



**Loss of Load Expectation Working Group (LOLEWG)  
Conference Call and WebEx  
October 3, 2022  
1:00 to 4:00 pm ET / 12:00 to 3:00 pm CT  
Dial-in and WebEx information available at [www.misoenergy.org](http://www.misoenergy.org)**

**Minutes**

**1. Administrative Items (Werner Roth for James Peters)**

**a. Call to Order / Roll Call**

Meeting called to order at 1:00 pm ET.  
The Public Meeting Notice was read.

Chair: James Peters  
Vice Chair: Werner Roth (presiding)  
MISO Liaison: Lynn Hecker  
Stakeholder Relations: Amanda Jones

**Participants:**

Aaron Bloom, Next Era  
Abdelraouf Ismail,  
Entergy  
Adam Renfandt, NDSG  
Alex Zakem, AJZ  
Consulting  
Alyssa Cooper, Entergy  
Amber Joyce , MDU  
Andy Dytuco, Ameren  
Andy Kowalczyk, SREA  
Anita, ACES  
Anuhya Chodagam, MISO  
Armando Figueroa-  
Acevedo, MISO  
Art Iler, IN OUCC  
Ben Abing, ITC  
Bill Raihala, Xcel  
Bipin Balar, NIPSCO  
Bob German, DTE  
Brad Pope, OMS  
Brad Ridout, CIPCO  
Brian Davison,  
Constellation  
Brian Giggee, MDU  
Brian Tulloh, MISO  
Brock Ondayko, AEP  
Energy  
Bruce Froyum, MISO  
Bryan Estes  
Chris Plante, WEC  
Cindy Guillot, Cleco  
Clayton W. Robinson,  
Cordelio Power

Daniel Jagessar, Entergy  
Darius Monson, MISO  
Darren Kearney, SD PUC  
Staff  
Darrin Lahr, MISO  
Dave Evenson, GRE  
Dave Johnston, IN URC  
David Browning, MISO  
David Harlan, Veriquest  
David Ricketts, VistraCorp  
David Sapper, CES  
Dennis Kimm, MEC  
Derek Mosolf, MISO  
Dustin Grethen, MISO  
Dylan Stockert, MDU  
E Thoms, MISO  
Ed Achaab, AEP  
Eric Rodriguez, MISO  
Erik Hanser, MI PSC  
Frank Swigonski, PG  
Renewables  
George OConnor, Brunini  
Hudson Davis, Entergy  
Hwikwon Ham, MN PUC  
Iryna Franko, ACES  
Jake Weinberg, Gabel  
Associates  
James Okenfuss, Savion  
Jamie Niccolls, Alliant  
Jan Vanhus, Entergy  
Jason Marshall, WVPA  
Jason Mazigian, BEPC  
Jennifer Vosburg

Jeremi Wofford, Ameren  
Jeremy Barlow, MPUS  
John Orr, Constellation  
John Thomasen, MGE  
John Wachtler, MN PUC  
Jonathan Bourg, SiSung  
Kari Hassler, Xcel  
Karolanne Foley, DPC  
Kimberly Dunning,  
CenterPoint Energy  
Kurt Vanderlick, Cleco  
Kush Gandhi, Cordelio  
Power  
Kyle Abell, MISO  
Levi McNeely, WVPA  
Mark Volpe, COMPP  
Martin Smith, MGE  
Mary Morrison, Xcel  
Matt King, GDS  
McGara DeWan, ESAI  
Megan Wisersky  
Michael Robinson, MISO  
Michaela Flagg, CES  
Mike Gahimer, NIPSCO  
Mike Mooney, HEPN  
Mike Schowalter, Fresh  
Energy  
Mingxin Zhang, GPI  
Natalie McIntire, CGA  
Neil Hammer, MEC  
neil hammer, MEC  
Nicholas Collins, Entergy  
Nick Abraham, MI PSC



