



## Minutes of the Reliability Advisory Council Meeting

### St. Paul, MN, and Webex

Thursday, August 8, 2024, 9:00 a.m. to 2:31 p.m. Central

Notice for this meeting was electronically posted to the MRO [website](#) on July 11, 2024.

A final agenda, including advanced reading materials, was also posted on August 1, 2024.

#### 1. Call to Order and Determination of Quorum

The Reliability Advisory Council (RAC) Chair, Gayle Nansel, called the meeting to order at 9:00 a.m. Nansel welcomed everyone, and roundtable introductions were made. Reliability Analysis Administrator, Rebecca Schneider, advised the chair that a quorum of the RAC was present. A complete list of attendees is included as [Exhibit A](#).

#### 2. Standards of Conduct and Antitrust Guidelines

Pursuant to Policy and Procedure 4, Bryan Clark, MRO Director of Reliability Analysis, highlighted MRO's Standards of Conduct and Antitrust Guidelines.

#### 3. Safety Briefing

MRO Outreach Coordinator, Shawn Keller, presented a safety video illustrating the steps to take if various emergency situations are encountered onsite at MRO.

#### 4. Chair's Remarks

Chair Nansel noted that a Level 2 NERC Alert (NERC Recommendation to Industry Regarding Inverter-Based Resource Model Quality Deficiencies) was issued on June 4, 2024. She encouraged the members to read the Interregional Transfer Capability Study (ITCS) overview report published on June 27, 2024. Nansel also highlighted the three newsletter articles published by the RAC last quarter.

#### 5. Consent Agenda

The RAC reviewed the consent agenda, which included draft minutes from the May 16, 2024, meeting.

*Upon a motion duly made and seconded, the RAC approved the consent agenda in its entirety.*

#### 6. MRO Board of Directors, OGOC and General Update

Clark provided a recap of the second quarter Organizational Group Oversight Committee (OGOC) meeting held on May 22, 2024. The RAC Chair and Vice Chair attended the risk roundtable discussion on Energy Policy. It was noted that the slow pace of education and energy policy is a growing concern, and State Regulators need to be engaged and educated. MRO plans to include the Canadian Provinces (Manitoba and Saskatchewan) in their outreach efforts. The OGOC recommended that MRO redefine the problem statement regarding energy policy. Clark also shared future meeting dates for the OGOC and MRO Board of Directors.

#### 7. Interregional Transfer Capability Study (ITCS) Update

Clark provided a status update on the ITCS project. Part 1 (Transfer Capability Analysis) of the three-part study has been completed, and the study overview report was published. Part 2 (Prudent



Additions) will consist of multiple scenarios, including extreme weather, energy analysis and prudence. Part 3 (Meet and Maintain) may include generation additions and/or transmission upgrades, market mechanisms, reliability standards, and policy recommendations. The Canadian Analysis will take place after the final report deadline on December 2, 2024. There was a discussion around the accounting of simultaneous transfer capabilities and multi-regional impact. There was concern that if the study stated a need for generation without factoring in supply chain issues, the results could be degraded.

## **8. 2025 Organizational Group Nominations**

Schneider shared information regarding the MRO organizational group nomination period and HERO Award nominations. RAC members and MRO Sponsored NERC Representatives whose terms are expiring at the end of the year, were encouraged to reach out to MRO if they do not plan on self-nominating for another term.

## **9. Reliability and Security Technical Committee Meeting Update**

MRO Principal Technical Advisor, Mark Tiemeier, provided a recap of the NERC Reliability and Security Technical Committee (RSTC) meeting held on June 11-12, 2024, in Seattle, WA. Tiemeier shared that two new task forces were discussed: Large Loads Task Force and Electric Vehicles (EV) Task Force. Both task forces presented scope documents to the RSTC. The RSTC suggested the large loads task force redefine their scope and objective before the approval process. The focus of the EV task force is on performance and modeling of EV chargers.

