Planning Advisory Committee (PAC)
October 7, 2026
Carmel, IN
10:00 am to 12:45 pm ET / 9:00 to 11:45 am CT
Dial-in and Webex information available at www.misoenergy.org

Minutes

1. **Administrative Items (Dave Johnston)**
   a. **Call to Order / Roll Call**
   Meeting called to order at 10:00 am ET.
   The Public Meeting Notice and Code of Conduct were issued.

   Interim Chair: Dave Johnston
   MISO Liaison: Vikram Godbole
   Stakeholder Relations: Amanda Jones

   Sector Representatives:
   Affiliate: not present
   Coordination: Michael Steiman
   Eligible End Users: Kavita Maini
   Environmental: Ciaran Gallagher
   IPP: Erin Murphy
   Muni/Coop/TDU: Steve Leovy
   Power Marketers: not present
   Public Consumers: Art Iler
   State Regulatory: Sarah Martz
   Transmission Developers: not present
   Transmission Owners: Rob Wells

   In Person Participants:

   Ron Slagel, Ranger Power
   Mike Dantzler, Ranger Power
   Dylan Rubenstein, Ranger Power
   Jeff Kelley, NIPSCO
   Shivam Sharma, Alliant
   Larry Borum, Ranger Power
   Scott Jones, IN OUCC
   Sandeep Tadepally, RWE
   Lise Trudeau, MN DOC
   Claudia Partridge, Fresh Energy

   Remote Participants:

   Aaron Demuth, OTP
   Aaron Martin, CMS
   Abby Sherman, ACP
   Abhishek Dinakar, Savion
   Abigail Reid, MGE
   Adam Solomon, Vestas
   Adam Stern, Clearway
   Adam Stern, New Leaf Energy
   Alan Comnes, New Consulting
   Alex Carb, Participant
   Alex Kloiber, CIPCO
   Allie Koepplinger, MI PSC
   Amanda Cook, RTO Insider
   Amber Joyce, MDU
   Andrew Kienitz, MN Power
   Andrew Kowalczyk, SREA
   Andy Cotter, ATC
   Angela Maiko, GRE
   Angie Gomez, Calfee
   Anita Collier, ACES
   Anna Weiss, ICC
   Anthony A Alvarez, Iowa OCA
   Arash Ghodsian, Invenergy
   Armin Karabegovic, CWLD
   Bakhtawar Khan, Gabel
   Ben Dayman, MEC
   Ben Scott, CMS
   Bill Booth, Michael Best
   Brad Pope, OMS
   Brenda Prokop, CES
   Brent Taylor, MPPA
   Brian Daschbach, LS Power
   Brian Drumm, ITC
   Brian Giggee, MDU
   Carolyn Todd, Eco Energy
   Carson Hemphill, MEC
   Cassie Osterhoudt, National Grid
   Chad Craven, Savion
   Chad Ladner, Entergy
   Chengyue Guo, ATC
   Chris Bell, Ameren
   Chris Norton, AMP
   Chris Plante, WEC
   Ciaran Gallagher, Clean Wisconsin
   Cindy Hammarlund, CES
   Claudia Partridge, Fresh Energy
   Cody Anderson, OTP
   Constance Groh, Liskey PLLC
   Craig Spencer, Alliant

