

Resource Adequacy Subcommittee (RASC)
Carmel, IN
October 1, 2025
10:00 am to 2:15 pm ET / 9:00 am to 1:15 pm CT
Dial-in and Webex information available at www.misoenergy.org

Minutes

1. Administrative Items (Werner Roth)

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.

Chair: Werner Roth

Vice Chair: Trey Mayeux

MISO Liaison: Neil Shah (for Zhaoxia Xie)

Stakeholder Relations: Amanda Jones

Participants:

Aaron Martin, CES
Amber Joyce, MDU
Carolyn Wetterlin, Xcel
Energy
David Johnston, IURC
David Ricketts, Vistra Energy
Eric Stephens, AMP

Erin Schlick, NextEra
Jeffery Kelley, NIPSCO
Jodi Walters, CMPAS
Jung Suh, Calpine
Justin Stewart, Ameren
Michael Alter, Fresh Energy
Michael Fischette, LBWL

Ray Hoffman, AES
Scott Jones, IN OUC
Steve Rose, MN PUC
Taylor Hofforty, WVPA
Tom Weeks, MPPA
Tyler Bergman, CGA

Remote Participants:

Abby Schoeller, MGE
Abigail Reid, MGE
Adam Renfandt, NDSG
Adria Brooks, GridStrategies
Alan Mok, Duke
Amanda Cook, RTO Insider
Andrew Drea, IL OAG
Anna Sommer, Energy
Futures Group
Annette Holst, MEC
Annie Dellva, Xcel
Anushree Pethe, Daymark EA
Art Iler, IN OUC
Austin Hoekman, MRES
Aydrik Schuh, MDU
Bakhtawar Khan, Gabel
Barton Norfleet, PSC MS
Becca Gillespie, ESN
Becca Skalko, GRE
Ben Hamilton, Big Rivers
Ben Kaldunski, Xcel
Bill Booth, Michael Best
Bill Raihala, Xcel
Bill VanderLaan, ICC
Bipin Balar, NIPSCO
Bob German, DTE
Brad Pope, OMS
Brenda Prokop, CES
Brian Giggee, MDU
Bridget Corwin, MI PSC
Brock Ondayko, AEP

Bryan L Garnett, Duke
Cameron Elias, MEC
Carrie Milton, Potomac
Economics
Casey Harding, MEC
Casey Swarts, AiGent
Chad Hanson, CMPAS
Chad Herrick, CIPCO
Chance Moore, Alliant
Charlie Robling, IMEA
Chris Bridges, AECC
Chris Norton, AMP
Chris Plante, WEC
Christon Bertus, Entergy
Christopher Burke, Cleco
Ciaran Gallagher, Clean
Wisconsin
Cicily McGee, AR PSC /
APSC
Cindy Hammarlund, CES
Colburn Nilsson-Hassmann,
Mercuria
Collin Dettmann, City of Ames
Conor McKenzie, AEU
Cory Hetchler, Connex
Craig Markham, NuEnergen
Curtis Spence, City of Ames
Cynthia Bothwell, U.S. DOE
Dan McGraw, Mercuria
Daniel Boratko, Entergy
Darren Kearney, SD PUC

Dave Harlan, Veriquest
Dave Stoltz, Hoosier Energy
David Browning, GRE
David Carlson, IGS
David Davis, Apex
David Sapper, CGA
David Savage, IURC
David Shaffer, Dentons
David Webb, Entergy
David Zito, Gabel
Dean Lee, OTP
Dennis Kimm, MEC
Derek Miller, MGE
Derek Mosolf, GRE
Devan Fischer, ICC
DeWayne Todd, Alcoa
Diane Kearney, Potomac
Economics
Doug Price, Forest City IA
Dylan Stockert, MDU
Dylan Walski, MPC
Eric Giddens, IA IUC
Eric Ingenthal, Evergy
Eric Thoms, Invenergy
Erik Hanser, MI PSC
Erin Buchanan, CMPAS
Fiza Shaikh, New Project
Media
Frederick Salvo, Baker
Donelson
George Sasca, AECC

