Planning Advisory Committee (PAC)
April 22, 2026
Carmel, IN
10:00 am to 2:43 pm ET / 9:00 to 1:43 pm CT
Dial-in and Webex information available at www.misoenergy.org
Minutes

Updated 5/21: Added "Market Efficiency Project" to Item 03

1. **Administrative Items (Cynthia Crane)**
   a. **Call to Order / Roll Call**
   Public Meeting Notice and Code of Conduct
   The meeting was called to order at 10:00 am ET.
   The Public Meeting Notice and Code of Conduct were read.

   Chair: Cynthia Crane
   Vice Chair: Dave Johnston
   MISO Liaison: Jeanna Furnish
   Stakeholder Relations: Jake Carrico

   Sector Reps:
   Affiliate: not present
   Coordination: Michael Steiman
   Eligible End Users: Kavita Maini
   Environmental: Sam Gomberg
   IPPs: Tia Elliott
   Muni/Coop/TDU: Steve Leovy
   Power Marketers: not present
   Public Consumers: John Long
   State Regulatory: Sarah Martz
   Transmission Developers: Brian Daschbach
   Transmission Owners: Rob Wells

   In Person Participants:

   Alegria Fernandez, Celeo Redes
   Anton Ptak, EDF Power Solutions
   Bernal Uzquiano, Celeo Redes
   Carolyn Wetterlin, Excel Energy
   Cynthia Crane, ITC
   Daniel Wang, DeSRI
   Dave Johnston, Indiana Utility Regulatory Commission
   Diana Vasquez Torres, Deriva Energy
   Eric Stephens, AMP
   Ginger Hodge, Customized Energy Solutions
   Jeffery Kelley, NIPSCO
   Jeremy Bennett, Avangrid
   Justin Stewart, Ameren
   Lise Trudeau, MN PUC
   Mike Schowalter, Fresh Energy
   Scott Jones, Indiana Office of Utility Consumer Counselor
   Shivam Sharma, Alliant Energy
   Stephen Rose, Minnesota PUC
   Temujin Roach, EDF Power Solutions N. America
   Tyler Bergman, Clean Grid Alliance

   Remote Participants:

   Aaron Demuth, OTP
   Abigail Reid, MGE
   Adam Foltz, ATC
   Adam Manty, ATC
   Adam Renfandt, NDSG
   Adam Solomon, Vestas
   Adam Stern, Clearway
   Advait Rode, MI PSC
   Akintonde Abbas, Not Provided
   Alex Kloiber, CIPCO
   Allie Koepplinger, MI PSC
   Amal Mallavarapu, Eniplenitude
   Amanda Cook, RTO Insider

