

**NWPP Operating Committee
November 1, 2023 – 1300-1700 Pacific Time**

Agenda

Approval Items -*

INTRODUCTIONS

1. Introductions, Arrangements, and Agenda Changes Chris McDarment (CHPD), OC Chair
 - a. Quorum (50% of OC Membership and requires 2/3 majority of established quorum)
 - The meeting was called to order at 1300.
 - A quorum was established with 22 out of 29 members present at start of meeting.
 - b. Anti-Trust Compliance Statement Ryan Roy, WPP
 - Ryan Roy highlighted the NWPP Anti-Trust Compliance Statement which as it applies to members of the NWPP Membership Agreement.
 - The meeting location, exit, evacuation routes and the location of restrooms were discussed. Emergency assignments for the meeting were assigned, as follows:
 - Harlan Tallman – 911
 - Jessica Zamonis – meeting EMS
 - Justin Cochran - AED

Meeting Attendance:

Kevin Stinson, AESO | AESO RC

Rich Hydzik, AVA

Ty Kristensen, AVRN

Wei Shao, BANC

Dave Brown, BPA

Chris McDarment, CHPD | OC Chair

Jeff Heminger, DOPD | OC Vice Chair

Shannon Price, Fortis BC

Mike Stussy, GPCD

Josh Harris, IPC

Marcus Brown, BHE MT GWA WWA

Ansley Kulseng-Hansen, NWMT

Jonathan Cox, NWMT

Sam Ashmore, NVE

Rahn Sorenson, NVE

Kathee Downey, PAC

Bob Frost, PGE

Jan Grammar, PGE

Raj Hundal, PWX

Richard McLean, Excel Energy PSCO

Thomas Bagnell, PSE

Evan Sorrell, PSE

Harley Johnson, TWPR

Matt Weiss, TSGT

Kerri Schlacter, TSGT

Adam Labuga, TID

Jim Emmon, TID

Chris Bultsma, WAPA-WAUW

Guests:

CJ Ingersoll, GRID
Dustin Herrick, PGE
Kiel Lyons, NERC
Bryan Wolosnick BC RC

Derek Hawkins, SPP RC
Tim Beach, RC West
Greg Park, STD Chair

WPP Staff:

Justin Cochran
ChaRee DiFabio
Ben Hutchins
Chelsea Loomis
Ryan Roy

Keith Schreiner
Rebecca Sexton
Harlan Tallman
Jessica Zamonis

ADMINISTRATION

2. Western Power Pool – Corporate Update

Ryan Roy

a. finances

i. NWPP OC Good Faith Estimate – YTD Overview 2023-2024

- The OC approved the distribution of the estimate to actuals updates by email. The independent board has put a finance committee together to help get invoices out more timely manner. This is a very high priority for the Board. The close out should be available before the next meeting.

Action Item:

WPP to provide status update via email to OC.

b. Staffing

- Power Pool Staffing was discussed regarding a replacement for Greg Park and the ongoing negotiations with a qualified candidate. Ryan discussed the difficulties in a competitive market and the need to find someone with a broad range of experience in multiple areas of interest to the Power Pool, the OC, the RSG and the WFRSG. There is a need to find someone with a lot of relevant experience and who can be a cultural fit with the Power Pool Staff. The pool staff has gone through initial interviews and is looking to make an offer and have someone on board within the next two weeks.
- Other positions were discussed regarding hiring a Junior Accountant, which will help with invoicing, and finding another two positions as part of onboarding the new SRSB members. One position will assist Harlan Tallman and Justin Cochran. There is another position for a software developer to pick up some of the workload that David Pennington has been responsible for.

c. Town Hall Updates

Rebecca Sexton

- Rebecca led a discussion on the WPP strategic engagement and planning highlights. The key points are below:
 - Three Phases of Planning
 - 1. Information gathering – The new board and staff are on same page about different things affecting the industry.
 - 2. Idea Generation –
 - Stake holder Engagement from survey (SWOT Analysis) – outreach to all groups where services are provided
 - Town Halls –Portland, Bellevue Spokane, and Phoenix
 - Review of Survey Results
 - Longstanding programs valuable (OC, RSGC, TPC, CG) and work to retain
 - Expectations for how and where we show up
 - Adequate Staff for a quick turn around
 - Common Concerns for future – RTO/Market Expansion, Changing Grid Resources related Load Growth and etc.
 - 3. Draft Strategic Plan in new year 2024