Greg Rislov, SD PUC	Luke Kinder, AR PSC / APSC	Roger Doherty, MI PSC
Greg Weiss, Ameren	Luke Metcalf, Voltus	Ron Franz, DPC
Heidi Ratz, Pattern Energy	Luke Striplin, AECC	Ryan Lovan, IA IUC
Henry Chu, DPC	Mark Ahlstrom, NextEra	Ryan Lowe, MB HYDRO
Iryna Franko, ACES	Mark Volpe, Compp	Ryan McKeever, Husch
Jacob Vickers, FERC	Matt King, GDS	Blackwell
Jamie Nicolls, Alliant	Matthew Harward, Healy Law	Ryan Sims, IGS
Janelle Dieleman, MEC	Matthew Jackson, FERC	Ryan Wilhelmus, Big Rivers
Jared Meyer, Evergy	Matthew P Beilfuss, WE	Ryan Yeoman, MI PSC
Jason Fogarty, Potomac	Energies	Sam Wendt, MEC
Economics	Matthew Wyatt, MPW	Samuel Lukens, IL OAG
Jason Mazigian, BEPC	Maxx Snell, MDU	Sarah Gunasekera, Daymark
Jay Sher, Alliant	Megan Allen, Ameren	EA
Jeff Dodd, Viridon	Michael Saer, GRE	Sarah Horner, MPC
Jeff Wernert, The Prime	Michelle Lynch, Hoosier	Sarah McCarville, MEC
Group	Energy	Sean Shafer, Voltus
Jenny Zhao, Wartsila	Mike Gahimer, Arevon	Sebastian Smater, Strom
Jeremi Wofford, Ameren	Mike Mooney, Hoosier Energy	Power
Jeremy Caron, GPI	Mike Schowalter, Fresh	Shane Chang, Entergy
Jeremy Martin, CenterPoint	Energy	Shaun Mohler, SMXB Law
Jeremy S Jones, Entergy	Mitchell Myhre, Alliant	ShayLa Sanders, CMS
Jerry Martinez, Sol	Molly Lundberg, MN8 Energy	Sherian Krause, MEC
Jessica Burdette, MN PUC	Monsherra Blank, SPP	Srijan Karim, MEC
Jessica Greenberg, Enel	Natalie Cotton-Nessler, CES	Stacey Svendsen, SREA
Jim Dauphinais, BAI	Nate Gagnon, Duke	Stephen Rose, MN PUC
Jim Holsclaw, Calfee	Nathan Williams, Ameren	Sterling Passingham,
Joe Kingery, BEPC	Natisha Wilkerson, LBWL	Tenaska
Joe Popp, DTE	Neil Hammer, MEC	Steve Dowell, Alcoa
John Bott, IMPA	Nicholas Simon, MGE	Steven Leovy, WPPI
John Reinhart, GRE	Nick Long, WPPI	Sunny Jansen, MEC
Jonathan Surls, Energy	Nick Ludwig, Alliant	Taylor Carpenter, Calfee
Exemplar	Nick Schroeder, MGE	Taylor Martin, Potomac
Jordan Adams, Duke	Nicolas Cottely, Spearmint	Economics
Jordan McNair, Voltus	Nidhi, GDS	Taylor Meyer, Entergy
Julie Swisher, MEC	Nikki Penland, Cpower	Thomas Chamberlain,
Justin McNeil, KY PSC	Energy	Entergy
Karolanne Foley, DPC	Nina Peluso, Energy Futures	Tia Elliott, Pelican Power
Kavita Maini, Wisconsin	Group	Tia Marguglio, Xcel
Energy	Noel Darce, Stone Pigman	Tim Beddow, OTP
Keith Parrott, MPPA	Omar Rubalcava, MEC	TJ Duff, MEC
Kelly Bertholet, MB HYDRO	Orijit Ghoshal, Tract	Tom Butz, MN Power
Ken Kagy, CFU	Paul Meis, Alliant	Tom McDonough, Xcel
Kendra Graves, CIPCO	Peter Dotson-Westphalen,	Travis Graff, Prairie Power,
Kevin Cline, MEC	Cpower Energy	Inc.
Kevin Kingsley, MDU	Presley Reed, Dentons	Travis Stewart, Gabel
Kiley Snyder, CIPCO	Rachel Passman, Gabel	Trey Mayeux, Cleco
Kimberly Dunning,	Raju Brahmabhabheri, ITC	Tricia DeBleekere, OMS
CenterPoint	Randal Gerving, MDU	Tyler Bergman, CGA
Kirstin Lindblom, AES	Renee L. Colbert, DPC	Vasker Neupane, Daymark
Kreig Voreis, ACES	Rhett Edward Trease, Duke	EA
Kristen Parker Long, Entergy	Rick Gillingham, Hoosier	Victoria Jones, Connex
Kristina Grandquist, MEC	Energy	Vince Vandaveer, Ameren
Kristina Hubbell, MI PSC	Rick Liang, Cooperative	Vivian Madu, Entergy
Kyle M Watson, Entergy	Energy	Walt Cecil, PSC MO
Kyra Kelly, Duke	Robert Frank, NDSG	Werner Roth, TX PUC
Laine Greenwood, Alliant	Robert Haigh, Entergy	William Rader, OTP
Laura Weir, MI PSC	Robert Schmidt, Rainbow	Wyatt Ellertson, Entergy
Laura Witzling, PSCW	Energy	Zach Bennett, Cooperative
Leslie Hamby, CenterPoint	Robert Thorson, MGE	Energy
Lincoln Miller, PSCW	Robert Vosberg, LPSC	Zach Fjestad, OTP
Lise Trudeau, MN PUC	Roberto Paliza, Paliza	