Amber Joyce, MDU
Amrit Srivastava, EPE Consulting
Andres Giraldo, Burns
Andrew Kienitz, MN Power
Andrew Kowalczyk, SREA
Andy Cotter, ATC
Andy Ford, GDS
Andy Narvesen, OTP
Angela Maiko, GRE
Ankit Pahwa, Deriva Energy
Anna Fernandez, Wright & Talisman
Anthony A. Alvarez, Iowa OCA
Apoorva Desai, Alliant
Arash Ghodsian, Invenergy
Arebise Deng, Engie NA
Aydrik Schuh, MDU
Bakhtawar Khan, Gabel
Becca Skalko, GRE
Ben Abing, ITC
Ben Dayman, MEC
Ben Scott, CMS
Ben Stearney, ACES
Bill Turnbull, MEC
Blake Robbins, Duke
Brad Arnold, Ameren
Brad Pope, OMS
Brant Werts, Duke
Brent Taylor, MPPA
Brian Daschbach, LS Power
Brian Drumm, ITC
Brian Giggee, MDU
Bruce Grey, Doral Renewables
Carlos Pena, Energy Futures Group
Chase Ezell, EPL
Chengyue Guo, ATC
Chris Norton, AMP
Chris Plante, WEC
Christiana Ivanova, GQS Energy
Christopher Miller, FERC
Ciaran Gallagher, Clean Wisconsin
Cindy Hammarlund, CES
Clayton W. Robinson, Pattern Energy
Cleveland Richards Jr, PPL
Cody Anderson, OTP
Constance Groh, Liskey PLLC
Craig Lockwood, Viridon
Craig Spencer, Alliant
Cynthia Crane, ITC
Damon Xenopoulos, SMXB Law
Dan Alfred, CMS
Dan Coomes, CETC
Darren Kearney, SD PUC
Dave Harlan, Veriquest
David Webb, Entergy
David Carlson, IGS
David Davis, Apex
David Harlan, Veriquest
David McRae, AECC
David Osterkamp, ITC
David Ricketts, Vistra
David Sapper, CGA
David Savage, IURC
David Shaffer, Dentons
David Zito, Gabel
Derek Kou, Sol
Derek Mosolf, GRE
Derek Sunderman, Savion
DeWayne Todd, Alcoa
Dylan Stockert, MDU
Dylan Stupca, OTP
Edward Garvey, Aesl Consulting
Emily Piontek, CGA
Eric Giddens, IA IUC
Eric Thoms, Invenergy
Erik Hanser (LARA), MI PSC
Erik Winsand, ATC
Erin Chiari, Jupiter Power
Erin Murphy, NextEra
Ethan Chastain, Hoosier Energy
Ethan Tellier, CIPCO
Eva Kaso-Collette, Orsted
Evan Hays, AES
Forest Eidbo, MN PUC
Forrest Tingo, LSBP
Frederick Salvo, Baker Donelson
George Schwager, Atlantica
Gina Severance, ITC
Greg Jekel, Hoosier Energy
Hardik Patel, Invenergy
Harsha Chandavarapu, NextEra
Heidi Ratz, Pattern Energy
Hicham Khireddine, National Grid
Humberto Branco, Rev Renewables
Isaiah Carter, CMS
Jake Chapman, LA PSC
James McCormick, CMS
Jared Alholinna, GRE
Jared Rasbold, Cooperative Energy
Jason Mazigian, BEPC
Jason Weiers, OTP
Jay Rasmussen, Duke
Jeff Gindling, Duke
Jeff Phillips, Entergy
Jenna Runge, 1898 & Co.
Jennifer Easler, Iowa OCA
Jennifer Vosburg, Jennifer J. Vosburg, LLC
Jenny Liu, Jupiter Power
Jeremy Bennett, Avangrid
Jeremy S Jones, Entergy
Jerry White, Cleco
Jessica Burdette, Geronimo Power
Jill I. Kringstad, NDSG
Jim Holsclaw, Calfee
Jodi Walters, CMPAS
John Borgmeyer, PSC MO
John Liskey, CUB MI
John Long, Iowa OCA
John Weber, MRES
John Wolfram, (Prime Group for 5 Owners)
Johnston, David, IURC
Jonah Baskin, Sierra Club
Jordan Johnson, CenterPoint
Josh Gutzmann, Xcel
Joshua Niemi, ITC
Justin Davies, Ameren
Justin Stewart, Ameren
Kara Fidanza, NRG
Katie Rock, BlueGreen Alliance
Kavita Maini, (MIC,MLEC)
Keeth Works, SWPA
Keith Berry, Hendrix
Kellie Kane, Burns
Ken Kagy, CFU
Kenneth Foladare, Tangibli Inc
Keyur Patil, Zero Emission Grid
Kimberly Dunning, CenterPoint
Kristen Parker Long, Entergy
Kristy Rennick, CMS
Kyle M Watson, Entergy
Lane Sisung, LA PSC
Laura Baker, SMXB Law
Laura Hannah, NRDC
Lauren Azar, Azar Law LLC
Leslie Hamby, CenterPoint
Liqin Jiang, Duke
Lisa Barrett, DTE

