

Reliability Standards Standing Committee (RSSC)

Meeting Minutes – 2019 Q4 RSSC Meeting #47

Date: March 5, 2020	Time: 9:30am – 3:00 pm
Location:	IESO H.O., 120 Adelaide St. West, Suite 1600, Toronto
Meeting Sponsor:	Tam Wagner
Meeting Chair and Facilitator:	Scott Berry
Scribe:	Sean Lagan

Meeting Objectives: To update members regarding IESO's on-going activities in the areas of reliability standards development, compliance monitoring and regulatory affairs and to solicit stakeholder feedback.

Action required: Attendees are asked to download and review meeting materials posted on the [RSSC Webpage](#) prior to the meeting.

1. Welcome and Introductions

Scott welcomed guests to what is the 48th meeting of the committee, thanked attendees, and provided a safety moment.

Note: There were technical difficulties establishing the WebEx connection.

2. Administrative Issues

Attendance was taken (but is no longer published with the minutes).

Those who attended on phone were asked to provide confirmation to Sean Lagan (sean.lagan@ieso.ca) to be recorded.

- a. The agenda was reviewed.
Item 13 was modified as Adam Tschirhart was unable to attend the meeting, Scott Berry will provide a brief update.
The agenda was accepted as final.

- b. The minutes of the RSSC Q4 meeting were reviewed by exception.

The minutes were approved as final and will be updated on the RSSC webpage.

- c. Open action items from the RSSC Committee were reviewed.

Updates from the 2019 Q4 meeting have been highlighted below.

**New action items from the 2020 Q1 meeting are added in the next meeting section of the document.

RSSC Open Action Items as of the end of Q4 2019 Meeting				
Action Item ID	Action Item	Status update Q4 Meeting Status Update is highlighted Historical updates remain below for context.	Status	Assigned To
2019-04-1	MACD to look at aligning MP response time to audit notification from 90 days to NPCC's 120 days	This is something MACD will provide an update for the Q1 meeting.	Open	Cristian Dragnea
2019-02-01	Revised RSSC Terms of reference	The item will carry forward to the Q1 meeting where the drafted changes will be proposed for approval.	Open	S. Berry
2019-01-01	RAS and SPS Discussion: The IESO and Hydro One have discussed that the definition of RAS accounts for Type 1 and 2 SPS, but Type 3 still lacks clarity. Low impact RAS are in the category of Type 3. SPS that do not have BES impact must also be considered. H1 and IESO are working to come to an agreement and will eventually take these conversations to NPCC. The IESO to provide an update on this at next RSSC.	The IESO expects to have an update at the Q1 meeting as they are still awaiting confirmation from NPCC.	Open	H. Lainis

- d. Roster Updates since Q4 meeting.

Action	Name	Company
Add	Tabasum Bandey	Bruce Power

3. CIP Standards Update

Rob Antonishen provided the CIP Standards Updates on CIP developments within NPCC and NERC.

Key updates included;

The current Ongoing projects impacting CIP Standards are;

Project 2016-02 – CIP Modifications

Project 2019-02 – BCSI Access Management

Project 2019-03 – Cyber Security Supply Chain Risks

In order to prevent confusion due to the large number of CIP Standards being changed as a result of these projects, Rob provided a breakdown of what projects will modify each standard:

Project 2019-03 SDT (Supply Chain EACMS/ PACS) will be making changes to CIP-005-6, CIP-010-3 and CIP-013-1 (leaving EACMS). This project has priority due to a FERC submission deadline of Oct 26, 2020

Project 2019-02 SDT (BCSI in Cloud) is working on making changes to CIP-004-6 and CIP-011-2 (leaving EACMS)

Project 2016-02 SDT not be posting until the other SDTs to go to final posting (Tentative June/ July 2020).

This SDT will then make conforming changes as needed to ensure consistency.

Rob's slides have been posted online to provide specific dates and details for each project and their corresponding standards.

