



## Minutes of the Reliability Advisory Council Meeting

### Hybrid: St. Paul, MN and Webex

*Wednesday, March 1, 2023, 9:00 a.m. to 3:02 p.m. Central*

*Notice for this meeting was electronically posted to the [MRO website](#) on February 1, 2023. A final agenda, including advanced reading materials, was also posted on February 22, 2023.*

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

The Reliability Advisory Council (RAC) Chair, Dick Pursley called the meeting to order at 9:00 a.m. Pursley welcomed everyone and 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. Chair's Remarks

Chair Pursley noted the presentation Professor Meghan O'Sullivan, Harvard University's Kennedy School, gave at MRO's Board of Directors Meeting on December 1, 2022. Her topic was "The Geopolitics of the Energy Transition." Pursley highlighted several items from the breakout session during the Organizational Group Oversight Committee (OGOC) meeting on November 30, 2022. During the session, members of the RAC and the OGOC discussed some of the top Operational and Planning Reliability Risks and reviewed the draft 2023 RAC Work Plan.

Pursley noted Minnesota's new legislation for 100 percent carbon-free energy by 2040. He also noted FERC approval of the cold weather reliability standards (EOP-011 and EOP-012) on February 12, 2023. Pursley highlighted activity on the System Planning Impacts from DER Working Group (SPIDERWG), including openings on the standard drafting team for NERC Project 2023-02 Performance of IBRs. Standard PRC-004-6 is affected by this project. The nomination period is open until March 23, 2023.

#### 4. New Members' Welcome Presentation

Bryan Clark, MRO Director of Reliability Analysis, reviewed the welcome presentation for new members including the advisory council structure, OGOC roster, and guiding principles for council members. Clark also highlighted MRO's diversity initiative for organizational groups. He gave an overview of the RAC membership and thanked the past and current Chair and Vice Chair for their leadership. Clark touched on the RAC key responsibilities and noted the upcoming Annual Reliability Conference in May 2023.

#### 5. Consent Agenda

The RAC reviewed the consent agenda, which included draft minutes from the November 16, 2022 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 fourth quarter OGOC meeting on November 30, 2022. The RAC's 2022 accomplishments were highlighted. There was a small group breakout session during which the draft 2023 RAC work plan was reviewed. The group also discussed the Regional Risk Assessment (RRA) and determined focus areas for the RAC in 2023. Notable items included, bulk power modeling accuracy and expertise in modeling. The OGOC suggested that MRO staff be included on NERC Rep quarterly calls.

A RAC member suggested that the RRA be utilized when developing conference agendas and/or webinar topics to ensure alignment with the top risks in our region.

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

Reliability Advisory Council and RSTC member, John Stephens, provided a recap of the Reliability and Security Technical Committee (RSTC) meeting from December 6-7, 2022. Stephens reviewed the accomplishments the committee has achieved and noted the many completed items in his report. The RSTC has reviewed a draft Standard Authorization Request (SAR) for FAC-001 and FAC-002 presented by the NERC SPIDERWG. There was discussion around outreach efforts to promote the Reliability Guidelines approved by the RSTC. The next meeting is scheduled for March 22-23, 2023.

## **8. MRO Representatives on NERC Subgroups**

### *NERC Electric Gas Working Group (EGWG) – Jaimin Patel*

Patel reviewed the 2023-24 EGWG Work Plan, and the five primary work plan items. The EGWG has approved and posted the Design Basis for a Natural Gas Study White Paper. The next meeting is March 9, 2023.

### *NERC Inverter Based Resource Performance Subcommittee (IRPS) – David Brauch*

The IRPS had not met since the last RAC meeting. No update was provided.

### *NERC System Planning Impacts from DER Working Group (SPIDERWG) – Wayne Guttormson*

Guttormson provided a recap of the meeting held on February 1-2, 2023. Guttormson reviewed the general activities since the last meeting. He also highlighted several deliverables being submitted for RSTC action at the March 2023 meeting, including two SARs submitted for endorsement, a Reliability Guideline for approval, and a SAR for revisions to MOD-031 Standard for review. The RSTC approved a Distributed Battery Energy Storage White Paper. The next meeting is scheduled for May 2-3, 2023.

### *NERC System Protection and Control Working Group (SPCWG) – Lynn Schroeder*

Schroeder provided an update on the development of a position paper related to FERC Order 881 and the potential impact on PRC-023. In summary, the SPCWG believes that no changes to PRC-023-4 are necessary and that the systems do not need to be set to meet the margin required in PRC-023-4 for the Ambient Adjusted Rating (AAR). However, the SPCWG does recommend that entities review all protection system loadability for relays to which PRC-023-4 applies and any new lines that fall under the orders to ensure a sufficient margin above anticipated normal and emergency AAR. A final draft is scheduled for approval by the working group next month, followed by the RSTC in May.