Lisa Szot, Adapture
Lise Trudeau, MN PUC
Liz Salerno, GQS Energy
Luke Kinder, AR PSC / APSC
Mark Price, DC Energy
Mark Zelensky, PPL
Matt Tillman, 1803 Electric Coop.
Matthew Harward, Healy Law
Maxx Snell, MDU
Megan Allen, Ameren
Meghan Ross, ITC
Melissa Foreman, Entergy
Melissa Seymour, Sun2o
Michael Fischette, LBWL
Michael L. Dantzler, Ranger Power
Michael Ratliff, Spearmint
Michael Saer, GRE
Michael Steiman, MB HYDRO
Mike Chase, Entergy
Mike Cronier, LRE
Mike Fischette, LBWL
Mike Schowalter, Fresh Energy
Miles Larson, LSBP
Mithil J Acharya, EPE Consulting
Mithun Mallick, Aypa
Naishadh Hegde, Ameren
Natalie Cotton-Nessler, CES
Natalie McIntire, NRDC
Nate Knopf, Hoosier Energy
Nathan Williams, Ameren
Nick Tenney, CMS
Nitin Kushwaha, Geronimo Power
Noel Darce, Fishman Haygood
Olivia Meek, Long Road Energy
Ozzie Lawler, MN Power
Peg Abbadini, UPPCO
Phillip Miller, Cleco
Presley Reed, Dentons
Preston Hart, OTP
Quinn Beckham, KCE
Raj Pudhota, TED
Randy Johanning, ATC
Ray McCausland, Ameren
Remo Shestani, Tangibli Inc
Renae Steichen, Rev Renewables
Rhett Edward Trease, Duke
Rhonda Peters, CGA
Rob Wells, ITC
Robert Frank, NDSG
Robert Vosberg, LPSC Staff
Ruth Pallapati, MN Power
Ryan Lovan, IA IUC
Ryan Lowe, MB HYDRO
Ryan McKeever, Husch Blackwell
Ryan Snyder, CenterPoint
Rylan Hanson, OTP
Sakshi Gupta, Zero Emission Grid
Sam Gomberg, UCS
Samson Mabry, Entergy
Sanjay Bhatia, Savion
Sara Ostrander, Hoosier Energy
Sarah Johnson, HeartlandJoule
Sarah Martz, IA IUB
Sarah Murphy, Daymark EA
Sawyer McClure, WPSCI
Scott Deffenderfer, Ameren
Sean Brady, Brady LLC
Sebastian Smater, Strom Power
Shala Coe, Calfee
Sherian Krause, MEC
Simon Mahan, SREA
Sonny Stuger, ESAI
Srijan Karim, MEC
Stacie Hebert, Herbert Consulting
Stephanie Neitzel, ATC
Steve Davies, IURC
Steve Leovy, WPPI
Sumit Mundade, Treaty Oak Clean Energy
Summer Fabus, EDPR
Susan Rossi, Xcel
Taiyo, Pathway Power
Taylor Carpenter, Calfee
Terri Rivera, Entergy
Terry Volkmann, GLP
Thomas Chamberlain, Entergy
Thomas Sarver, Entergy
Thomas Siegrist, SMXB Law
Thompson Adu, Engie NA
Tia Elliott, Pelican Power
Tim Ellis, Clenera
TJ Cochran, Ameren
Tom Butz, MN Power
Tommy Roberts, Hoosier Energy
Trace Pennock, MYR Group
Travis Stewart, Gabel
Trey Mayeux, Cleco
Tricia DeBleeckere, OMS
Troy Fortwengler, WVPA
Tyler Bergman, CGA
Tyler Jorgenson, OTP
Tzu-Yuan Su, DPC
Vince Vandaveer, Ameren
Vincent A, Entergy
Walt Cecil, PSC MO
Wendy Reed, Wright & Talisman
Werner Roth, TX PUC
Weston Berg, Gabel
Will Koebel, PSCW
Yamit Lavi, NRDC
Yi Li, ATC
Yvonne Cappel-Vickery, All 4 Energy
Zach Fjestad, OTP
Zach Starkey, CenterPoint
Zachary Callen, ICC

b. Review Agenda
The agenda was accepted as posted.

c. Review Meeting Minutes, Action Items
Minutes from the February 25, 2026, meeting were accepted as posted. Action items from the previous meeting are closed.

d. Review Management Plan
The Management Plan was reviewed. There were no questions.

2. **Status Updates ➲ (Cynthia Crane)**
   a. **Interconnection Process Working Group (IPWG) – no report**
   b. **Planning Subcommittee (PSC)**
   c. **Steering Committee (SC)**
   Written status reports were provided with the meeting materials. There were no questions.

3. **MISO Post-Only Items ➲ (Jeanna Furnish)**
   a. **Variance Analysis Outcome Determination – LRTP Project 16**
   b. **Variance Analysis Outcome Determination – LRTP Project 28**
   Two documents were provided with post-only materials. Jeanna provided a summary of the items and discussed the actions taken that are highlighted in the posted documents.