Upcoming CIP Standard – Effective Dates

- April 1, 2020
 - Low Impact Electronic and Physical Security, Transient Cyber Assets (detected malware mitigation) CIP-003-8
- July 1, 2020
 - Original Supply Chain Standards CIP-005-6, CIP-010-3, CIP-013-1
- January 1, 2021
 - Cyber Incident Reporting Standards CIP-008-6 – Attempted Cyber Security Incidents
- April 1, 2022 (tentative)
 - Communications between Control Centers CIP-012-1 – Encryption of data links

4. NERC Lessons Learned

Hamad Shahbaz presented on the single lessons learned posted on the NERC website since the Q4 RSSC Meeting.

The Lessons impact TO/GO's and deals with Moisture Intrusion in Hermetically Sealed Metering Current Transformers.

Three hermetically sealed oil-filled metering current transformers (CTs) with undetermined leakage were placed in service after being in open storage for several years
Two out of the three CTs failed.

The following corrective actions were required;
The troubleshooting team determined the seal design allowed moisture to enter the CTs during the daily cycling of temperature which can be avoided by implementing a bolted gasket system.
The utility has implemented a new program that requires the purchase of replacement units which are stored in a climate-controlled dry, indoor environment

The takeaways from the experience are that moisture content oil sampling is recommended prior to use if the device was kept in long-term storage, and normal 'hi-pot' testing in the field should be above the stress level of the insulator in order to find a high moisture condition

5. Standards Enforcement Dates Update/Roadmap

Hamad Shahbaz provided the Standards Enforcement Dates Roadmap.
The Roadmap is posted online in the Meeting Materials section of the RSSC webpage.
The following requirements come into effect during Q1 2020.

Effective Date Jan 1, 2020

- CIP-003-7
- IRO-002-6

Note: CIP-003-8 will become effective on April 1, 2020.

6. MACD Activities and CMP Status Update

Monica Adam provided an update on the CMP.
The first set of self certifications have been issued.
There will be no cortication's issued in Q2 Q3 Q4)
Recipients will have 40 days to respond

Cristian Dragnea provided an update on revisions to manuals. The first step will be to determine the scope of audits that will be completed by Market Participants. Looking at updating manuals that pertain to reliability standards compliance and enforcement. There will be updates for these throughout the year.

7. NERC Standards Development and NPCC Standards Developments Update

Helen Lainis delivered the update on NERC and NPCC Standards developments. Key details include;

Standard Authorization Request – Cold Weather

On February 19, 2020, NERC issued revised SAR for comments due March 19, 2020

The revised SAR addresses the comments raised by stakeholders and has been modified to ensure communication between functional entities when generator unit availability is expected to be affected by all ambient weather conditions (including, but not limited, to cold weather temperatures).

Standards Alignment with Registration

On February 21, 2020, NERC submitted petition for regulatory approval for the following proposed revisions:

- FAC-002-3 is being revised to remove references to Load-Serving Entity.
- IRO-010-3 is being revised to remove references to Load-Serving Entity.
- MOD-031-3 and MOD-033-2 are being revised to change Planning Authority to Planning Coordinator.
- NUC-001-4 is being revised to remove references to Load-Serving Entity.
- PRC-006-4 is being revised to add “UFLS Only- Distribution Provider” to the Applicability section.
- TOP-003-3 is being revised to remove references to Load-Serving Entity.