Nick Puga, Bates White  
 Nickolas Przybilla, MISO  
 Noel Darce, Stone  
 Pigman  
 Peg Abbadini, HE  
 Preston Riewe, OTP  
 Rachel Cairo, DTE  
 Renee Colbert, DPC  
 Richard Bendish, MDU  
 Robert Vosberg, LPSC  
 Staff Consultant  
 Roberto Paliza, Paliza  
 Consulting  
 Ron Franz, DPC  
 Ryan Keehn, Entergy  
 Ryan Kohler, PSCW  
 Ryan Wilhelmus,  
 CenterPoint Energy  
 Ryan Yeoman, MI PSC

Sam Kokkinen, GRE  
 Sherian Krause, MEC  
 Shirley Schultz, AMP  
 Srilekha Dokala, Entergy  
 Stephanie Schmidt, ATC  
 Steve Leovy, WPPI  
 Steve Rakow, MN PUC  
 Tag Short, MISO  
 Terry Jarrett, MJMEUC  
 Tia Elliott, Cleco  
 Tim Tessier, IA OCA  
 Tom Butz, MN Power  
 Tom King, WPSCI  
 Tom Weeks, MPPA  
 Travis Broussar, LAFA  
 Travis Stewart, Gabel  
 Associates  
 Trey Mayeux, Cleco  
 Tricia DeBleeckere, MISO

Venkata Bujimalla, IA IUB  
 Verónica Bósquez, Orsted  
 Vince Vandaveer ,  
 Ameren  
 Vish Sankaran, ICF  
 Walt Cecil, MO PSC  
 Walter Ferguson, MISO  
 Warren Hess, CMPAS  
 William Alkier, AECI  
 Wonbae Choi, Algonquin  
 Power  
 Wyatt Ellertson, Entergy  
 Yong Jiang, MISO  
 Yulin Liang, Cooperative  
 Energy  
 Zachary Callen, ICC  
 Zak Joundi, MISO

**b. Review Agenda**

Agenda accepted as posted.

**c. Review Meeting Minutes / Action Items**

Minutes for the September meeting were accepted as posted. Several action items were accepted in the September meeting, shown below. Some were closed with the posting of an updated presentation and others addressed with the posting of a supplemental document with September materials. Notification was sent to the LOLEWG on September 27 linking to: [20220906 LOLEWG Item 03 PY 2023-24 Preliminary LOLE Study Results.pdf](#) (updated) [20220906 LOLEWG September Meeting Action Items Follow Up.pdf](#) (new)

Action Item	Owner	Date	Status
Action items from the LOLE study presentation: <ul style="list-style-type: none"> <li>• Seasonal waterfall charts, RAN initial analysis, drivers for change                Winter: cold weather outage adder, forced outage rates                Planned outages (total as well as those &gt; 31 days) in model (if we can pull out of SERVM)</li> <li>• Seasonal PRM LOLE targets, allocation by season                include in report                provide an extra row on slide 6 showing the LOLE target for each season</li> <li>• ELCC percentages for wind/solar</li> <li>• LRR seasonal LOLE distribution in LOLE report</li> <li>• Definitions for table headers</li> <li>• Slide 7 drivers</li> </ul>	MISO	9/6/2022	Closed

A couple of clarifying questions were answered pertaining to posted ELCC percentages used in the reserve margin calculations. Lynn Hecker noted that the consideration of location in resource



adequacy will be explored as part of the future MISO Roadmap efforts.. Lynn and Eric Rodriguez answered questions about modeling for annual wind accreditation analysis and 40% winter wind ELCC used in the reserve margin calculations. MISO will present its proposal for the annual wind accreditation analysis to the October 12<sup>th</sup> RASC, which will use a rolling 10-year fleet wide historical wind performance to determine seasonal class average for wind resources..

**d. Review Management Plan**

The current management plan was shared with meeting materials. There were no questions.

**e. Leadership Nominations, Election Cycle**

Nominations for chair and vice chair were opened. Interested candidates should send bios to Amanda Jones ([ajjones@misoenergy.org](mailto:ajjones@misoenergy.org)) by Friday, October 28. Candidates will be announced on Monday, October 31 along with next steps. The election – if necessary – will occur by email in November.