   Stakeholders inquired about the main driver for the cost increase between the initial estimated cost and the current cost for Project 16. MISO responded that, as the project was further developed, additional project specific costs were identified such as costs for construction matting and securing and permitting the transmission line right-of-way. In responding to further questions about the outcome selected, MISO said that it had options to take no action, develop a mitigation plan, or cancel the project as the option of reassignment was not applicable for Project 16. In this case, a mitigation plan was the best option. MISO further stated that the next threshold to trigger a variance analysis for this project is a 10% cost increase at the new baseline cost estimate. MISO provided an example that project cancelation was used in its Variance Analysis process related to the Hartburg-Sabine Project, a Market Efficiency Project, located in Texas when a statute was passed that prevented the developer from securing the siting needed.

   For Project 28, stakeholders asked how MISO determined if the incumbent or selected developer could navigate the process quicker. MISO responded that the main determinate was the regulatory process, and the incumbent is better positioned to attain the necessary regulatory approvals in Wisconsin and achieve the accelerated in-service date. MISO further explained that the selected developer would have had to go through both the processes of acquiring public utility status and receiving appropriate certifications to construct, whereas the incumbent TO only had to navigate the process of receiving appropriate certifications to construct. In answering statements about the estimated costs of the reassigned substations, MISO explained that the base designs of the substations as identified in the LRTP Tranche 2.1 planning study will continue to be allocated as a Multi-Value Project, whereas the expanded scopes of work as required by the associated Expedited Project Request will be allocated locally like the rest of the Expedited Project Request. Stakeholders inquired whether the cost containment provisions associated with the WISE project will be transferred with the reassigned substations, and MISO explained that those cost containments do not transfer, but further provided that the portion of the costs that will be locally allocated costs (i.e., for the expanded scopes of work) will be determined by the state regulators, as applicable.

4. **Liaison Report (Jeanna Furnish)**
   Jeanna provided highlights of her written liaison report, including:
   - Interregional Planning Update
     - MISO and SPP have paused work on Targeted Market Efficiency Projects (TMEPs) to allow for MISO and SPP Staff to focus on the Coordinated System Plan (CSP) studies and FERC Order 1920 interregional compliance.
     - Coordination on FERC Order 1920 Interregional Compliance with PJM, SPP, and SERTP is underway for a December 2026 filing.
   - Jeanna provided a breakdown of the Expedited Resource Addition Study (ERAS) projects by state, and stated a few open spots remain, and encouraged stakeholders to submit projects if they meet the criteria.
   - The Generator Interconnection (GI) Workbook corrections process is complete. MISO is developing a new intake process for *pro forma* Generator Interconnection Agreements (GIA) requests, with instructions for this process coming in May 2026.

- Announcements and Workshops:
  - May 14: Large Load Working Group (LLWG)
  - May 5: Expedited Project Review Technical Studies Task Force (EPR-TSTF)
  - May 6: Summer Readiness Workshop
  - May 8: Futures Redesign Workshop
  - May 26: Regional Expansion Criteria and Benefits Working Group (RECBWG)
  - MISO is launching a new website feature called "My MISO Calendar" at the end of April designed to save stakeholders time when adding MISO meetings to their personal calendars
  - Stakeholders will now have the MISO Pulse Poll Survey populate automatically in their browsers upon conclusion of a main parent entity MISO meeting.

5. **New Issue: Elimination of Planning Participation Credit For the Competitive Transmission Process (PAC-2026-1)√ (Alex Monn)**
   Alex presented the new issue of the elimination of the planning participation credit submitted to the PAC. He outlined the potential benefits identified for resolving this issue include simplifying both the planning process and the Competitive Transmission Process for MISO staff and stakeholders. Since nearly all projects that appear before MISO in the competitive transmission process receive the credit, it is not a differentiating factor among applicants. Alex stated that changes to the Attachment FF Tariff and Business Practice Manual (BPM) 027 will be required to implement this change. Alex anticipates FERC acceptance of Tariff revisions by December of 2026, and recommends the PAC adopt the issue.

