

Minutes of the Meeting

Q2 2022 RSSC: Meeting #55

Meeting date: 08/25/2022

Meeting time: 09:30 a.m.

Meeting location: IESO Hosted MS Teams

Chair/Sponsor: Scott Berry/Darren Matsugu

Scribe: Harish Vijay Kumar

Invitees	Representing	Attendance Status Attended, Regrets, Teleconference
Mike Beuthling	Hydro One	Teleconference - MS Teams
Mark Townsend	Hydro One	Teleconference - MS Teams
Hassan Vahed Kalankesh	Hydro One	Teleconference - MS Teams
Helen Lainis	IESO	Teleconference - MS Teams
Kurtis Chong	IESO	Teleconference - MS Teams
Shahid Khan	Northland Power	Teleconference - MS Teams
Paul Malozewski	Hydro One	Teleconference - MS Teams
Sheraz Majid	Hydro One	Teleconference - MS Teams
Chris Muoio	IESO	Teleconference - MS Teams
Catherine Ethier	OEB	Teleconference - MS Teams
Dave Kwan	OPG	Teleconference - MS Teams
Chris Moir	OPG	Teleconference - MS Teams
Vladislav Urukov	OPG	Teleconference - MS Teams
Kevin Wozniak	Hydro One	Teleconference - MS Teams
Norm Dang	IESO	Teleconference - MS Teams

Invitees	Representing	Attendance Status Attended, Regrets, Teleconference
Dhvani Shah	Hydro One	Teleconference - MS Teams
Sylvian Moore	Boralex	Teleconference - MS Teams
Abbas Munir	Bruce Power	Teleconference - MS Teams
Tabasum Bandey	Bruce Power	Teleconference - MS Teams
Dahir Mohamed Haji	Bruce Power	Teleconference - MS Teams
Colin Elwood	Bruce Power	Teleconference - MS Teams
Bendong Sun	Bruce Power	Teleconference - MS Teams
Paul Barrette	Northland Power	Teleconference - MS Teams
Mernaz Malozewski	Guidehouse	Teleconference - MS Teams
Nayab Saeed	OPG	Teleconference - MS Teams
Aditya Menon	Hydro One	Teleconference - MS Teams
Sanju Samuel	TransAlta	Teleconference - MS Teams
Georgina Newell	TransAlta	Teleconference - MS Teams
Ashley Scheelar	TransAlta	Teleconference - MS Teams
Shahid Khan	Northland Power	Teleconference - MS Teams
Sarbjee Bains	Northland Power	Teleconference - MS Teams
Shannon Ferdinand	Capital Power	Teleconference - MS Teams
Hassib El murdea	OPG	Teleconference - MS Teams
Kevin Samuel	FPL	Teleconference - MS Teams
Darren Matsugu	IESO	Teleconference - MS Teams
Cristian Dragnea	IESO	Teleconference - MS Teams
John Nguyen	IESO	Teleconference - MS Teams

Invitees	Representing	Attendance Status Attended, Regrets, Teleconference
John Antonakos	IESO	Teleconference - MS Teams
Keven Van Velzen	BBA	Teleconference - MS Teams

Agenda Item 1: Welcome and Introductions

Scott Berry kicked off the 55th RSSC meeting at 9:30 AM welcoming participants. Scott requested new RSSC participants to introduce themselves. He thanked Sean Lagan for chairing the previous RSSC meetings and congratulated him on his new role. Scott then shared a safety message about “back-to-school” season and situational awareness.

Agenda Item 2: Administrative Items

The agenda for the 55th RSSC meeting was reviewed by Scott Berry. Hasseb El Murdea and Paul Malozewski moved to adopt the agenda and the agenda was adopted as constructed.

The minutes of the previous RSSC meeting (54th) were reviewed. Dave Kwan and Chris Moore moved to adopt the meeting minutes; these were accepted as drafted.

Scott Berry provided an update on the open action items (listed below).