Cynthia Crane, CEP
Dan Alfred, CMS
Daniel Wang, Desri
David Harlan, Veriquest
David Johnston, IURC
David McRae, AECC
David Sapper, CGA
David Savage, IURC
David Zito, Gabel
Derek Sunderman, Savion
Devan Fischer, ICC
DeWayne Todd, Alcoa
Diana Vasquez, Deriva Energy
Dylan Stockert, MDU
Elizabeth Sheldon, Xcel
Eric Dearmont, Healy Law
Eric Giddens, IA IUC
Eric Stephens, RWE
Erik Hanser, MI PSC
Erin Murphy, NextEra
Ethan Chastain, Hoosier Energy
Eva Kaso Collette, Orsted
Evan Shea, NextEra
Fiza Shaikh, New Project Media
Forrest Tingo, LSBP
Frederick Salvo, Baker Donelson
Gabe Kainz, OTP
Gary Weiss, Ameren
Greg Jekel, Hoosier Energy
Harsha Chandavarapu, NextEra
Heather Palmer, Iowa OCA
Henry Yang, Jupiter Power
Hilary Gold, Entergy
Humberto Branco, Rev Renewables
Isaiah Carter, CMS
Jack Clark, Spearmint
Jacob Lampi, CIPCO
Jared Rasbold, Cooperative Energy
Jason Cox, EQ Energy Advisors
Jason Mazigian, BEPC
Jason Weiers, OTP
Jeff Baker, Duke
Jeff L Dodd, Viridon
Jeffrey Barrett, Apex
Jenjira Knernschield, CEC
Jennifer Solomon, NextEra
Jeremi Wofford, Ameren
Jeremy Bennett, Avangrid
Jeremy Jones, Entergy
Jessica Burdette, Geronimo Power
John Liskey, CUB MI
John Wolfram, Catalyst Consulting LLC
Josh Tellier, ATC
Justin Berg, Power Alliance
Justin Stewart, Ameren
Kara Smerud, MN Power
Kathy Thole, Ameren
Kavita Maini, Wisconsin Energy
Kimberly Dunning, CenterPoint
Kimiya Attar, AEU
Kolin Seward, Sam Houston
Kris Fitzpatrick, KCE
Kyle M Watson, Entergy
Laura Witzling, PSCW
Lauren Azar, Azar Law LLC
Leslie Hamby, CenterPoint
Lisa Barrett, DTE
Lise Trudeau, MN PUC
Martin Lodyga, EPE Consulting
Maxx Snell, MDU
Megan Allen, Ameren
Meghan Ross, ITC
Michael Fischette, LBWL
Michael Fleck, ITC
Michael Saer, GRE
Michael Steiman, MB HYDRO
Michaela Frederick, WPPI
Mike Mooney, Hoosier Energy
Mithun Mallick, Aypa
Naishadh Hegde, Ameren
Natalie Craig, AR PSC / APSC
Nathan Knopf, Hoosier Energy
Nathan Rowray, MEC
Nathan Williams, Ameren
Niall Pascal, Allium Energy
Noel Darce, Fishman Haygood
Peg Abbadini, UPPCO
Presley Reed, Dentons
Preston Hart, OTP
Raj Pudhota, TED
Raju Brahmandabheri, ITC
Ray McCausland, Ameren
Rebecca Darrah, AES
Riley Roach, Grid United
Rob Wells, ITC
Robert Frank, NDSG
Robert Vosberg, LPSC Staff
Rock Park, MN PUC
Ryan Lovan, IA IUC
Rylan Hanson, OTP
Sam Wendt, MEC
Sangeetha Rajasekeran, Nira
Sanjay Bhatia, Savion
Sara Ostrander, Hoosier Energy
Sarah Martz, IA IUC
Sarah Murphy, Daymark EA
Sawyer McClure, WPSCI
Scott Bechler, Sun2o
Scott Deffenderfer, Ameren
Shailabh Mazari, CC Renew
Shannon Weigel, Jupiter Power
Shreya Tiwari, VC Renewables
Soma Soko, New Leaf Energy
Srijan Karim, MEC
Stacie Hebert, Herbert Consulting
Stephen Rose, MN PUC
Steven Leovy, WPPI
Summer Fabus, EDPR
Susan Rossi, Xcel
Taylor E Lucke, Duke
Terri Rivera, Entergy
Terry Volkmann, CFU/HU
Thompson Adu, Engie NA
Tia Elliott, Pelican Power
Tim Ellis, Clenera
Todd Komplin, WPPI
Tom Chamberlain, Entergy
Tom Siegrist, SMXB Law
Tommy Roberts, Hoosier Energy
Toni Lin, Participant
Tricia DeBleeckere, OMS
Tyler Berton, GDS
Tzu-Yuan Su, DPC
Vince Vandaveer, Ameren
Walt Cecil, PSC MO
Werner Roth, TX PUC
Will Koebel, PSCW
Yarrow Etheredge
Zach Fjestad, OTP
Zach Van Ness, Matrix Renewables

b. Review Agenda
Agenda accepted as posted.

c. Review Meeting Minutes, Action Items
Minutes for the August 26, 2026, meeting were accepted as posted. Action items are closed.