Schroeder also noted several accomplishments, including PRC-019 Implementation Guidance posted for industry and cold weather recommendations addressed by SPCWG and provided to the RSTC.

*NERC Energy Reliability Assessment Task Force (ERATF) – Tom Whynot*

Whynot shared a draft white paper released in February 2023 by the ERATF entitled “Considerations for Performing an Energy Reliability Assessment” which was distributed to the RAC members for review. There is growing concern around fuel assurance in current energy assessments. The ERATF is introducing two standards (operational and planning) for energy assessments to evaluate capacity. It was noted that energy reliability planning is a topic the RAC is considering for a webinar. The next meeting is in person on March 21, 2023. Discussion ensued.

## **9. 2023 Work Plan Update**

*Action Item Review*

Chair Pursley reviewed the action items in the 2023 work plan. Updates were made accordingly. Discussion ensued.

*Upon a motion duly made and seconded, the RAC approved the 2023 work plan.*

*NERC Rep Guidance Document*

The RAC reviewed the guidance document drafted by MRO staff intended to be used as a guideline for the MRO sponsored NERC Representatives discussion meetings. The document will be distributed to the NERC Reps, RAC members and liaisons for further review via email.

*2023 Reliability Conference Update*

RAC member, Bryn Wilson, provided an update on the 2023 Reliability Conference scheduled for May 17, 2023 in St. Paul, Minnesota. There was discussion around the draft agenda.

## **10. Reliability Coordinator Updates**

*Midcontinent Independent System Operator (MISO)*

RAC member, Andy Witmeier, provided an oral report. Witmeier noted that last fall was unremarkable, and there are no reliability issues expected for the spring season. There were no issues during hurricane season. Winter was relatively uneventful except for the storm that occurred on Christmas Eve (Elliot). During Winter Storm Elliot, MISO lost generation due to the cold weather, and load unexpectedly peaked on Friday, December 23. MISO’s load forecast was off roughly five percent during Elliot. However, they were able to export power to others during the event using emergency generation. There is a NERC/FERC Joint Inquiry in progress.

*Saskatchewan Power Corporation (SPC)*

RAC member, Binod Shrestha, provided an oral report. Shrestha noted the summer outlook load forecast is 3,200 – 3,550 megawatts. Peak load is usually in July. There are scheduled generation outages during off-peak months. There are no gas or coal fuel supply issues. Wind capacity is expected to remain normal around ten percent of installed capacity. SaskPower is expected to meet operating reserve margins during peak and off-peak times.

*Southwest Power Pool (SPP)*

Scott Aclin, SPP, provided an oral report. Aclin reported that fall and winter were mild, but there were



potential coal supply issues in summer and fall. Since the railroads did not strike, the coal plants have returned to healthy supply levels. During Winter Storm Elliot, SPP declared two Energy Emergency Alerts (EEAs) Level 1 on December 23, 2023. The EEAs were preceded by a cold weather advisory on December 19, 2023. Drivers of the EEAs were generation unavailability, lack of fuel supply, and extreme cold weather outages. SPP's forecast missed load by 2-3 gigawatts in all timeframes during the event. Aclin also noted a summer workshop scheduled for May 11, 2023. Discussion ensued.

## **11. Planning Coordinator Updates**

### *Saskatchewan Power Corporation (SPC)*

RAC member, Binod Shrestha, provided an oral report. Shrestha highlighted a few activities around NERC standards. SPC participated in a joint study with Manitoba Hydro for PRC-006. A benchmark and supplemental assessment are due this year for TPL-007. SPC's anticipated load growth is forecasted to be about one percent. The five year outlook includes several gas/hydro generation projects, including 375 megawatts in wind power plants. The expectation is to add more wind and solar beyond five years. There is also a transmission project under construction between SPP and SPC – adding approximately 140 miles of lines. Shrestha noted a 20 megawatt battery energy storage project that will be operational in early 2024. Discussion ensued.

### *Manitoba Hydro (MH)*

RAC member, Nandaka Jayasekara, provided an oral report. Jayasekara noted the provincial peak load growth is around one percent per year for the next decade. Manitoba Hydro has 36 megawatts of solar PV distributed energy resources (DER), and modest solar growth is anticipated over the next five years. Jayasekara highlighted Manitoba Hydro's Long-Term Transmission Plan and shared the planned expenditures by region and investment category. Key interconnection projects that Manitoba Hydro has committed to were reviewed in addition to a few multi-regional projects not committed to yet. Jayasekara provided an overview of Manitoba Hydro's transmission assessment process.

