reliability. A Reason Code will also be communicated via ICCP with rationale of why the Flag = 1. This enhancement will not require any Tariff changes.

MISO reviewed the reason code summary and answered clarifying questions from the group. Draft ICCP points required to implement the Flag were shared at the Modeling Users Group (MUG) via BPM-031 redlines on January 21, 2025.

The UDE Flag “go live” is expected near June 1, 2025

- GE software delivery: 2/28/25
- MISO Model changes: 3/1/25
- MISO software changes: 4/1/25
- Procedure updates: 4/4/25
- MISO Operator training: 4/30/25
- MP tool changes: 5/16/25
- Kickoff Settlement rules: Aug MSC

MISO (Customer Experience) will send a survey on March 4, 2025, and will have office hours available on April 10, 2025. MISO (Client Services and Readiness) will contact Market Participants (MPs) as needed based on survey results.

9. Demand Response Participation Rules (MSC-2024-6) (Mike Robinson)

Overview of final proposed Tariff changes

MISO discussed improvements to demand response participation rules in response in part to FERC's recent Stipulation and Consent Agreements. MISO shared that several instances of inappropriate market behavior have been identified for demand resources. MISO provided some additional clarification on why some of these proposed changes are necessary. Revised draft Demand Response Participation Rules Tariff Language redlines based on stakeholder feedback are posted with meeting materials. MISO proposes to make a Tariff filing by February-end 2025.

MISO reviewed key themes in stakeholder feedback and MISO responses. MISO discussed incremental changes to the proposal. MISO incorporated the following stakeholder feedback in the revised Tariff language:

- Adopted some stakeholder suggestions for more appropriate wording in different parts of the redline Tariff to achieve the proposed objectives
- Clarification on Transmission Provider rights for approval on MP's selected M&V method (Att. TT)
- Further revisions to meter data submissions for MPs with LMRs (Att. TT)
- Additional proposed charges for a resource's failure to fully respond when called during Contingency Reserve Deployment events (40.3.4)

Next Steps

- Finalize Tariff language
- Develop Tariff filing (in process)
 - MISO proposes to make a Tariff filing by February-end
 - Effective date: 60 days thence
- Draft BPM language - MISO confirmed that details around the Reference Level calculation are and will be further described in BPM 009, section 6.9.

10. Elimination of Dual LMR/EDR Registration Option (MSC-2025-3) (Mike Robinson)

Discuss MISO's plan for Tariff filing and provide overview of final proposed Tariff changes

The MSC agreed to adopt this new issue by general consent.

MISO discussed the elimination of the dual LMR/EDR registration option. Multiple concurrent registrations of a resource as an EDR and any other market instrument will be eliminated as a participation option effective with Planning Year 26/27. Tariff redlines have been posted in the meeting materials (draft Elimination of Dual LMR EDR Registration Option Tariff Language redlines). MISO proposes to make a tariff filing by April 1, 2025.

MISO reviewed themes in stakeholder feedback and MISO's response/clarifications on the proposed design and proposal. MISO shared that the recent stakeholder feedback reflected they are not in support of elimination of dual registration for EDRs and noted that Load Modifying Resources (LMRs) participation options are being addressed through Demand Response and Emergency Resource Reforms efforts at the Resource Adequacy Subcommittee (RASC).

Next Steps

- Finalize Tariff language
- Develop Tariff filing and finalize implementation timelines
- Filing Date: April 1, 2025
- Effective Date: 60 days after filing
 - Immediately address issues related to EDRs without further delay
 - MPs of LMRs and DRRs can adjust their plans for participation in the 2026 PRA

11. Metered Generation Baseline for DRR-1 Contingency (Luke Metcalf, Voltus)

Reserves (MSC-2025-2)

Introduce new issue to MSC

The MSC agreed to adopt this new issue by general consent.

Mr. Metcalf of Voltus introduced this issue and discussed the potential benefits, roadblocks, and proposed language including:

- Attachment TT 3)ii)b) has a simple language error that needs to be fixed
 - Current language appears to be prohibitive for any btmg participation in Contingency Reserves
 - Attachment TT also refers to "BTMG", which is a defined term in the Tariff and not applicable to the Attachment TT usage

Issue Statement: Attachment TT 3)ii)b) describes how performance of btmg assets should be assessed in contingency events, but the calculation is measured as a difference between "metered demand" and "metered output", which is nonsensical.

12. New Business (All)

None



13. Action Items (Mandi McGirr)

Action Item	Owner	Date	Status
Call for Leadership Nominations - for Chair/VC of MSC for the term of April 2025 – March 2026 – please email a short bio to stakeholderrelations@misoenergy.org by March 7; MISO to send notice to the MSC distribution list	MISO	2/20/2025	Closed
Market Implementation and Continuing Error Relationship (MSC-2022-2) - change status of issue to Completed	MISO	2/20/2025	Closed
MISO requested feedback on Monthly Operations Report by March 14, 2025.	MISO	2/20/2025	Closed

14. Adjourn

Meeting adjourned at 1:38 ET/12:38 pm CT.

Next Meeting: April 10, 2025
In-person Carmel