Action Item	Owner	Date	Status
Feedback requests will be opened for: • Removing Storage Limitations in GIAs (PAC-2024-3) – feedback due Sept. 16 • Transmission Service Requirements for Charging Electric Storage Resources (ESRs) from the Grid (PAC-2023-2) – feedback due September 11	MISO	8/26/2026	Closed
Notify PAC of November 2 special meeting when a time is selected	MISO	8/26/2026	Closed

d. Review Management Plan
Updates to the management plan were posted in redline. MISO took an action item to add the November 2 special meeting to the management plan.

e. Leadership Nominations
Leadership nominations for the 2027 term were opened. Interested candidates should submit bios by Wednesday, November 4. Candidates will be reviewed in the next meeting, and a closed email ballot will follow – if necessary – in accordance with the Stakeholder Governance Guide.

2. Status Updates ➲ (Dave Johnston)
- **a. Interconnection Process Working Group (IPWG)**
- **b. Planning Subcommittee (PSC)**
- **c. Steering Committee (SC**

PSC and SC status reports were provided with meeting materials. There were no questions.

3. Liaison Report (Vikram Godbole)
MISO shared highlights of the written liaison report, including:
- Interregional Planning Update
- Legacy Queue Acceleration Proposal: described MISO's Tariff filing to offer allowances in DPP-2022 Phase II; see slides 5 and 6 of the posted liaison report and redline Tariff language. To be discussed further with IPWG on October 13.
- LRTP Status update provided, including recent action and upcoming discussion planned for October 14 PSC and November 18 PAC. MISO noted its efforts to develop a new platform to take in questions specific to LRTP for which details will be shared soon. Significant progress has been made on modeling and MISO is starting analysis.
- MISO Feedback Response to PAC: Removing Storage Limitations in GIAs (PAC-2024-3) (20260826)
- Announcements and Workshops
  - Customer Experience Annual Survey closes October 13
  - New Visitor Management System Launched October 5
  - Large Load Working Group (LLWG) October 8, October 29, November 16
  - PAC Special Meeting for MTEP November 2
  - Expedited Project Review TSTF November 3
  - MISO Board of Directors System Planning Committee November 12
  - RECBWG November 17

4. MISO Post Only Items ➲
- **a. Tranche 1 Triennial Review Report Out**
- **b.** Questions about the report arose later in the meeting; stakeholders requested that MISO return in the next meeting to further address the details of the analysis.

5. **Legacy Queue Acceleration Tariff Sheets**
   Discussed in the liaison report; there were no additional questions.

6. **MISO-SPP Joint Operating Agreement (JOA) Revision^ (Liang Qi)**
   Coordination for Generator Interconnection
   MISO proposed revisions to Section 9.4 of the MISO-SPP Joint Operating Agreement (JOA). The proposed changes are intended to improve coordination between MISO and SPP, support compliance with FERC Order 2023, and incorporate SPP's Interconnection Cluster Study (ICS) process into existing affected-system coordination procedures. MISO also proposed a series of non-substantive language updates intended to improve consistency, standardize terminology, and reduce ambiguity throughout Section 9.4 of the JOA.

   MISO staff noted that the effort will continue through both MISO and SPP stakeholder processes, with a follow-up update planned for the November 18, 2026 PAC meeting. A tentative FERC filing is anticipated in late 2026, with an expected effective date approximately 60 days following filing approval.

   MISO requested stakeholder feedback by October 21.

7. **MTEP26 Report Review (Arthur Ashby)**
   MISO walked through a summary of MTEP26 and upcoming activities associated with completion of the 2026 MISO Transmission Expansion Plan (MTEP). MTEP26 remains on schedule and is expected to be a significant planning cycle due to increasing load growth, evolving reliability needs, and substantial transmission investment requirements. The draft MTEP26 report was posted on September 28, 2026, and stakeholders were reminded that the substantive comment period remains open through October 12, 2026. Comments received during this period will be reviewed at upcoming PAC and System Planning Committee (SPC) meetings prior to final project approval by the Board.