   Stakeholders expressed concern about the elimination of the credit and offered suggestions for MISO to consider instead of elimination. MISO recognized the concerns and assured stakeholders that they will receive ample opportunity to provide feedback to MISO when this issue is presented at a subsequent PAC meeting. MISO and stakeholders agreed to change the name of the issue from "Elimination" to "Review" and the issue was adopted by consent.

6. **Market Participation and Registration of Co-Located Load and Generation (PAC-2024-4)^ (Marc Keyser)**
   Consideration of Zero-Injection GIA
   Marc presented on the draft Tariff language that reflects the elements of the Zero-Injection (ZG) Generator Interconnection Agreement (ZGIA) proposal relating to interconnection and planning for the load. The draft Tariff redlines were posted with the meeting materials. Slide 3 presented a high-level summary of the recent feedback received from stakeholders and touched on some major themes from the stakeholder responses. Marc identified the portions of the Tariff (including Attachment X, Appendix 19 of Attachment X, and Attachment FF) that will require updates, and four BPMS (BPM-002, BPM-011, BPM-015, BPM-020) that will require updates.

   Marc provided a summary of the changes to Attachment X including the creation of the terms "Zero Generation Interconnection Service, Zero Generation Interconnection Service Agreement, and Zero Generation Associated Load". Marc clarified that the Zero Generation Interconnection Service does not supersede state laws regarding siting, service, or operations. Additional information was provided on the elements of the ZG Interconnection Study, as well as specifics on the monetary amounts tied to the study deposits, and relevant dates and details. Additional changes to Appendix 19 of Attachment X obligate the resource to cease production under certain conditions, such as if the ZG Associated Load is offline.

   Changes to the Attachment FF Tariff language include describing contractual commitments for ZG associated loads when a ZGIA is used as a Non-Transmission Alternative within the MISO Transmission Expansion Plan (MTEP).

   The next steps for ZGIA include returning to the PAC with a post-only document for the PAC portions of the Tariff filing with a planned Tariff filing date in June 2026. The resource adequacy and markets related issues will be discussed at the Large Load Working Group (LLWG). Marc clarified that there would be one Tariff filing to

FERC combining the elements from both the PAC and LLWG. Stakeholders were encouraged to provide feedback on the ZGIA Proposal Draft Tariff Language by May 6, 2026.

Marc read through the MISO feedback response verbatim on MISOs approach to multiple point of interconnections (POI) and asked for stakeholders to voice support and opposition, and stakeholders responded, with more stakeholders being opposed to the approach than in support. The stakeholders who voice opposition said it was highly unlikely there would be no injection onto the transmission system if a two completely separate POI substations would permitted to be used for ZGIA. A potential compromise could be to allow the generation and load to be connected to the same substation, but possibly at a different POI within that substation. MISO said that was a common statement across feedback received, but it is possible that the same issue concerning use of network facilities could arise under that scenario as well. The stakeholders who expressed support indicated that many large loads coming in are requesting more than one POI on the load side, and if multiple POIs are not allowed between load and injection, all generation could be forced behind the meter. Other concerns expressed are wind and solar energy would likely not be able to participate under a single POI system.

Stakeholders asked about the 150% ZGIA Request limit of the gross demand of the associated load threshold identified by MISO in its Attachment X changes. MISO responded that the limit applies to nameplate capacity, and not accredited capacity to provide resource option flexibility to the applicant. MISO concluded that it encourages stakeholders to submit written feedback on the number and if it is appropriate.

Another theme of stakeholder questions revolved around the limitations of a ZGIA resource injecting on to the system. MISO said it already has tools in its Tariff to terminate a ZGIA facility if it injects outside of the specific use for the named facilities, or more than the interconnection service amount. MISO also recognized the importance of the edge case where the load trips offline, stating that market offers will ensure that no injection will be allowed, and normal operations require the generator to maintain production of energy less than or equal to what the load is consuming. MISO concluded that it is proposing that a ZGIA can qualify up to the initial PRMR, not the final PRMR for the load.

The final theme of questions revolved around participation in the ZGIA process and studies needed. MISO stated that it is not limiting participation on who is eligible for ZGIA participation and participation requirements will likely vary according to state regulation. When asked, MISO noted that the reason there was an Independent Power Producer (IPP) carveout in the ERAS filing was due to the limited number of spots available, and that there is no limitation on the number of ZGIA requests, and thus no need for an IPP carveout. MISO said it does not anticipate the ZGIA request process to only exist for new loads, saying that existing loads are able to use it, and if stakeholders identify conflicting language to let MISO know in written feedback so that can be addressed. MISO concluded that there is currently nothing that would prevent a unit in the queue from withdrawing and submitting a request for ZGIA service.

