



Planning Advisory Committee (PAC)

January 24, 2024

Carmel, IN

10:00 am to 12:00 pm ET / 9:00 to 11:00 am CT

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

Minutes

1. Administrative Items (Cynthia Crane)

a. Call to Order / Roll Call

Meeting called to order at 10:00 am ET.
The Public Meeting Notice was issued.

Chair: Cynthia Crane
Vice Chair: David Johnston
MISO Liaison: Jeanna Furnish
Stakeholder Relations: Amanda Jones

Affiliate: not present
Coordination: Michael Steiman
Eligible End Use Customers: Kavita Maini
Environmental: Sam Gomberg
IPP: not present
Muni/Coop/TDU: Steve Leovy
Power Marketers: not present
Public Consumers: John Wachtler
State Regulatory: Lise Trudeau (proxy for Joe Sullivan)
Transmission Developers: Brenda Prokop
Transmission Owners: Rob Wells

In Person Participants:

Adam Solomon, Steelhead	Jarred Miland, MISO
Andy Witmeier, MISO	Jason Atwood, Yes Energy
Aneta Godbole, MISO	Jeff Kelley, NIPSCO
Anton Ptak, EDFR	Joe Sullivan, MN PUC
Carolyn Wetterlin, Xcel	John Wachtler, MN DOC
David Harlan, Veriquest	Justin Stewart, Ameren
Eileen King, MISO	Lise Trudeau, MN PUC
Ginger Hodge, CES	Lucie Semone, Sol Systems

Mike Gard, MISO
Mike Schowalter, Fresh Energy
Ryan Westphal, MISO
Sandeep Tadepally, MISO
Shirley Schultz, AMP
Temujin Roach, EDFR
Warren Hess, CMPAS

Other Participants:

Aaron Demuth, OTP	Amanda Schiro, MISO
Aaron Greenberg, Oriden	Amber Joyce, MDU
Aaron Shipley, SPP	Andrew Berg, MRES
Aaron Stoll, GridUnited	Andrew Burnes, NPM
Abhishek Dinakar, Savion	Andrew Kienitz, MN Power
Adam Renfandt, NDSG	Andy Kowalczyk, SREA
Alan C, Triple Oak Power	Angela Maiko, GRE
Alan Urban, MISO	Anita Collier, ACES
Alex Kloiber, CIPCO	Ankit Pahwa,
Allie Koeplinger, MI PSC	Anthony Rotar,
Amanda Fong, MISO	Antonio Santos, EDF
Amanda Frazier, Treaty Oak	Armando Figueroa-Acevedo,
Clean Energy	MISO
Amanda Jones, MISO	Armin Karabegovic, CWLD

Art Iler, IN OUCC
Ashleigh Moore, MISO
Austin Behrmann, PG
Renewables
Austin Roth, R3 Renewables
Ben Stearney, ACES
Benjamin Scott, CMS
Bert Finzer, MISO
Beth Soholt, CleanGridAlliance
Bildon Francis, Avangrid
Bill Booth, Michael Best
Boone Staples, Tenaska
Brad Pope, OMS
Brad Wentz, Ameren