OC COMMITTEE ACTIVITIES

3. Winter Storm Elliott Cold Weather Report

Kiel Lyons, NERC

- A copy of the presentation could not be included in the meeting notes due to NERC's security classification restrictions on distribution, so a link to the final published report has been included here: [Winter Storm Elliott Report: Inquiry into Bulk-Power System Operations During December 2022 | Federal Energy Regulatory Commission \(ferc.gov\)](#)

Key take-aways from the follow-up discussion included:

- 1) Total firm load shed exceeding 5,000 MW during cold weather of 12/23 – 12/24, 2022. 90,500 MW of unplanned outages, 13% of US's portion of eastern interconnection resources. 1702 units affected with over 3500 outages/derates/fails to start. High transmission flows resulted in constraints but were mitigated by redispatch. The frequency dropped to 59.938 Hz.
- 2) 55% of the generating unit outages, derates and failures to start were caused by:
 - a. Freezing issues (31%)
 - b. Fuel issues (24%)
 - i. Natural Gas Fuel Issues were 20% of all causes and other fuels were 4%
 - c. Generator Owners indicated 41% were caused by Mechanical/Electrical Issues, but the team found them to be correlated with subfreezing temperatures.

- d. Of the generating unit outages, derates and failures to start were attributed to having “Freezing Issues.” Nearly 80% of the outages occurred at ambient temperatures that were above their documented minimum operating temperatures.
- e. Outages that were attributed to having Mechanical/Electrical Issues increased with decreasing ambient temperatures.
- 3) Discussion occurred on how the minimum temperatures were derived since the ambient temperature was above the reported minimum temperature capability of 80%.
- 4) Discussion continued regarding better forecasting to reduce the need for load shedding.
- 5) There was discussion on the temperature being above what was forecasted, but the load being much higher due to load profile changes from electrification and more resistance heat loads.

4. RC Updates (Times and order will vary on availability of presenters)

a. SPP RC

Derek Hawkins, SPP

- Key discussion:
 - RC Customer Meetings were held October 10-11, 2023
 - Order 818
 - Winter Readiness
 - Increase awareness of grid conditions throughout the footprint
 - RC Tools to promote better communication with customers
 - Congestion Management Next steps
 - ECC overview – how would this look in the west
 - Continued interest from RC customers on next steps for interconnection-wide congestion management
 - What does that look like with expanding markets?
 - How can this evolve in the West? The history of the East was compared and contrasted with the West.
 - Western focus training opportunities
 - System Operator Conferences
 - RTO West Expansion
 - RC Interactions in West – how does this look
 - Go Live in 2026
 - Seams coordination
 - ECC task force is going to conduct outreach
 - SPP has new RCs in training
 - There is a new manager for System Operations in West

- SPP Non-RC Related – Western Energy Imbalance Service market (WEIS) Participant Relations continues to work to mitigate issues that are identified.

b. BCRC

Bryan Wolosnick, BCRC

- Key Discussion:
 - There is a new BC RC Manager – Bryan Wolosnick effective 10/2/2023
 - There is a transitional staffing situation at the RC due to one operator leaving and retirements –
 - Currently operating with 5 operators and a 6-person rotation
 - There are offers out for two new operators and two new engineers (responsible for next day planning)
 - Adding 2 new Transmission Engineers
 - EOP-006 Annual Restoration Training was discussed
 - Operations
 - Mica Generation Station has one unit out of service
 - Coming out of summer operations into winter there was not a lot of planned work
 - The loss of Mica is the worse case scenario right now
 - The Site C generation, on the Peace River, should be online sometime in Mid-March 2024.
 - There is new RAS and protection being implemented as part of this project

c. AESO

Kevin Stinson, AESO

- Kevin provided status update via PowerPoint presentation covering the following areas:
 - Operations Update/Events
 - EEAs 8/28 & 8/29
 - Procurement of Frequency Response – 50 MW/0.1Hz
 - 2023 Restoration Training
 - Island Outage Event in Oct.
 - Generation Mix
 - Increases to both Solar and Wind by 532 MWs – 28 % of installed capacity
 - Fall/Winter Outlook
- There is significant snow in Calgary already this fall. Alberta was islanded from October 2 to 7, 2023. 532MWs of new wind since the last meeting, and 158 MWs of new solar have been added. Batteries have been installed to use during islanding but are available to be dispatched when not islanded.