7. **Large Load Interconnection Reliability Requirements (PAC-2024-1) (Beibei Lei)**
Bei Li presented on the revised Large Load definition. After receiving feedback from stakeholders on its initial Large Load definition, MISO made revisions and developed transition language to address pending but unbuilt Large Load. MISO is actively developing Tariff language and will provide the updated Tariff language at the May 14 Large Load Working Group (LLWG). Slide 4 illustrated a comparison of the updated Large Load definition after stakeholder feedback, and the elements under discussion as part of the Large Load Interconnection Reliability Requirements (LLWG-2026-3) issue at the LLWG. Bei Li highlighted the Aggregation and Single-Site Determination feedback elements received from stakeholders, and how this feedback is addressed in both the Large Load Definition issue (PAC-2024-1), and the Interconnection Reliability Requirements issue (LLWG-2026-3). Slide 8 provided several examples on loads and their in-service status and whether the definition and interconnection reliability requirements apply. If a load is in service prior to the effective date, neither the large load definition nor the interconnection reliability requirements would apply. If the load is not in-service but reflected in the MTEP/EPR process both would apply, with transitional provisions of the reliability requirements

applying. Finally, if the load is not in-service and not reflected in the MTEP/EPR process, both conditions would apply.

Next steps include reviewing tariff language drafts of the Large Load Definition and interconnection requirements at the May 14 LLWG, and seeking stakeholder feedback at that meeting, providing an update at the May 27 PAC on the Large Load Definition, and reviewing definition and requirements Tariff language at the June 10 LLWG.

Stakeholders expressed concern that the 50MW threshold in the definition would not be considered a large load, depending on which part of the MISO system it connected to. MISO responded that the definition simply is what quantifies a large load, and the load will be measured by but the impacts on the system. MISO referenced the Applicability of reliability requirements for large loads outlines on slide 6 of the presentation as one of the ways for MISO to assess the impact of the load on the system. MISO later noted that while a 50MW load on the 345KV system would likely not cause significant risk, elevating the definition to 100MW or higher could have a meaningful impact to the system if that load connects to the 69KV system. Thus, the 50MW threshold is intended to apply across the entire MISO footprint and raising it would impact that uniformity. Finally, MISO clarified that if a load was originally connected at 40MW, and then grew by 10MW, it would be subject to the requirements since it crossed the threshold.

8. **FERC Order 1920 update (Edin Habibovic)**
   Edin provided an update on the status of MISOs FERC Order 1920/1920-A filing and explained at a high level the Order 1920 and the related tariff updates defining the obligations and deliverables. Those provide direction and reflect 1920/1920-A obligations required in the Tariff, but detailed technical processes will be documented in the Business Practices Manuals (BPMs). After meeting the June 2026 regional compliance deadline, MISO and stakeholders will have two years to complete the necessary Regional Process Documentation work, which includes updates to BPM and other relevant procedural documentation. Edin clarified that while MISO incorporated some changes from stakeholder feedback, the remaining changes will require further discussion and consideration in the stakeholder process in BPM updates. Stakeholders will receive an informational update once the Order 1920/1920-A regional compliance filing is finalized mid-June 2026.

   In responding to stakeholder questions, MISO said that the Seven-Step Planning Process utilized in MISO's FERC Order 1920 planning would be used in future planning processes as well. MISO also reminded stakeholders of the opportunities for feedback and information appropriate for business practice manuals and tariff and committed to post feedback approved by the submitting entity.

9. **New Business (All)**
   There was no new business

10. **Review Action Items (Jake Carrico)**

Action Item	Owner	Date	Status
Feedback requests will be opened for: • ZGIA Proposal Draft Tariff Language (PAC-2024-4) (May 6)	MISO	4/22/2026	Closed
Change the name of the PAC-2026-1 issue on the dashboard to Review of the planning participation credit	MISO	4/22/2026	Closed

11. **Adjourn**
    The meeting adjourned at 2:43 ET / 1:43 CT.

Next Meeting: May 27, 2026