Brandin Stoesz, MHEM	David Kosturik, Nexamp	Jeff Dodd, Ameren
Brandon D. Morris, MISO	David Leventhal, AES	Jeff Gindling, Duke
Brandon Waldrup, Cooperative Energy	David M, CMPAS	Jeff Haselhorst, MISO
Brenda Prokop, LS Power	David Mcrae, AECC	Jeff Kelley, NIPSCO
Brent Taylor, MPPA	David Mindham, EDP	Jeremi Wofford, Ameren
Brett Furuness, NIPSCO	David Osterkamp, ITC	Jeremiah Doner, MISO
Brian C Drumm, ITC	David Ricketts, Vistra	Jeremy Bennett, MISO
Brian Giggee, MDU	David Sapper, CES	Jeremy Jones, Entergy
Brian Sullivan, Entergy	David Savage, IN URC	Jerry Terry, MISO
Bridget Sparks, AES	David Ticknor, RES	Jerry White, Cleco
Brock Ondayko, AEPES	David Zito, Gabel	Jessica Campbell, Pedal Steel Solar
Brooke Nelson, MEC	Derek Mosolf,	Jessica Chabot, New Leaf Energy
Bruce Froyum, MISO	Derek Sunderman, Savion	Jim Kilgore, MISO
Bryan Estes,	Diana Gastelum, GPI	John Liskey, Liskey PLLC
Carl Field, HEPN	Diane Janicki, BETM	John Thomasen, MGE
Carolyn Wetterlin , Xcel	Dirk Bierbaum, RPU	John Wolfram,
Carrie Rowland, Scout Clean Energy	Divya Balakrishnan, Nexamp	BREC,CWLP,HE,SIPC
Casey Sobecks, MISO	Divya Boddu, ICF	John Wolfram, BREC-CWLP-HE-SIPC
Chad Allen, MISO	Don Frerking, SPP	Jon Langford, Orsted
Chad Craven, Savion	Drew Hagin, Azimuth Renewables	Jordan Johnson, Center Point
Chamberlain, Thomas, Entergy	Drew Siebenaler, Xcel	Jose Ruiz-Monroy, HEPN
Chandana Bommareddy, Inner Gex	Dylan Stupca, OTP	Joseph Millard, Ameren
Chandler Medaugh, DTE	Ed Achaab, AEP	Joseph Reddoch, MISO
Charles Gibune, Origis	Eden Starbuck, DTE	Josh Byrnes, IA IUB
Charlotte Thomasson, MISO	Edin Habibovic, MISO	Josh Grindeland, PGR
Chase Ford, Nexamp	Emily McClure, ICC	Julia Scott, MISO
Chris Embry, MISO	Emma Nix, Leeward	Justin McNeil, KYPSC
Chris Mertz, Candela	Eric Olson, MISO	Justin Salinas, Enel
Chris Miller, FERC	Éric Souque, MB Hydro	Kara Smerud, MN Power
Chris Norton, AMP	Erik Hanser, MI PSC	Kari Valley, MISO
Chris Stoltz, PGR	Erik Winsand, ATC	Karl Kohlrus, PPI
Chris Thibodeaux, Cleco	Erin Murphy, Big Rivers	Katelyn Ross, DTE
Christine Ericson, ICC	Erin Peddicord, MISO	Katherine, Algonquin Power
Christopher Elie, Duke	Farah Neha, Advantage Cap	Kathryn Dial, Next Era
Christopher Plante, WEC	Felix Wang, Algonquin Power	Katie Hulet, GRE
Ciaran Gallagher, Clean Wisconsin	Forrest Tingo, Light Source BP	Kavita Maini, KM Energy Consulting
Cicily McGee, AR PSC	Georges Charles,	Keith Berry,
Cindy Guillot, Cleco	Georges Charles, Origis	Ken Foladare,
Cleveland Richards Jr,	Gordy Pietsch, GRE	Ken Kagy, CFU
Cody Anderson, OTP	Greg Gudeman, Ameren	Kendall White, Next Era
Cody Doll, Next Era	Greg Jekel, HEPN	Kevin Crotty, In Deck Energy
Connie Groh, Liskey PLLC	Haley McElyea, 1898 & Co.	Kevin Hou, Burns & McDonnell
Conor McKenzie, GPI	Hannah Fikes, AES	Kevin Kingsley, MDU
Cooper Wade, MISO	Hardik Parikh, Origis	Khamsune Vongkhamchanh, Entergy
Cory Samm, HEPN	Heather Lockhart, Vistra	Kimberly Dunning, Center Point
Craig Wrisley, Xcel	Heidi Lange, Next Era	Kiran Thammineni, Ameren
Cy McNeill, Alliant	Howard Wong, MISO	Koz, Alphataraxia
Daisy Ning, Matrix	Humberto Branco, Savion	Kristen Staples, AECC
Dan Alfred, CMS	Hunter Blair, MISO	Kristina Grandquist, MEC
Dana Cochran, MISO	Hunter Yanke, PSCW	Kristopher Barringer, MISO
Daniel Ferrell, Origis	Ian Sharpe, Leeward	Kurt Vanderlick, Cleco
Darren Kearney, SD PUC	James O'Brien, ICC	Kyle Johnson, MISO
Darrin Lahr, MISO	Jane Laskowski-Hart, MISO	Kyle Trotter, MISO
Daryl Hart, Valor	Jared Alholinna, GRE	Kyle Watson, Entergy
Dave Seelye, MISO	Jared Rasbold, Cooperative Energy	Laura Witzling, PSCW
David Carlson, IGS	Jason Hastings, Vesper	
David Davis, Apex	Javier Martinez, PSCW	
	Jay Rasmussen, Duke	
	Jeff Dicharry, Entergy	