   Looking ahead, MISO outlined the remaining MTEP26 schedule leading to Board consideration. Following the stakeholder feedback period, comments will be reviewed at the November 2 PAC meeting and the November 12 SPC meeting. An updated Appendix F is scheduled for posting on October 27, with final approval of the MTEP26 portfolio targeted for the MISO Board of Directors meeting on December 3, 2026.

   Stakeholders asked clarifying questions about the study and any interaction with new products being developed through the Large Load Working Group (LLWG). MISO clarified which of the Top 10 MTEP26 projects were 500kV facilities and that none involve HVDC infrastructure. There was discussion of EPR study activity increases and analysis that MISO conducts. Finally, there were questions on changes to the report structure and content this year with some noting that it was significantly shorter than previous years, though MISO explained that the same material is provided through links in the report rather than reiterated.

8. **Order 1920 Interregional Compliance (Aaron Shipley)**
   MISO Staff provided an update on ongoing efforts to comply with FERC Order No. 1920 and Order No. 1920-A, including activities related to interregional transmission planning and coordination with neighboring regions. Staff reviewed key compliance milestones, stakeholder engagement efforts, and the development of proposed tariff and Joint Operating Agreements (JOA) revisions necessary to support the Order's requirements. MISO noted that existing coordination frameworks provide a strong foundation for compliance and outlined next steps leading to the February 2027 interregional compliance filing. Stakeholders discussed aspects of the compliance approach, including proposed JOA language and about opportunities to further review outstanding language.

   Staff noted once JOA agreements were finalized with each partner it would pursue filing with FERC ahead of the compliance deadline in February 2027.

9. **Updates from Subgroups**

a. **Next Steps: Transmission Service Requirements for Charging Electric Storage Resources (ESRs) from the Grid (PAC-2023-2) (Nick Przybilla)**
MISO provided an update on MISO's proposal to expand exemptions from Transmission Service Requirements (TSRs) for Electric Storage Resource (ESR) charging from the grid when charging occurs under MISO economic dispatch. Under the proposal, ESRs charging in response to MISO's economic dispatch signals would not be required to obtain transmission service, while charging during self-scheduled intervals would continue to require either Point-to-Point or Network Integration Transmission Service (NITS). MISO noted that ESR operators would retain flexibility in determining charging behavior through offers and commitment status while remaining subject to economic dispatch processes.

Stakeholder feedback received following the last meeting generally supported the proposal but requested additional information regarding current ESR charging patterns, study assumptions, and long-term evaluation of transmission impacts. Some feedback raised concerns regarding commissioning, testing, outage recovery, partial exemptions, co-located resources, and treatment of various dispatch options. MISO responded that the proposed framework is intended to address all current ESR charging scenarios and clarified that many broader analytical requests, including benchmarking and fleet-wide charging studies, fall outside the scope of the current tariff and business practice manual changes.

Further clarification was provided regarding ESR energy withdrawal limits and associated planning studies. ESR charging capability is expected to be evaluated through the Definitive Planning Phase (DPP), surplus interconnection, replacement processes. Where charging limitations are identified in the DPP process, stakeholders may pursue additional studies or network upgrades to mitigate constraints through the TSR or MTEP process. MISO indicated that new study results may supersede previously established withdrawal limits and that the organization is developing processes to document, track, and enforce those limits across planning and operational frameworks.

The update reiterated implementation details and specific eligibility considerations. MISO reaffirmed that Zero-Generation Interconnection Agreements (ZGIAs) are not eligible for TSR exemptions because they do not provide grid services and cannot inject energy into the system. For co-located ESRs serving large loads, eligibility depends on whether the ESR is being economically dispatched by MISO to provide a grid service versus operating primarily to support the associated load. MISO indicated that additional coordination related to ESRs and large loads should continue through the Large Load Working Group.