Tiemeier mentioned that seven documents have been posted for comment on NERC's website. Three documents are high priority: Electromagnetic Transient Studies for Inverter-Based Resources (IBRs), Technical Reference Document: Considerations for Performing an Energy Reliability Assessment, and Distributed Energy Resources (DER) forecasting in relation to planning studies.

Tiemeier also noted an improved Reliability Guideline: Generating Unit Operations during Complete Loss of Communications.

There was discussion between the RSTC and Standards Committee around the coordination of efforts for the Standard Authorization Request (SAR) application and approval process. There was agreement that a joint task force should be created. The next meeting will take place on September 11-12, 2024, in Montreal, Quebec.

## **10. MRO Representatives on NERC Subgroups – Written Reports**

*NERC Electric Gas Working Group (EGWG)* – Jaimin Patel provided a written report located in the agenda packet.

*NERC Inverter Based Resource Performance Subcommittee (IRPS)* – Doug Bowman provided a written report located in the agenda packet.

*NERC System Planning Impacts from DER Working Group (SPIDERWG)* – Wayne Guttormson provided a written report located in the agenda packet.



*NERC System Protection and Control Working Group (SPCWG)* – Lynn Schroeder provided a written report located in the agenda packet.

*NERC Energy Reliability Assessment Working Group (ERAWG)* – Tom Whynot provided a written report located in the agenda packet.

## **11. 2024 Work Plan Update**

### *Action Item Review.*

Chair Nansel reviewed the action items in the 2024 work plan and updates were made accordingly. There was a discussion about the Geomagnetic Disturbance (GMD) Impact Database and whether NERC is still tracking this information. The upcoming Cold Weather Preparedness Workshop was also discussed.

## **12. Reliability Coordinator Updates**

### *Southwest Power Pool (SPP)*

C.J. Brown, RAC member, provided an update on SPP's summer season. Brown shared that SPP issued several resource alerts due to tightening conditions and smaller reserve margins. Renewables are growing, and SPP hit a minimum peak load of 170 megawatts for wind in the eastern part of their footprint. SPP has a dedicated uncertainty response team of five individuals who continually monitor conditions to keep the system operators well-prepared. Brown shared that a heat dome situation is a growing concern. He also noted localized system congestion due to varying wind conditions and some storm damage in the region.

SPP changed their Planning Reserve Margin (PRM) to 36 percent in the winter and 16 percent in the summer. There was discussion around the current Loss of Load Expectation (LOLE) assumptions, including the one in ten-year standard.

### *Saskatchewan Power Corporation (SPC)*

Binod Shreshta, RAC member, provided an update on behalf of SaskPower. May and June were cooler than expected, and the summer load was lower than forecasted. SPC set a summer peak load of 3,670 megawatts in July. Shreshta reported no operating issues so far this summer.

SPC is forecasting a winter peak load of 3,900 megawatts (unconfirmed). The assessments for the winter forecast are still in progress. There are a few planned generation outages in late fall/early spring, but they should not cause any capacity issues. SPC is not expecting any capacity issues for winter operations based on available assets.

*To accommodate scheduling conflicts, Chair Nansel moved the 2025 Regional Risk Assessment Update (Agenda Item 15.) ahead on the agenda. These minutes reflect the order in which the reports were provided.*

## **13. 2025 Regional Risk Assessment Update**

MRO Principal Technical Advisor, Mark Tiemeier, reminded the RAC members that the 2025 risk information sheets were sent out in June and feedback is due by August 23, 2024. The 2025 RRA risk information sessions are scheduled for September 9 and 11, 2024. He noted a potential date change



for the September 11 session (Security Risk Information). The focus of the sessions this year will shift to risk impact and likelihood, and the participants will look at scenarios, past events, and trends during the risk ranking workshop.