Lauren Azar, Azar Law	Nihal Mohan, Next Era	Shilpa Toppo, 174 Power
Lauren Godfrey, MISO	Nina Zheng, RWEA	Global
Lauren Strager, ITC	Nitin Kushwaha, NGR	Shirsha Nandy, Hectate
Lei Tang, Next Era	Olivia Harby, Galehead	Energy
Leighton Good, MPR	Pablo Ovando,	Simon Mahan, SREA
Liang Qi, MISO	Patrick Collie, Algonquin Power	Sky Goliber, Galehead
Lily Henning, R3 Renewables	Patrick Kelly, K2Renew	Sonny Nguyen, Vesper
Lily Maloney, Long Road Energy	Pavan Sajja, Linea Energy	Soyoung Park,
Lisa Barrett, Advanced Energy United	Peg Abbadini, HE	Srijan Karim, MEC
Lisa Silverwulf, HDR	Peter Schuster, MEC	Stacie Hebert, OTP
Lise Trudeau, MN PUC	Peter Sparhawk, WSP	Steve Dowll, Alcoa
Lopa Parikh, Oredt	Phillip Miller, Cleco	Steve Leovy, WPPI
Luke Kinder, AR PSC	Presley Reed, Dentons	Steve Porter, DPC
Lynn Walker, MISO	Preston Hart, OTP	Steven Huynh, MISO
Madeleine Balchan, Xcel	Quinn Beckham, Key Capture	Subhadarshi Sarkar, Next Era
Mandi McGirr, MISO	Energy	Susan Rossi , Xcel
Marcus Hawkins, OMS	R. DeWayne Todd, Alcoa	Sydney Yeadon, MISO
Margaret Kristian, NGR	Rachel Passman, Gabel	Taiyo, Pathway Power
Mariel Schoneman, MISO	Raj Pudhota, TED	Terry Jarrett, MJMEUC
Mark Zelensky, PPL	Randall Oye, Xcel	Terry Volkmann, GLP
Massamba Samb, Bright Night Power	Ray McCausland, Ameren	Thomas McNailen, CC Renew
Matt Bogdan, ITC	Rebecca Moore Darrah, WVPA	Tiara Dorsette, Leyline Capital
Matt Tackett, MISO	Regan Fink, PGR	TJ Cochran, Ameren
Matt Waldron, ATC	Renae Steichen, RevRenewables	Tom Siegrist, SMXB Law
Max Meyer, MISO	Rhonda Peters, Intertranec	Tommy Roberts, HEPN
Michael Carrigan, ICC	Richard Bendish, MDU	Trevor Armstrong, MISO
Michael Gard, MISO	Rob Wells, ITC	Trey Mayeux, Cleco
Michael Hibshman, Hexagon Energy	Robel Arega, Plus Power	Tricia DeBleckere, MISO
Michael Russ, Strata Clean Energy	Robert Fox, NIPSCO	Tuan Truong, Duke
Michael Saer, GRE	Robert Frank, NDSG	Tung Nguyen, Next Era
Michael Steiman, MN Hydro	Robert Lamoureux, MISO	Venkata Bujimalla, IA IUB
Michaela Flagg, CES	Robert Vosberg, LPSC Staff	Victoria Jones, MISO
Mickey Headds, MISO	Consultant	Vince Vandaveer, Ameren
Mike Dantzler, Ranger Power	Roberto Paliza, Paliza Consulting	Walter Ferguson, MISO
Mike Dicks, HEPN	Ron Carrier, Big Lake Consulting	Warren Hess, CMP
Mike Fischette, LBWL	Ronghai Wang, MISO	Warren Whitson, Viridon
Mike Johnson, Oriden	Ross Nadel, Matrix	Weiqing Jiang, Jupiter Power
Mike Koehler, Azimuth Renewables	Ruth Kloecker, ITC	Wendy Anderson, MN Power
Mike Mooney, HEPN	Ryan Frederic, MS PSC	Wendy Reed, Wright & Tallisman
Mike Schowalter, Fresh Energy	Ryan Wernette, WPSCI	Werner Roth, PUCT
Miles Larson, LSBP	Rylan Hanson, OTP	Whit Cox, SREA
Milica Geissler, MISO	Sam Bustillos, EPE Consulting	William Buchanan, Next Era
Mitchell Myhre, Alliant	Sam Gomberg, UCS USA	William LaVista,
Nan Duan, MISO	Samantha Schall, AES	Yonas Demissie, MISO
Nestor Martinez, MISO	Sarah Mangnus, MISO	Yvonne Cappel-Vickery, All 4 Energy
Nick Puga, Bates White	Sarah Nieman, MISO	Zach Farrar, Great Bay Renewables
Nick Schwager, Elecnor	Sarvesh Gadre, Arevon	Zach Fjestad, OTP
Nicolas Kumm, Marshfield Utilities	Scott Deffenderfer, Ameren	Zach Van Ness , Matrix
	Scott Goodwin, MISO	Zachary Starkey, Center Point
	Scott Hoberg, MN Power	Zack Bearden, MISO
	Sean Chang, Shell	Zelalem Tekle, RevRenewables
	Sean Rogers, MISO	