Jayasekara shared an update on FERC Order 881 implementation plans and Manitoba Hydro's first Integrated Resource Plan (IRP) which is expected to be published in summer 2023. The IRP includes natural gas and electricity resources and infrastructure including generation, transmission, distribution and non-wires solutions.

## **12. MRO Regional Risk Assessment (RRA)**

MRO Principal Technical Advisor, Mark Tiemeier, provided an overview of the MRO 2023 Regional Risk Assessment (RRA). Tiemeier noted that the RRA was published on February 6, 2023 and highlighted the upcoming webinar on March 8, 2023. Tiemeier explained the purpose of the risk assessment tool and the reason MRO conducts the regional risk assessment every year. The infographic was also reviewed which recaps the MRO Reliability Risk Matrix risk rankings and key findings from the RRA. Tiemeier gave an overview of the top reliability risks to the MRO region. Discussion ensued.

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

There was nothing to report on behalf of the NERC Standards Review Forum (NSRF).



#### **14. Protective Relay Subgroup Update**

MRO Senior Systems Protection Engineer, Jake Bernhagen, provided an update on behalf of the Protective Relay Subgroup (PRS). Bernhagen highlighted items for the upcoming first quarter meeting scheduled for March 14, 2023. Jack Norris, NERC will be presenting on a new misoperations metric and Rich Bauer, NERC will present on FERC Order 881. Bernhagen also noted an ERO-wide misoperations workshop that NERC is planning to host in fall 2023.

#### **15. 2023 Meeting Dates**

Chair Pursley reviewed the 2023 meeting dates for the RAC, as well as the other councils and subgroups.

#### **16. RAC Member Roundtable**

Chair Pursley invited member participants to share other relevant industry observations. Topics discussed included, physical security threats to substations and supply chain issues. RAC member, Nandaka Jayasekara, noted that he has been selected for the NERC SAR Drafting Team for Project 2022-04 EMT Modeling. And a suggestion was made for MRO to include the target audience in event announcements when promoting outreach events.

#### **17. Other Business and Adjourn**

Having no further business to discuss, the meeting was adjourned at 3:02 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
Dick Pursley, Chair	Great River Energy
Andy Witmeier	MISO
Binod Shrestha	Saskatchewan Power Corporation
Bryn Wilson	Oklahoma Gas & Electric
Dallas Rowley	Oklahoma Gas & Electric
Dwayne Stradford	American Electric Power
Jason Weiers	Otter Tail Power Company
Jeremy Severson	Basin Electric Power Cooperative
John Stephens	City Utilities of Springfield Missouri
Nandaka Jayasekara	Manitoba Hydro
Ron Gunderson	Nebraska Public Power District
MRO Staff Present	
Name	Title
Bryan Clark	Director of Reliability Analysis
Rebecca Schneider	Reliability Analysis Administrator
Lisa Stellmaker	Executive Administrator
Mark Tiemeier	Principal Technical Advisor
Salva Andiappan	Principal Reliability Assessment Engineer
Jake Bernhagen	Senior Systems Protection Engineer
Cris Zimmerman	Manager of Outreach and Stakeholder Engagement
Steen Fjalstad	Director of Security
Lee Felter	Principal Security Engineer
Lauren Mcclary	Meeting Administrator



Joshua Hebert	Senior Compliance Auditor, O&P
<b>Other Attendees</b>	
<b>Name</b>	<b>Organization</b>
Wayne Guttormson	Saskatchewan Power Corporation
Jaimin Patel	Saskatchewan Power Corporation
Lynn Schroeder	Sunflower Electric Power Corporation
Tom Whynot	Manitoba Hydro
John Roemen	Western Area Power Administration
Scott Aclin	Southwest Power Pool
Daryl Maxwell	Manitoba Hydro
Andrew Coffelt	Kansas City Board of Public Utilities
Jessica Burdette	MN Department of Commerce
Richard Bou	Xcel Energy
Shawna Satterwhite	Oklahoma Gas & Electric
Austin Towne	Western Farmers Electric Cooperative
Tina Adams	Western Farmers Electric Cooperative
Daniel Moore	Western Farmers Electric Cooperative
Jeremy Harris	Evergy
Mary Agnes Nimis	FERC
Neil Smith	Corn Belt Power Cooperative
Dan Weger	Evergy
Nazra Gladu	Manitoba Hydro