There is No impact on Ontario

NPCC Regional Reliability Standard PRC-006-NPCC-12 Automatic Under-frequency Load Shedding

- Regulatory approval was issued on February 18, 2020
- OEB Review Period ends May 3, 2020
- Effective Dates
 - All requirements with the exception of R3 will be enforceable on the first day of the first calendar quarter following the applicable governmental and regulatory approvals (Approx. July 1, 2020)
 - R3 will be enforceable on the first day of the first calendar quarter 12 months following the applicable governmental and regulatory approvals (Approx. July 1, 2021)

Proposed Reliability Standard TPL-001-5: Transmission System Planning Performance

- Regulatory approval issued January 23, 2020
- Primary impacts in Ontario are to IESO and H1 as Functional Entities identified are PC and TP
- Improves upon currently-effective TPL-001-4 by providing for:
 - More comprehensive study of single points of failure of protection systems
 - Stability analysis to assess the impact of the possible unavailability of long lead time equipment
 - More complete consideration of factors for study of planned maintenance outages
 - Enforcement date July 1, 2023

Standards Efficiency Review Phase I

- FERC issued a Notice of Proposed Rulemaking on January 23, 2020
- Proposes to approve the retirement of 74 Reliability Standard requirements associated largely with the calculation of Available Transfer Capacity
- Proposes to remand one requirement submitted for retirement by NERC (VAR-001-6 R2) because it is the only requirement that requires the scheduling of reactive power
- Seeks additional information from NERC on two requirements submitted for retirement (FAC-008-3 Requirements R7 and R8) regarding identifying the most limiting element of a facility and sharing facility ratings

Proposed Reliability Standard PRC-024-3 Generator Frequency and Voltage Protective Relay Settings

- Final Ballot was concluded on December 13, 2019 and passed with 82.47% industry approval.
- Major changes to the final draft included:
 - Removed Transmission Owner from the Applicability
 - Added an exemption to the Applicability: all auxiliary equipment and associated protection
 - Replaced the 0.1 second 'Minimum Time (Sec)' value with 'Instantaneous'
- NERC Board of Trustees approved the proposed standard on February 6, 2020
- Pending NERC filing for regulatory approval

Proposed Reliability Standard TPL-007 -4 GMD Planning Standard

NERC filed for regulatory approval on February 7, 2020.

- Recap of proposed modifications:
 1. require the development and implementation of corrective action plans to mitigate assessed supplemental GMD event vulnerabilities
 2. Authorize extensions of time to implement corrective action plans on a case-by-case basis
 3. Canadian variance kept in tact
- OEB Review period ends June 12, 2020

7 b. NPCC Criteria Developments

Status of RAS Implementation/Transition (Directory #7 SPS and NPCC Glossary term SPS)

- TFCP has scheduled a series of conference calls with TFSS, TFSP and TFCO to review the final draft of Directory#7 (to conform with PRC-012) for Member comment.
- TFCP anticipates:
 - Initial posting to occur in the quarter of 2020
 - Additional posting comment period during 2020
 - Approval by Full Members by January 2021 (concurrent with the enforcement date of PRC-012-2)

A-10 Classification of BPS Elements

- A-10 document has been revised in accordance with the TFSP Scope to:
 1. Identify critical facilities for the application of the NPCC criteria
 2. Improve consistency
 3. Simplify the methodology
- Revised version of A-10 was posted to the Open Process for 2 comment periods during 2019.
- All comments have been addressed

– Consideration of the A-10 document by RCC has been deferred until the February 2020 RCC meeting in order to allow RCC members more to review additional changes agreed to by the TFCP regarding the exclusion process.

8. Update on NERC Standards Committee Activities

David Kiguel provided an update on NERC Standards Committee Activities

Since the Q4 RSSC meeting, the Standards Committee have met;

- December 18th, 2019 (Atlanta)
- January 22nd, 2010 (Teleconference)

The February meeting cancelled. With the next meeting of the committee scheduled for March 18 in Atlanta.