b. Review Agenda
Agenda accepted as posted.

c. Review Meeting Minutes, Action Items

Minutes for the November 2023 meeting were accepted as posted. All action items from the last meeting were closed.

Action Item	Owner	Date	Status
MISO will open feedback request for: <ul style="list-style-type: none"> Draft BPM-012 and 013 edits related to TSRs for Charging ESRs (Comments due December 8) (PAC-2023-2) JTIQ new direction summarized on slide 7 (Comments due December 6) 	MISO	11/15/2023	Closed
Action Item: PAC leadership will communicate the assignment of new Issue PAC-2023-4 to IPWG leadership for placement on their management plan. Note: IPWG has that penciled in for Jan, March and May in the management plan that will post on Friday!	MISO	11/15/2023	Closed
Action Item: MISO will confirm if the Q1 discussion of hybrid resource participation model (issue MSC-2020-2) in MSC includes co-located resources; see notes on this topic above.	MISO	11/15/2023	Closed

d. Review 2024 Charter and Management Plan ✓

Both documents were provided with meeting materials for annual review. No changes were proposed to the charter. Updates to the redline were shown in redline. Both were accepted and will be forwarded to the Steering Committee (SC).

2. Status Updates ↳ (Cynthia Crane)

- a. **Interconnection Process Working Group (IPWG)** Next meeting: January 30
- b. **Planning Subcommittee (PSC)** Next meeting: January 31
- c. **Steering Committee (SC)** A written status report was provided with meeting materials. Next meeting: February 6

3. Liaison Report (Jeanna Furnish)

- o TSRs for Charging ESRs BPM Updates (PAC-2023-2)
- o Interregional Coordination annual issues review processes with PJM and SPP
- o Announcements and Workshops
 - New PSC Liaison: Victoria Jones
 - Add Order 2023 workshop date
 - LRTP Workshops January 26, March 15
 - EDC Workshop Feb 27
 - Annual ARR Workshop March 4
 - RECBWG next meeting March 5
 - BOD/AC Week March 21

4. MISO Posted Items ↳ (Jeanna Furnish)

a. **Expedited Project Review (EPR) Requests**

Jonesboro CWL: Commerce to Ringier 69 kV line rebuild project; MDU: Ellendale Load 2 Addition
A written update was provided with meeting materials.