Action Item Summary

ID	Date	Action	Status	Comments
Q1-2022-01	April 14, 2022	Update the latest version of the NERC standards mapping document on the IESO website.	Closed	Standards mapping document is now up-to-date on the webpage.
Q1-2022-02	April 14, 2022	Update status of the standards under Cold weather project	Closed	Helen was scheduled to provide an update on the cold weather standards under agenda item #4.

Agenda Item 3: CIP standards Development Update

Norm Dang delivered the CIP Standards Development Update

Active NERC SDTs

Project 2016-02 CIP Mods SDT - made changes to CIP-002 and CIP-013.

Posted ballot 4 of the CIP V5 VTAG issues.

Project 2020-04 CIP-012 Mods SDT - proposed changes to CIP-012.

On availability of communication links between control centers. Failed ballot of Draft 2 in Jan 2022.

Project 2020-03 SDT Supply Chain Low Impact SDT

Proposed changes associated with remote vendor access to Low Impact BES Cyber Systems. Passed ballot of Draft 3.

Kurtis enquired if there are any methods to identify malicious communications, Norm provided information about the FERC NOPR that specified detection of malicious communication in entity networks for low impact facilities.

Project 2021-03 SDT TOCC – made changes to CIP-002

Changes to address Transmission Owner Control Centres (TOCC) that perform function of a Transmission Operator. NERC currently has studies underway to determine the impact of any proposed TOCC changes.

Dave Kwan from OPG clarified the need for adding Electronic access control (EACMS), Physical access control systems (PACS), and Protected Cyber Assets (PCA) in CIP-002 and that if an entity missed to fulfil the compliance of any of these definitions then the entity is just penalized for CIP-002 and not the entire set of standards and Norm confirmed that will be the case.

New CIP Requirements

CIP-012-1 changes to address encryption of data communications for real-time monitoring and real-time assessment data, came into effect July 1, 2022.

CIP-013-2, CIP-005-7 and CIP-010-4 – Standards to address supply chain requirements for PACS, EACMS: New versions come into effect Oct 1, 2022.

CIP-004-7 and CIP-011-3 – BES cybersecurity information (BCSI) in the cloud: New versions come into effect on Jan 1, 2024

CIP-003-X Vendor electronic remote access controls for Low Impact BCS (effective date: TBD)

Agenda Item 4: O&P Standards Development

Helen Lainis delivered the O&P Standards Development update.

Project 2021-07, Extreme Cold weather grid operations, preparedness and coordination standards – EOP-011-3 and EOP-012-1

- Second posting for Draft 2 of EOP-012-1 is due September 1, 2022.
- EOP-011-3 passed with 70% industry support.
- Phase 1 includes proposed requirements to address the recommendations from the FERC-NERC Joint Inquiry Report:
 - o EOP-012-1- New requirements 6 and 7, which mentions a Generator Operator (GO) corrective action plan.

- EOP-012-1- New requirement 5, revising GO training to include annual periodicity.
- EOP-012-1- New requirements 1,2 & 7, GO operation to specific ambient temperature and weather conditions (retrofit and new build).
- EOP-011-3- revised requirements 1.2.5 and 2.2.81d – Transmission Owner, Transmission operator and Distribution provider separation of circuits used for manual load shed.

Sarbjee Bains of Northland power enquired about the change to R1 in EOP-012-1 that requires the GOP to provide capability to operate for not less than 12 continuous hours at the extreme cold weather. He wanted to know if the IESO would need a capability test or if the GOP could simply declare that information. Helen mentioned that they might have to prove their capability to NPCC. Sarbjee then enquired about how temperature shift will be taken into account for this standard and how IESO will account for that. Helen mentioned that she will follow-up on this matter with the standards drafting team.

Sarbjee also enquired about equipments that are not located within enclosures and their appropriate mitigation strategies for cold weather. He suggested that having a guide to these mitigation activities will be helpful, Helen responded that she will push for a guideline document with the standards drafting team.