b. Review Agenda

Agenda accepted as posted.

c. Review Meeting Minutes / Action Items

Minutes for the August 20 meeting were accepted as posted. Part of one action item remains open as shown below and posted with meeting materials:

Action Item	Owner	Date	Status
MISO will schedule a workshop on September 3 to discuss settlements for the LOLE Continuing Error	MISO	8/20/2025	Closed
MISO was asked to consider hosting a workshop on the package of DR Reforms (October 14)	MISO	8/20/2025	Closed
MISO will update the PRA Calendar in the liaison report to reflect the potential GVTC deadline new deadline (subject to FERC approval)	MISO	8/20/2025	Closed
Feedback requests will be opened for: <ul style="list-style-type: none"> • BPM-011 (September 3) • Module E Tariff Revisions (September 8) • CONE Calculations and Reference Technology (September 3) • LMR Enhancements Tariff (RASC-2019-9) (September 10) • Co-located Resource Accreditation (RASC-2019-2) (September 5) • HVDC key questions from April workshop (September 12) 	MISO	8/20/2025	Closed
Management Plan: <ul style="list-style-type: none"> • New Issue 31+ Day Outage Rule Enhancements (RASC-2025-2) will be added 	RASC Leadership	8/20/2025	Closed
From the Item 05 LOLE Continuing Error presentation: <ul style="list-style-type: none"> ✓ MISO to provide estimated Price Deltas used to determine appropriate adjustments related to LOLE Continuing Error (complete) ✓ MISO to consider if it will post adjusted RBDC curves used for appropriate adjustment calculations (complete) • MISO to consider establishing process steps and documenting in BPM for any future continuing error in the MISO markets (open) ✓ MISO was asked to provide software settings it uses for the Annual LOLE studies (subject to contract limitations with the software vendor) (posted with LOLEWG meeting materials: https://www.misoenergy.org/events/2025/loss-of-load-expectation-working-group-lolewg---september-25-2025/) 	MISO	8/20/2025	In Progress
From the LMR Accreditation Replacement and Penalty Provisions (Item 08b): MISO will add a FSL penalty example to the posted presentation	MISO	8/20/2025	Closed

d. Review Management Plan

Updates to the management plan were posted in redline with meeting materials.



A stakeholder asked when to expect discussion of the accreditation methodology for storage under the Direct Loss of Load (DLOL) methodology. MISO indicated that DLOL indicative results for Planning Year (PY) 2026-2027 would be shared later in Q4 2025/early Q1 2026 then the RASC leadership could discuss if it warrants further work.

2. Status Updates (Werner Roth)

- a. **Steering Committee (SC)**
- b. **Loss of Load Expectation Working Group (LOLEWG)**

Written stats reports were provided with meeting materials. There were no questions.