David provided an update on the Standards Committee 2020-2022 Strategic Work Plan

Approved the 2020-2022 SC Strategic Work Plan

- Draft was provided for comments to the SC and NERC staff from November 20 to December 2, 2019.
- Once approved, the plan is presented to the NERC Board of Trustees for endorsement.
- Includes 6 main tasks:
 1. Periodic Reviews: PMOS and staff to prioritize
 2. Standards Grading: will start the 2020 Standards grading as soon as practicable
 3. Transition of Guidelines and Technical Basis to Technical Rationale: work to continue to review Guidelines and Technical Basis documents for transition to Technical Rationale documents and moving compliance examples to Implementation Guidance
 4. Standards Committee Process Subcommittee (SCPS): endeavour to complete all on-going projects by December 2020.
 5. Fourth Quarter Review of 2020-2022 SC Strategic Work Plan
 6. Standards Efficiency Review: identify potential efficiencies through retirement or modification of particular requirements that do not contribute to reliability

David gave the Standards Committee update on the following NERC Projects;

Project 2019-02 BES Cyber System Information Access Management

- Authorized initial posting for a 45-day formal comment period, with ballot pool formed in the first 30 days and initial ballot during the last 10 days of the comment period.
- Non-binding poll and ballot for associated Implementation Plan, VRFs and VSLs.

Project 2019-05 Modifications to PERC-003-2

In December 2019 the SC accepted revised Project 2019-05 Modifications to PER-003-2 (Operating Personnel Credentials). The SAR, authorized drafting revisions to the Reliability Standards identified in the SAR; and • Appointed the SAR Drafting Team.

Project 2019-06 Cold Weather SAR Drafting Team

Appointed chair, vice chair, and members to the Project 2019-06 Cold Weather SAR drafting team. Note, no Canadians nominated.

Project 2015-09 Establish and Communicate System Operating Limits.

Appointed a new chair of standard drafting team (The initial selection had to transition out of the role)

Standard Efficiency Review (

Endorsed the recommendations made by the SER sub-team in its Evidence Retention white-paper.

Project 2019-03 Cyber Security Supply Chain Risks

Standards impacted in the project include

- CIP-005-7 (Electronic Security Perimeter(s))
- CIP-010-4 (Configuration Change Management and Vulnerability Assessments)
- CIP-013-2 (Supply Chain Risk Management)

The SC authorized initial posting of proposed standards and associated Implementation Plan for a 45-day formal comment period, with ballot pool formed in the first 30 days, and parallel initial ballots and non-binding polls on the VRFs and VSLs, conducted during the last 10 days of the comment period.

The project addresses the directives issued by FERC in Order No. 850 to modify the Supply Chain Standards

Project 2017-1 Modifications to BAL-003-1.1

Approved errata correction to BAL-003-2 (Frequency Response and Frequency Bias Setting) (Board adopted in November 2019)

The purpose of new standard BAL-003-2 is to require sufficient Frequency Response from the BA to maintain Interconnection Frequency within predefined bounds by arresting frequency deviations and supporting frequency until the frequency is restored to its scheduled value

9. Review ToR for Cyber Forum WG and revised RSSC Terms of Reference

Rob Antonishen presented the revised Terms of Reference for the Cyber Forum Working Group.

The proposed The Terms of Reference was voted on by members of the RSSC and approved unanimously.

The document will be incorporated into the revised RSSC Terms of Reference that will be voted on at the Q2 meeting.

11. OPSRP Update

Adam Tschirhart was unable to attend to provide an OPSRP update, however, Scott Berry provided the dates fro the 2020 Restoration Workshops.

March 26 - Ajax

April 23 – Niagara

May 21 – Thunder Bay

June 11 - Kincardine

Oct 29 – London

12. Milestones Spreadsheet Update – S Lagan

The updated milestone spreadsheet will be published in April 2020. Upcoming enforcement dates can be located in the Enforcement Date Roadmap.