Kurtis enquired about the implementation timeline for these standards and Helen mentioned that it will be 5 years. Kurtis then mentioned that if any of the Market Participants think that these standards are not applicable for Ontario region, IESO can that back to the standards drafting team. Dave Kwan then requested for clarification with reference to Kurtis' comment and ask if we would want to remand the standard through the OEB process. Kurtis indicated that since the standards are at the drafting phase, we can put forward our comments to influence the direction of the drafting.

Sarbjee enquired about using past operational data of the units to prove compliance with the upcoming requirements and Helen said that could possibly be used to prove compliance to some requirements. He further enquired if previous operational data could be used for all requirements. Helen mentioned that she will also take those questions back to the standards drafting team.

Project 2017-01, Modifications to BAL-003 Phase II, Frequency response and Frequency Bias setting

- Formal comment period and initial ballots due on September 7th, 2022.
- A new requirement is proposed (R5), which states that the Balancing Authority (BA) must have an operating process as a part of its operating plan to address the needed frequency response reserves.
- New proposed requirement (R6) requires that each generator must operate with its frequency responsive controls in service unless the BA has been notified that its governor is out-of-service.
- New proposed requirement (R7) requires that the Generator Owner establish settings for the governor droop and dead-band that do not exceed maximum thresholds, or otherwise notify the BA if this is not the case.

David Kwan from OPG enquired about requirement (R5) and Helen mentioned that it is more appropriate for IESO to do an assessment of its frequency response reserves on a seasonal basis rather than on a day-ahead cycle.

Project 2020-02, Modifications to PRC-024-3, Generator ride-through frequency and voltage protectio settings for generating resource

- Comment period for SAR concluded July 14, 2022.
- SAR is meant to retire PRC-024-3 and replace it with a performance-based ride-through standard that ensures generators remain connected to the BPS during system disturbances.
- Specifically focuses on the generator protection and control systems that can result in the reduction or disconnection of generating resources during these events and ensures protection or controls that fail to ride through system events are analyzed, addressed with a corrective action plan (if possible), and reported to necessary entities for situational awareness.

Project 2021-04, Modifications to PRC-002-3, Disturbance monitoring and reporting requirements

- Initial Ballot for Draft 1 concluded July 25, 2022.
- Goal is to clarify the necessary notifications in Requirement R1, Part 1.2 relative to Fault Recording (FR) data, and clearly identify the BES Element owners that need to have FR data for transformers and transmission lines with the associated identified bus.

Project 2020-06, MOD-026-2, Verification of Dynamic models and data for BES-connected facilities

- Initial ballot for draft 1 concluded on July 6, 2022. Did not pass.
- MOD-026 and MOD-027 have been merged.
- TP to provide clear requirements and processes (R1)
 - Acceptance criteria, types of models, format, etc.
 - Process for submittal.
- EMT Model requirements (R6)
 - Provisions for legacy equipment
 - More detailed package of information required
 - Verify documentation with model
 - Validate with testing (OEM device testing & field test)
- TP reviews in alignment with developed acceptance criteria.
- Update model required if impact to dynamic performance.
- Synchronous condenser, FACTS devices, HVDC Facilities.

Agenda Item 5: NERC Standards Implementation Roadmap

Scott Berry delivered the NERC Standards Implementation Roadmap

Scott gave a brief overview of the updated standards Roadmap, which now emphasizes the implementation dates of the standards. He indicated the Roadmap will be posted online for the participants after the meeting.

Agenda Item 6: MACD Update (Self Certifications, compliance assessments)

Cristian Dragnea delivered the MACD Update on Self-Certifications

Cristian mentioned that MACD has been focusing on a backlog of pending compliance assessments, and had decided to not issue any self-certification requests to MPs for the rest of the year.

Cristian also mentioned that they had made progress with tackling the backlog. He also indicated that some minor re-org changes had taken place within MACD. He mentioned that following the re-organization, MACD includes a new Market Monitoring & Data Analytics group; an Expedited Case Resolution group that deals with market issues that do not cause any significant reliability issues; and finally the Case Investigations group that deals with reliability and market issues.