3. MISO Posted Items (Neil Shah)

- a. **FERC Status Report**
- b. **BPM-011 r32**

Written reports were posted with meeting materials. Neil pointed out the *final* posting of BPM-011 r32. There were no questions.

4. Liaison Report (Neil Shah)

Neil provided highlights of his written liaison report, including the following:

- o LOLE Model and Definition Update: posting of software settings; planned posting of masked model; and Tariff definition of Loss of Load Expectation ("LOLE") filed in Docket # ER25-3007-000
- o MISO Response to Stakeholder Feedback
- o Workshops & General Announcements
 - Open through October 31: Long-Term Load Forecast Pilot Survey: Stakeholders asked several clarifying questions and requested an extended deadline to respond.
 - October 14: Demand Resources Reform Workshop
 - October 22, November 21, December 19: FERC Order 881 Coordination – Closed
 - October 29, November 18, December 17: Futures Redesign Workshop (Series) – Neil answered several clarifying questions about the redesign and noted that MISO is working on RA analysis as part of the Futures process, which will be shared with stakeholders.
 - October 29: Winter Readiness
 - October 30: Annual ARR Allocation Workshop
 - December 16: HVDC Assessment Workshop Date Change – Stakeholder request to publish the whitepaper prior to the workshop. Neil noted that the workshop is the *start* of a discussion on HVDC and how MISO integrates HVDC into various market processes.

Several stakeholders expressed a desire for more information on increased capacity declarations in the MISO South Region earlier this year. MISO posted Operations Reports with more information for the [June 10](#) and [September 16](#) Markets Committee of the Board of Directors meetings. Stakeholders were also encouraged to participate in the [October 9 Reliability Subcommittee \(RSC\)](#).

5. 2026-2027 PRA Updates

a. Overview (Andy Taylor)

Andy reviewed the timeline and critical dates for the 2026-2027 Planning Resource Auction (PRA). Andy discussed preparations MISO and stakeholders are beginning for the PRA, with critical deadlines approaching, and the need for awareness of deadlines as detailed throughout the posted presentation. MISO is engaging in conversation with System(s) Users focused on improving the PRA experience and invited stakeholders to sign up by October 24. See slide 8 for more details.

A stakeholder asked about the Non-GADS Performance Template that was updated for PY26-27 and asked if it could be provided sooner in the Summer rather than early Fall. Later in the meeting,



Mike Colenso commented that this may not be feasible and suggested starting with the prior year's template with updated dates.

b. Excess BTMG Deliverability^ (Andy Taylor)

Andy shared proposed updates to Excess BTMG deliverability ahead of the 2026-2027 PRA. MISO proposed an update as detailed in the presentation and sought stakeholder feedback by October 15.

MISO is considering expanding options for Excess BTMG Deliverability and has determined that it will be based on Final PRMR obligation for the LSE. Since Final PRMR is based on the PRA clearing, MISO is considering also allowing LSE's to offer associated Zonal Resource Credits (ZRCs) into the PRA and to procure firm transmission *after* the PRA clears once Final PRMR is known. See posted slides for more detail.

Several stakeholders asked clarifying questions about specific scenarios for BTMG and about procuring Transmission service before/after the PRA. MISO was asked to add provisions to the BPM spelling out what happens if firm Transmissions is *not* procured; stakeholders were asked to follow up their remarks with written feedback.

c. LMR Registration Guidelines (Geoff Brigham)

Geoff provided an overview of the plan and timeline to share templates and checklists to assist Market Participants in the registration of LMRs which will occur over the next 30 days for the 2026-2027 PRA. He shared an overview of LMR and Demand Response filings with anticipated effective date. MISO will communicate to stakeholders as materials become available and are posted to the MISO website under Resource Adequacy > Guides and References > LMR folder. Geoff provided examples of things that might change in these documents, such as around testing guidelines. As for BPM language, the most recent version was posted with RASC materials for the July meeting. MISO has been working on updates based on stakeholder feedback and should be able to post prior to the October 14 workshop.

d. Non-GADS Template Updates^ (Mike Colenso)

Mike provided two verbal remarks prior to his presentation: 1) FERC accepted MISO's Tariff filing on GVTC timeline. GVTC extensions, if needed, are due October 7 and should be submitted through the Help Center. 2) a stakeholder earlier in the meeting asked about posting GADS templates earlier, which is not feasible earlier than September. One workaround is using a prior version of the template with updates dates.