Tiemeier highlighted a new risk in 2025 called Nation State Adversaries which ties into the risk roundtable topic for the Organizational Group Oversight Committee (OGOC) meeting on August 21, 2024. The topic is “Nation States – Supply Chain Implications.”

Tiemeier shared that extreme weather is a risk in 2025, but not wildfires specifically. There was further discussion around wildfire mitigation plans and the effect of IBRs and IBR loads on grid reliability.

*The RAC recessed for lunch at 11:35 a.m. and reconvened at 1:00 p.m.*

#### **14. NERC Standards Review Forum Update**

Chair Nansel will continue to follow the NSRF meetings and distribute relevant items to the RAC, as needed.

*To accommodate scheduling conflicts, Chair Nansel moved MISO’s Reliability Coordinator Update and Planning Coordinator Update (Agenda Items 12 and 13.) further back on the agenda. These minutes reflect the order in which the reports were provided.*

#### **15. Protective Relay Subgroup Update**

MRO Manager of Reliability Performance, Jake Bernhagen, shared that the Misoperation Information Data Analysis System User Group (MIDASUG) has been disbanded. Bernhagen noted that technical presentations from MidAmerican Energy Company and Manitoba Hydro were presented at the PRS meeting held on June 11, 2024. Next, the PRS will participate in a joint meeting with WECC’s Protection and Control Subcommittee (PCS) on October 3, 2024, in Salt Lake City, UT. The joint meeting will follow NERC’s 2<sup>nd</sup> annual BES Protection System Misoperation Reduction Workshop on October 1-2, and NERC is currently working on the agenda.

#### **16. Planning Coordinator Updates**

*Midcontinent Independent System Operator (MISO)*

MISO Director of Expansion Planning, Jeanna Furnish, provided an update on ambitious decarbonization strategies, accelerated policies, and other factors driving rapid change in MISO’s region. The resource fleet is evolving, and operational complexities are increasing along with the gap in needed resources with the necessary reliability attributes. As a Regional Transmission Organization (RTO), MISO works collaboratively and transparently with stakeholders to enable the reliable delivery of low-cost energy through efficient, innovative operations and planning. MISO created its Reliability Imperative to position the region to reliably support and enable the future system. Furnish recapped MISO’s long-range transmission planning solutions in Tranche 1 and Tranche 2.

*Southwest Power Pool (SPP) will provide a planning coordinator update at the RAC fourth quarter meeting In October.*

#### **17. Reliability Coordinator Updates**

*Midcontinent Independent System Operator (MISO)*



MISO Senior Operations Director, John Harmon, provided an overview of MISO's summer operations and solar peaks. The region experienced above average heat, particularly in the MRO and north central portions of the footprint. The southern region experienced sustained heat. MISO issued capacity advisories when wind generation was low. MISO set a new solar peak of seven gigawatts, which is almost double the previous peak. Additional focus areas for MISO in the near term are fast ramp resources and FERC Order 881.

Harmon also shared MISO's summary of operations during Hurricane Beryl. Hurricane Beryl made landfall on July 8, 2024, as a Category 1 storm, causing extensive damage to distribution and transmission systems in Southeastern Texas (SETEX). Over 200,000 customers were without power at one point. MISO coordinated extensively with SPP for landfall and the restoration procedures. MISO was well-positioned for the hurricane through ongoing preparation initiatives, operating procedures, and lessons learned from previous hurricanes.

### **18. Analysis for Large, Single Point Loads (e.g., Data Centers)**

RAC member, John Harmon, lead the discussion during the meeting. Large, single point loads, such as data centers, are becoming more common in the MRO footprint. Data centers can create challenges on the Bulk Electric System (BES) by demanding sizeable loads over brief periods of time. MISO would like to see analysis from other entities to better understand the dynamic nature of these facilities. The RAC may serve as a forum for collaboration and information sharing on this topic.