Staff reported only minor revisions to the proposed Business Practice Manual (BPM) redlines, including clarification of study assumptions and an increase in the study deposit from $20,000 to $50,000 when stability analysis is required as part of an ESR energy withdrawal study. No additional tariff changes were proposed. MISO outlined a tentative timeline that includes completion of stakeholder review through the PAC, filing tariff revisions with a 60-day effective date during the fourth quarter of 2026, and updating supporting BPM documentation. Overall, stakeholders expressed broad support for the proposal while encouraging continued evaluation of long-term transmission impacts, network upgrades, and ESR charging behavior.

Stakeholders asked a few clarifying questions about the feedback summary and MISO responses. MISO accepted an action item to confirm whether non-firm TSRs should also be sufficient to meet the ESR TSR requirements. (Note: Following the meeting, MISO confirmed that any type and duration of TSR is sufficient to satisfy the ESR TSR requirement. It can be firm or non-firm.) There were other clarifications addressing the interplay between the TSR process and DPP, MISO clarified that the proposed changes were only for the TSR process and not the DPP process and that there is no reciprocal feedback from the TSR back to previous DPP studies. Any additional stakeholder clarifications and questions were referred to be handled 1:1. through the Help Center to submit tickets for support.

10. **New Issue: Under-Frequency Load Shedding (UFLS) Program Improvement√ (Terry Volkmann)**

A new issue was submitted by stakeholder Terry Volkmann on behalf of Hoosier Energy pertaining to MISO's Under Frequency Load Shedding (UFLS) program and its ability to address evolving system conditions. The presenter noted that significant changes in the generation fleet, including retirements, renewable resource additions, and the rapid growth of large data center loads, may warrant a re-evaluation of the UFLS program before the next required NERC PRC-006 study in 2028. Concerns were raised that the current annual UFLS true-up process may not fully capture substantial load additions that occur between planning cycles and could affect the adequacy of the existing program.

The presentation reviewed the objectives of the UFLS program, which are intended to prevent generator damage during low-frequency events, avoid system blackouts caused by insufficient load shedding, and prevent excessive load shedding that could create over-frequency or over-voltage conditions. It was noted that MISO currently establishes lower and upper UFLS obligations for participating entities and verifies those requirements annually based on modeled summer peak load conditions. However, changes in generation resources and increasing large-load additions may alter system frequency response and the amount of load shedding needed to maintain reliability during islanding scenarios.

The PAC was asked to adopt the issue for further consideration. There were several clarifying questions about UFLS obligations and compliance with those obligations when actual load levels exceed those used in the annual verification process. Interim Chair Johnston called for sector reps to indicate whether they supported the issue being adopted as well as assigned to the PSC for further conversation. There was agreement for this path. MISO Stakeholder Relations will notify the PSC leadership of their new issue assignment.

11. New Business

No new business.

12. Review Action Items (Amanda Jones)

Action Item	Owner	Date	Status
Feedback requests will be opened for: • MISO-SPP Joint Operating Agreement (JOA) Revision – due October 21	MISO	10/7/2026	Closed
Management Plan: • Add Nov 2 Special Meeting • Tentative: MISO to consider follow-up of Triennial Review Report	MISO	10/7/2026	Open
Send notification of leadership nominations; interested candidates to send bios to Stakeholder Relations by Nov. 4	MISO	10/7/2026	Closed
TSRs for Charging ESRs (PAC-2023-2): MISO to confirm whether non-firm TSR should also be sufficient to meet the ESR TSR requirements Response: Any type and any duration of TSR is sufficient to satisfy the ESR TSR requirement. It can be firm or non-firm.	MISO	10/7/2026	Closed
Stakeholder Relations to notify PSC leadership of new issue assignment (PAC-2026-2)	MISO	10/7/2026	Closed

13. Adjourn

Meeting adjourned at 12:39 pm ET.

Next Meeting:
November 2, 2026 (Special Meeting for MTEP26)
November 18, 2026

➲ Post Only Item √ Potential Voting Item ^ Feedback Requested * Verbal Report