**f. Review 2023 Meeting Dates**

Meeting dates for next year were shared and are generally consistent with the schedule from 2022. All meetings will occur via Webex. There were no questions.

**2. Liaison Report (Lynn Hecker)**

Lynn provided highlights of her written liaison report, including:

- Planning Year 2023-24 LOLE Study status under Seasonal Construct
- RAN Office Hours through end of October (as announced by email Sept. 28)
  - Additional office hours for PowerGADS and GVTC questions coming soon!
- October 20: Winter Readiness Workshop
- REMINDER: Customer Relationship Survey October 5 – 26
- REMINDER: Register by Nov. 21 for Main Parent Entity Super Week November 28 – December 2

**3. Finalize PY 2023-24 LOLE Study Results (Eric Rodriguez)**

Final results of 2023-24 Planning Year (PY) Planning Reserve Margin (PRM) and Local Reliability Requirements (LRR) under the seasonal construct were provided. Stakeholders were invited to ask questions.

MISO was asked to explain the relationship between Loss of Load (LOL) hours vs. Planning Reserve Margin Requirement (PRMR) for winter and spring. PRMs vary across seasons largely driven by different resource mix/performance and load levels across seasons as shown on slide 3. Eric described how risk appears in weather years across the seasons, much of which falls in the winter. As data rolled, a low-risk winter year was replaced with a high-risk winter year due to winter storm Uri. Darius Monson talked about the calculation of PRM as a percentage of peak demand, and how it manifests in different seasons. This is influenced by resource availability, forced outage rates, peak planned outage season (spring) and offsets some of the reduction in peak demand compared to the requirement. The reduced availability of resources leads to an increased requirement. Additional context is available in the posted documentation for action items as well – particularly pertaining to forced outage rates in spring, which are relatively close to winter.

A stakeholder questioned the value and use of ICAP numbers on slide three. There was some discussion of its use amongst participants, including the NERC Long Term Resource Assessment (LTRA) and for those analyzing the effectiveness of the resource adequacy process wherein ICAP represents the portfolio they have and what's being modeled.



There was also discussion of UCAP to ISAC conversion ratios, timeframe, included resources and methodology used to set those ratios later this year which was previously discussed with the RASC. Those ratios must be published by December 15. The methodology will be described in BPM-011 language and discussed with the RASC.

A participant asked about the seasonal wind and solar ELCC in the LOLE model as shown on slide 15, and the comparison of those values to those previously derived on an annual basis. Eric indicated that this has to do with the scope of data being used; he talked about the development of synthetic data profiles developed with Astrape – discussed previously – that make up this ELCC percentage. He again noted that this is a discussion point with the RASC, e.g., using 10-year rolling average data for wind ELCC analysis. There were a few more questions about historic wind data and the fact that technology and wind capacity has changed over time.

**4. Finalize PY 2023-24 CIL/CEL Results (Nick Przybilla)**

Nick presented the final 2023-24 PY Seasonal Capacity Import Limits (CIL) and Capacity Export Limits (CEL) and explained the differences from preliminary values. A summation of the changes was shown on slide 3 followed by more detail for each Local Resource Zone (LRZ). A few LRZs were highlighted from the posted material; there were no questions. MISO was asked about the posting of 30-year wind/solar/load profiles to the Sharefile location, which is coming soon.

**5. New Business**

A stakeholder asked about temperature corrections for generators relative to unusual weather conditions in certain seasons, and how that relates to GVTC corrections. A recommendation was made to take up ambient temperature corrections. Lynn suggested that this be taken up with the RASC as a policy issue rather than the LOLEWG.

**6. Review Action Items (Amanda Jones)**

Action Item	Owner	Date	Status
MISO will open leadership nominations for chair and vice chair for the 2023 term and send notification to the LOLEWG	MISO	10/3/2022	Closed
MISO will post 30-year wind/solar/load profiles to the Sharefile location and notify the LOLEWG once available	MISO	10/3/2022	Open

**7. Adjournment**

Meeting adjourned at 2:30 pm ET.

Next Meeting: March 16, 2023