5. Issue Submission: EPR Improvements (Amanda Schiro)

New issue proposed for placement with PSC

MISO proposed a new issue for placement with the PSC to address the volume and complexity of the Expedited Project Review (EPR) process. MISO seeks to improve the process timeframes to increase certainty of the workload. Amanda talked about potential solutions for the PSC to consider, such as

reducing Technical Study Task Force (TSTF) meetings to review individual EPR submittals. Several participants asked questions about the study process and made suggestions to expand the scope of the issue to look at drivers for EPR projects to come forward, such as load growth changes, but that is out of scope at this time. There were a couple of technical study process recommendations that were referred to the PSC for further consideration.

The PAC sector reps agreed to adopt this issue and place it with the PSC. An initial presentation will be scheduled for March with progress to occur through Q2 and Q3. Any draft BPM or Tariff language will be drafted and brought forward to the PAC later in 2024.

6. Reports from IPWG and PSC

a. n/a

7. Queue Reform / Order 2023 Update* (Aneta Godbole)

MISO provided a verbal update on the recent FERC Queue Reform Orders: (1) to increase GIP milestone payments, introduce automatic withdrawal penalties, revise certain withdrawal penalty provisions, and improve Site Control rules for Interconnection Facilities (ER24-340) and (2) a limit on the total amount of MWs that will be studied in a particular cycle for each queue study region (ER24-341) (the cap filing).

MISO fielded numerous questions about the timing of the upcoming queue cycles, the applicability of these approved reforms, the timing of the Order 2023 compliance filing (April 3rd) and implications of that on future queue cycles, and whether MISO intends to re-file a version of the cap. MISO noted the approved reforms will apply to the 2023 queue which they expect to open the end of March. A timeline will be provided at the IPWG and workshops to help generators understand the requirements will be scheduled. MISO will schedule a stakeholder workshop to work through details of the queue submission and send notification to the IPWG listserv.

In addition, Aneta noted that MISO currently intends to process two queue cycles in 2024. No LRTP or JTIQ projects will be included in studies until they're approved. The 2023 cycle will open around the end of March 2024: close date TBD. MISO will attempt to select an effective date for Order 2023 compliance that falls between queue cycles for clarity.

Aneta and Andy Witmeier discussed the cap filing that proposed to limit the total number of MW entering in each queue cycles and was rejected by FERC. MISO appreciates the guidance from FERC in the rejection and will consider refiling later in 2024. Stakeholders will be updated later this year.

Finally, the compliance filing with Order 2023 was discussed. The Order was issued in July 2023 and MISO is working through the requirements, which mostly implements processes already in the Tariff. MISO awaits a response from FERC on the rehearing requests. Later this year, MISO will bring forward a plan to collect and distribute penalties for stakeholder discussion.

8. Transmission Planning and Other Study Updates

a. JTIQ Status Update (Sandeep Tadepally)

Sandeep provided an update on the JTIQ subscription proposal to determine when enough generation has signed up to fund the JTIQ portfolio. He walked through three rate examples to illustrate the periods of under, full, and over subscription, and discussed the last cluster rules used to ensure adequate generation contribution. He answered numerous clarifying questions. MISO noted both RTOs need to confirm this approach and develop JOA and Tariff language. Further cost allocation information will be presented to the RECBWG in March and MISO will update the PAC going forward.

Stakeholders were interested in how supplemental affected system studies might be conducted. MISO responded that the supplemental study will be done in similar manner as the current Affected system study done by the AFS partner. Later in the discussion, MISO noted that a second JTIQ might be on the horizon but depends on numerous factors and further stakeholder discussion.

**9. New Business**

No new business

10. Review Action Items (Amanda Jones)

Action Item	Owner	Date	Status
Notify PSC of its new issue assignment, EPR process improvement; scheduled for March PSC meeting	PAC Leadership	1/24/2024	Closed
PAC charter and management plan will be forwarded to the SC for annual review	PAC Leadership	1/24/2024	Closed

11. Adjourn

Meeting adjourned at 12:25 pm ET.

Next Meeting: March 6, 2024