An update was provided on the Non-GADS Performance Template for the upcoming PRA, which has been updated for PY 2026-2027 to include separate fields for GVTC and SAC. In prior Planning Years, MECT used the template-calculated SAC values as GVTC for non-GADS resources, resulting in SAC being equivalent to ICAP in most cases. GVTC will now be a separately defined value based on name plate capacity or testing for battery storage resources. BPM-011 redlines were proposed to clarify data submission requirements and GVTC for non-GADS resources. Feedback was requested by October 15.

Mike answered a few questions about the template and how to complete it, including the meaning of "nameplate capacity" (maximum capability in this case), and asked stakeholders to follow up with written feedback.

6. MISO CONE / Net CONE for PY 2026-2027 (Joshua Schabla and Akshay Korad)

Joshua presented a summary of updated efforts on locational Cost of New Entergy ("CONE") and Net CONE values for PY 2026-2027. MISO targets a FERC filing in October. Estimated CONE values for the 2026-2027 PY are 5% greater than estimates for the previous PY due to inflation and higher borrowing costs. Average raw Net CONE estimates for 2026-2027 PY are about \$80.3k for the MISO North/Central region and \$77.5k for the MISO South region.

Joshua reminded the RASC what CONE is and how it is used as the maximum offer and maximum clearing price in the PRA. At this time, MISO continues to use the same advanced combustion turbine used in previous years, though work is progressing to address the reference technology. A presentation will be given to the RASC in November. Joshua explained the CONE calculation, inputs, and methodology. Some values for inputs have changed or are updated to current values with the same calculation used last year, but accounting for adjustments to tax rates, corporate rates, inflation, etc.

CONE values were provided for each zone on slide 13. There were many questions about the rationale for using the 2020 report for EIA capital costs and rather than an updated version that reflects rising costs. Joshua provided MISO's rationale based in part on the reference technology used in 2020 vs. 2024, and heard comments from some stakeholders recommending reconsideration. He reminded the RASC that there is discussion scheduled to talk more thoroughly about reference technology and opportunities for feedback from stakeholders.

Joshua continued with discussion of the methodology for Net CONE beginning on slide 15. Results were shown in a table on slide 18. A stakeholder asked about the PY26-27 values for CONE and Net CONE being higher than other zones; there was discussion regarding how these values are driven by the inputs that come from the EIA report. Joshua also mentioned that MISO is up for discussion on any potential changes in the approach going forward.

A stakeholder asked about the inclusion of issue RASC-2024-6 submitted by COMPP last year with the CONE considerations MISO is working through, and if the discussion scheduled for Q3 2026 could be moved earlier in the year. The RASC leadership will discuss.

7. New Business

No new business

8. Review Action Items (Amanda Jones)

Action Item	Owner	Date	Status
From the Item 05 LOLE Continuing Error presentation: <ul style="list-style-type: none"> ✓ MISO to provide estimated Price Deltas used to determine appropriate adjustments related to LOLE Continuing Error (complete) ✓ MISO to consider if it will post adjusted RBDC curves used for appropriate adjustment calculations (complete) • MISO to consider establishing process steps and documenting in BPM for any future continuing error in the MISO markets (open) ✓ MISO was asked to provide software settings it uses for the Annual LOLE studies (subject to contract limitations with the software vendor) (posted with LOLEWG meeting materials: https://www.misoenergy.org/events/2025/loss-of-load-expectation-working-group-lolewg---september-25-2025/) 	MISO	8/20/2025	In Progress
RASC-2024-6 / CONE Reference Technology timing and approach to be considered by RASC Leadership	RASC Leadership	10/1/2025	Open
Feedback requests will be opened for: <ul style="list-style-type: none"> • Excess BTMG Deliverability (October 15) • Non-GADS Template Updates (October 15) 	MISO	10/1/2025	Closed



9. Adjournment

Meeting adjourned at 12:28 pm ET.

Next Meeting: November 12, 2025