Agenda Item 7: OPSRP Update

John Antonakos delivered the OPSRP Update

The latest version of the Ontario Power System Restoration Plan (OPSRP) was updated on December 1, 2021 and posted on the IESO website. The next revision of the OPSRP will be completed and issued by December 2022.

NPCC has begun its triennial review of Directory #8. TFCO is preparing feedback on comments that have been received and is aiming to complete this work by end of October this year.

The quarterly system restoration workshops held by the IESO will continue to take place online. The schedule for the remaining restoration workshops in 2022 is provided below.

- Workshop 3 – September 15th, 2022
- Workshop 4 – November 18th, 2022

John mentioned that there has been an update to the workshop registration process. He offered to send a registration link to anyone who expressed interest in participating.

Shahid Khan from Northland power enquired whether the 2023 workshops will be conducted online or in-person. John mentioned that it is not clear at the moment and most likely two workshops will be online and the other two will be in-person.

Agenda Item 8: Incoming revisions to UFLS Program

Chris Muoio delivered the incoming revisions to the UFLS program

Chris gave a brief overview of the UFLS program, its goal and participants; current challenges and recent program enhancements; and key milestone dates for 2022 (see below).

- Stakeholder engagement webinar: April 21, 2022;
- Baseline comment period end date: April 29, 2022;
- UFLS survey notification issue date: June 30, 2022;
- UFLS survey date: July 19, 2022; and
- Survey due date: September 16, 2022.

The proposed enhancements to the program include:

- LDCs who have limited visibility and control over UFLS relays based on legacy agreements with the province's main transmitter shall no longer be required to receive and submit Form 1719 going forward. The transmitter will be providing that information on their behalf.
- These LDCs will receive Form 113, which requests MPs to provide information on their manual (rotational) load-shedding plans, which would allow the IESO to identify overlaps with feeders connected to the MP's UFLS relays.
- Form 1719 now includes a field for MPs to indicate whether feeders tripped by underfrequency relays are also included in their organization's manual load shedding plans.
- Form 1719 has also been revised for improved clarity. IESO has provided a comprehensive guide to completing the survey forms.

Kurtis commented about Helen's presentation on cold weather standards which mentioned about overlap between manual and automatic load shedding, IESO will do that assessment based on the survey results and will reach out to the market participants based on the results.

Catherine Ethier from OEB enquired on where she can find the UFLS list of participants. Kurtis mentioned that she can send an email to ORCP mailbox to get more information.

Agenda Item 9: Lessons Learned and NERC Alerts

Harish Vijay Kumar delivered the Lessons Learned and NERC Alerts published by NERC since the last RSSC meeting. NERC posted eight lessons learned and one NERC Alert since the last RSSC meeting.

Lessons learned

- Distributed Energy Resource performance characteristics during a disturbance
- Islanding and insufficient primary frequency response resulted in unintended Under Frequency Load Shedding
- Model data error impacts state estimator and real-time contingency analysis results
- Substation flooding events highlight potential design deficiencies
- Unintended consequences of altering protection system wiring to accommodate failing equipment

- Intermittent network connection causes EMS disruption
- Forecasted high wind speed
- Tower climber incident

NERC Alerts

- Mitsubishi Transformer test data falsification

Agenda Item 10: Closing Remarks

Scott Berry invited Market Participants to share topics of their interest, which they would like to discuss in the next RSSC meeting within next month.

Adjournment

The meeting schedule for meeting 3 was provided to the Committee members discussed and agreed on a date for meeting #3 of 2022.

The IESO will issue MS Teams invitations for meeting #3 of 2022, which will be held on December 12th.

The meeting adjourned at 11:39 AM.

Action Items at Completion of 2022 RSSC Q1 Meeting

ID	Date	Asignee	Action	Status	Comments
Q2-2022-01	25/08/2022	Helen	Clarify with the standards drafting team on how temparture swing will be incorporated into the cold weather standards	Open	
Q2-2022-02	25/08/2022	Helen	To confirm if the use of previous operational data will be sufficient evidence to prove compliance to all requirements in the modified cold weather standards	Open	