d. RC West

Tim Beach, RC West

- Key Discussion:
 - A peak load of 126.3 GWs with 164.2 GWs of resources was experienced on August 16, 2023.
 - There were 25 EEAs, 7 watches, 12 EEA 1, no EEA 2, 6 EEA 3s so far, down from 42 EEAs in 2022.
 - One BA causes a majority of EEAs because it must be in an EEA before it can get reserves, and has a higher reserve requirement (~11%)
 - The solar eclipse on October 14th was a non-event. It did cause some oscillation events and frequency deviations, but they were quickly resolved.
 - System oscillations are being experienced due to batteries being utilized for AGC Operations. These have been mitigated by removing the batteries from service or turning off AGC. It is difficult to tune these batteries for the purpose of AGC.
 - Frequency response mitigation documentation is being drafted.
 - The Voltage SOL Task Force is working to reduce the number of SOL exceedances. There has been a 70% decrease due to changes in the methodology.
 - The RC is still working on seams issues regarding Path 80 Flow throughout the year. These have not been able to be fully resolved yet.
 - The RC is up to full staff, two off-shift staff are working on RTCA updates.
 - Current challenges
 - Seams issues – ECC and Market to Market issues
 - South to North Flow Issues on COI – working with BPA to address these issues including a review of IROLs.
 - Seasonal Summer Readiness Assessments
 - Seasonal Changes due to longer summers and peak weather later in the year. Seasonal shoulders practices need to be looked at.
 - Solar operations practices and RTCA violations

5. Transmission Planning Committee/Transmission Services – Updates

Chelsea Loomis & Ben Hutchins, WPP

- The TPC is always looking for opportunities to facilitate coordination between Transmission Planning and Operations.
- FERC 881 – Managing Transmission Line Ratings (Ambient Air Temperature Ratings) [E-1-RM20-16-000 | Federal Energy Regulatory Commission \(ferc.gov\)](#) was discussed with its potential impacts to operations. The process to rate overhead conductors was discussed.
 - Ambient Air Rating Adjustments (AAR) are due to be implemented by July 2025.

- These ratings have Impacts to Real-time Assessments and can result in potential violations.
 - Overhead Wire Rating equations show there are many variables to be considered when addressing these ratings. They must be calculated at least each hour, reflect an up-to-date forecast of ambient air temperatures across a relevant time period. They need to consider a lack of solar heating at night with local sunset/sunrise times updated at least monthly, be calculated for normal and emergency ratings, and consider conductor and equipment limits.
 - BPA is not going to fully comply with all parts of 881, they will adjust for temperature but not solar (day/night). Rather than derate, they will take line out of service.
- Additional updates from the TPC included:
 - Transmission Planning Committee reported that they are continuing with the Engineers Forum Series with a November 28th discussion with the AESO and their conversion from Coal to Natural Gas.
 - In January the TPC will be working with Rocky Mountain Institute about a presentation on modeling and system growth.
 - The NorthernGrid group has developed a training series using WPP services. These will be available to the public.
 - The Western Transmission Expansion Coalition is planning a planning effort that will go beyond just compliance planning.
- There were no Transmission Services updates.

6. Reporting ACE Standard Drafting Team Update (3:15pm)

Greg Park, SDT Chair

- Greg reported that the STD met on 10/31 to review the voting and comments from the polls regarding new defined terms: ACE Diversity Interchange; Inadvertent Interchange Management (corollary to ATEC); and, Reporting Area Control Error. There can be up to 36 new terms from this effort. Only terms regarding ACE are being addressed.
- The recently posted defined terms passed industry voting with greater than 90% on the first ballot. A final ballot will go out in a week or two. Staff would like to conclude this effort by the end of the year.
- The final ballot process is to be very short (10 days) and is intended to give entities an opportunity to change their votes. Board of Director's approval should be completed by the end of the year.

7. CPS1 Trends at the Interconnection Level (3:30 pm)

Greg Park, NERC RS Chair

- The CPS1 control is becoming more difficult in the Western Interconnection based on the data reviewed so far. WECC is seeing a consistent downward trend in performance.