### **19. Inverter-Based Resources (IBR) Registration Update**

Clark provided an update on the FERC directive to register Inverter-Based Resources (IBRs) across the ERO Enterprise. This is a three-year project ending in May 2026, and NERC is providing quarterly updates. The directive was issued due to the rapid integration of IBRs, and the reliability impacts on the BES. On July 9, 2024, NERC issued a Request for Information (RFI) to identify Category 2 Generator Owner and Generator Operator registration candidates. Entities are asked to respond to the RFI by September 20, 2024. The MRO region is expecting to register between 60 and 80 additional entities. Clark also shared the link to the IBR Registration Initiative project on NERC's website.

### **20. 2024 Meeting Dates**

Chair Nansel reviewed the 2024 meeting dates for the RAC, as well as the other councils and subgroups.

### **21. Joint Council Meeting Update**

Clark provided an update on the MRO Joint Council Meeting scheduled for October 2, 2024, in Saint Paul, MN. The meeting follows the MRO Security Conference and precedes the individual fourth quarter advisory council meetings. MRO is currently working on an agenda.

### **22. RAC Member Roundtable**

Chair Nansel invited member participants to share other relevant industry observations. Topics shared included a NERC Section 1600 data request regarding geomagnetic disturbances (GMD) reporting. Western Area Power Administration (WAPA) has been reporting to NERC regularly. Other topics



included entities struggling to obtain bulk assets such as breakers and turbines, and a potential topic for a future RAC meeting from Great River Energy.

### **23. Other Business and Adjourn**

Having no further business to discuss, the meeting was adjourned at 2:31 p.m.

**Prepared by:** Rebecca Schneider, Reliability Analysis Administrator.

**Reviewed and submitted by:** Bryan Clark, Director of Reliability Analysis



## Exhibit A – Meeting Attendees

Reliability Advisory Council Members Present	
Name	Organization
Gayle Nansel, Chair	Western Area Power Administration
Bryn Wilson, Vice Chair	Oklahoma Gas & Electric
Binod Shrestha	Saskatchewan Power Corporation
C. J. Brown	Southwest Power Pool
Dick Pursley	Great River Energy
Eric Barry	Xcel Energy
Evan Wilcox	American Electric Power
Jeremy Severson	Basin Electric Power Cooperative
John Harmon	MISO
Mark Eastwood	City Utilities of Springfield, Missouri
Nandaka Jayasekara	Manitoba Hydro
Natasha Brown	Oklahoma Municipal Power Authority
MRO Staff Present	
Name	Title
Bryan Clark	Director of Reliability Analysis
Rebecca Schneider	Reliability Analysis Administrator
Shawn Keller	Outreach Coordinator
Jake Bernhagen	Manager of Reliability Performance
Salva Andiappan	Principal Reliability Assessment Engineer
Mark Tiemeier	Principal Technical Advisor
Cris Zimmerman	Manager of Outreach and Stakeholder Engagement
Lisa Stellmaker	Executive Administrator
Eric Graftaas	Principal Power Systems Engineer



John Grimm	Principal Systems Protection Engineer
Sarah Wernette	Sr. Systems Protection Engineer
Steen Fjalstad	Director of Security
Tasha Ward	Director of Enforcement and External Affairs
Anna Martinson	RAM/Enforcement Administrator
<b>Other Attendees</b>	
Name	Organization
Ashley Calderon	Kansas City Board of Public Utilities
Claire Vigesaa	North Dakota Transmission Authority
Daniel Moore	Western Farmers Electric Cooperative
Doug Bowman	Southwest Power Pool
Ellen Watkins	Sunflower Electric Power Corporation
Jeanna Furnish	MISO
Kevin Giles	Evergy
Mike Prieb	McPherson Board of Public Utilities
Mostafa Sedighizadeh	Southwest Power Pool
Naved Khan	Southwest Power Pool
Ricardo Rodriguez	City of Ames
Scott Aclin	Southwest Power Pool
Tom Whynot	Manitoba Hydro
Wayne Guttormson	Saskatchewan Power Corporation