- The west (WECC) has been good at voluntarily submitting data to NERC.
 - More entities seem to be struggling with CPS1 on a monthly basis.
 - The M6 metric (3-hour ramping) is an indicative metric but not a formal metric at this time.
 - Entity implementation of new EMS is a common reason for changing CPS1 scores.
 - The lowest 5 performing BAs continue to head on a downward trend.
 - The industry is trying to identify control performance metrics for the interconnection. This is not an exact science, and it does not take into account ATEC).
 - The NERC Reliability Subcommittee (RS) is collecting data and determining if the reported methodology is still viable.
 - Greg stated that the RS met in Charleston last week, and it set up a strike team to look at battery integration at the BA and IBR level.
 - The guidance on batteries, and how they provide (if at all) primary frequency response, is vague and almost nonexistent. A group is to be put together to develop operating guidance.
 - Calculating CPS1 scores for every hour, on a monthly basis, revealed that there is a decrease in performance during the summer months (solar ramp hours) and a decrease in overall performance at the interconnection levels.
8. Operations Training Subcommittee – Status Update Keith Schreiner & Jessica Zamonis, WPP
- NorthernGRID’s module, discussed by Chelsea Loomis under the Transmission Planning Committee Updates made with WPP Staff, can be posted on Source.Training if desired. This will have limited value for system operators, but may have value to member operational and planning staff.
 - a. Metrics Update
 - The OTS Q3 metrics were discussed included the courses delivered, CEH delivered to certified users, courses per person, and CEH per NERC Certification. The top 5 courses were:
 - Emergency Preparedness;
 - Reserve Sharing Essentials;
 - Reserve Sharing QE;
 - 2023 RSG EEA Update; and,
 - Space Weather as always.
 - The top 5 courses are mostly due to the SRSG Integration into RSGC.
 - There are 3 Subscription based users; CAISO, Onward and Redding Electric.
 - b. *Access Policy Document
 - The Access Policy Document was distributed for review as part of the agenda.

- **Motion: Bob Frost made a motion, and it was seconded by Thomas Bagnell to approve the Access Policy Document as written.**
 - There was a question asked about whether SMUD employees will continue to have access to the OTS because SMUD provides BA services for BANC. Since SMUD is the Member of the committee, this policy documents what is currently being done and will not change anything.
 - Approved by unanimous consent, with no abstentions.

- c. **Training Program Update**
 - Keith would like to add two employees to the creative team in 2024-2025, voted on by the OTS (unanimously minus entities not participating) although they don't have a budget.
 - Associate trainer
 - Junior editor
 - Simulation training is a top priority for the training/creative team and the impact will be approximate increase to costs would be ~\$350k which equates to \$7k-\$8k per member. Discussion followed.
 - The OC will be asked to approve this item at the next meeting.

9. BAL-003 Update

Rich Hydzik, AVA

- The last ballot on BAL-003 didn't pass, the team believes there was some confusion about the wording in the standard by the industry. The STD is coming back together to address this confusion before the end of year. Ideally, the measurement criteria will change, and a new ballot should be out by sometime in Q1 of 2024.
- The STD added a governor requirement, a consequential setting requirement, and an operational planning requirement for operational frequency reserves.
- Rich suggested that one thing that is needed is a measure that allows for frequency response to be based on an average that can be changed to allow BA footprints to change in the mid-year.

10. RSTC Update

Rich Hydzik, AVA

- This discussion was tabled due to power failure experienced by the presenter.

MISCELLANEOUS

11. Meeting Notes –

McDarmont

- a. **August 2, 2023 – *Accept by Consensus**
 - There was a general discussion on Robert's Rules of Order and making motions.
 - Motion: Thomas Bagnell, PSE seconded Ty Kristenson, AVRN motion to approve the August 2, 2023 meeting notes with revisions as provided. – The motion was passed unanimously.

12. Current Operations

All

- There was discussion on an RC West operating instruction to NorthWestern to open Path 80. Path 18 bumped against SOLs as a result of Path 80 being open. At the time NWE felt that opening Path 80 could cause more issues, but in the end, they felt that it was the right decision. This is the second time WAPA had gone through all the instructions for managing path 80 without relief and they suggested that the Path 80 guidance may need to be revised.

13. Review of Action Items Decided at this Meeting

McDarment

1. The past action items were reviewed. (See action item list posted on the website)
2. New Action:
 - a. Greg Park to provide WWP staff the CPS1 Presentation
 - b. WPP to add a voting agenda item on OC agenda for two new training staff as recommended
 - c. Ryan Roy to provide end of year estimate to actual and YTD update by email for review by the Operating Committee
 - d. Chelsea Loomis to provide date for the next Engineers Forum to Ryan/ChaRee for the notes
 - e. Jessica Zamonis/Keith Schreiner – put NorthernGrid series of videos on Source.Training
 - f. Greg Park will be requested to share the CPS1 metric report and the Tableau workbook with WPP to be distributed to the OC

14. Future Meetings

McDarment

- e. Future Meeting Dates
 - i. February 7, 2024
 - ii. May 1, 2024
 - iii. August 7, 2024
 - iv. November 6, 2024
- The November 6th meeting will be the day after the election and the committee was asked if they had any concerns about coming to Portland for the November meeting. There were no concerns voiced.