Market Participants are encouraged to provide feedback on the reports to sean.lagan@ieso.ca

13. Future Meetings/Adjourn

Future RSSC Meetings

The dates for the 2020 INIC meetings were agreed to

Q2 – June 4

Q3 – Sept 10

Q4 – Nov 26

Meeting Adjourned at 1:15 pm

RSSC Action Items as of the end of the Q4 RSSC Meeting

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Open Action Items as of the conclusion of the RSSC Q1 2020 Meeting Updates from the Q4 meeting have been highlighted.				
Action Item ID	Action Item	Status update Status at the end of the Q4 RSSC Meeting.	Status	Assigned To
2019-04-1	MACD to look at aligning MP response time to audit notification from 90 days to NPCC's 120 days	Q1 Update MACD will continue to assess, but will not commit to make a decision now. They will assess the best practices at the time when we update the RS Audit market manual, which could be this year or next year.	Open	Cristian Dragnea
2019-02-01	Revised RSSC Terms of reference	<p>Q1 Update RSSC Members voted and approved the TOP for the CFWG. The TOR has been incorporated into the draft TOR for the RSSC members and will be voted on at the Q2 Meeting.</p> <p>The item will carry forward to the Q1 meeting where the drafted changes will be proposed for approval.</p> <p>The RSSC TOR changes and proposed TOR for the Cyber Security Group will be presented on in today's Q3 meeting as item 11.</p> <p>The item will carry forward to the Q4 meeting where the drafted changes will be proposed for approval.</p>	Open	S. Berry
2019-01-01	<p>RAS and SPS Discussion:</p> <p>The IESO and Hydro One have discussed that the definition of RAS accounts for Type 1 and 2 SPS, but Type 3 still lacks clarity. Low impact RAS are in the category of Type 3. SPS that do not have BES impact must also be considered. H1 and IESO are</p>	<p>NPCC is revising Directory 7 to allow current processes within NPCC to align with PRC. Additional information to be presented at Q2 meeting.</p> <p>Update at Q3 meeting: The IESO is still awaiting confirmation from NPCC.</p>	Open	H. Lainis

	<p>working to come to an agreement and will eventually take these conversations to NPCC. The IESO to provide an update on this at next RSSC.</p>	<p>NPCC is still working through the process with changes still pending.</p> <p>Presently regional entities across NERC are developing positions.</p> <p>Update at the Q2 meeting: TFSP has been meeting on it. Will be an update at next meeting (RSSC Q3 2019). NPCC are still working to classify which Type 3 that are in scope. (if RAS is type 3, it will be in scope)</p>		
2019-01-03	<p>At the Q1 2019 meeting, IESO Performance Validation and Models, Manager Steve Burns provided an update on MOD and PRC reporting obligations of participants. Steve spoke about a potential pilot project being available where the IESO could potentially coordinate the testing and submission of data for the MP. Steve will research the viability and provide an update at RSSC #46</p>	<p>Q1 Update- The IESO will not be proceeding with this pilot project at this point in time.</p> <p>Update at Q3 Meeting: The IESO is still working internally to get approval to move forward with the pilot project, and will provide an update at the Q4 meeting.</p> <p>Update at Q2 Meeting: PV&M is still investigating the viability of this pilot project. An update will be available for the Q3 2019 meeting.</p>	Closed	IESO
2019-01-02	<p>IESO to coordinate a presentation with Alicia from Hydro One to present to RSSC on the implications of the NPCC A-10 Criteria reviews</p>	<p>Item will be presented on in today's meeting</p>	Closed	S. Berry

Reliability Standards Standing Committee (RSSC)

(Draft) Agenda– 2020 Q1 RSSC Meeting #48

Date: March 5, 2020	Time: 9:30am – 3:00 pm
Location:	IESO H.O., 120 Adelaide St. West, Suite 1806, Toronto
Meeting Sponsor:	Tam Wagner
Meeting Chair and Facilitator:	Scott Berry
Scribe:	Sean Lagan

Meeting Objectives: To update members regarding IESO’s on-going activities in the areas of reliability standards development, compliance monitoring and regulatory affairs and to solicit stakeholder feedback.

Action required: Attendees are asked to download and review meeting materials posted on the [RSSC Webpage](#) prior to the meeting.

Time	Agenda Item	Responsible Party	Expected Actions
9:00	Coffee/Breakfast		
9:30	1. Welcome and Introductions	S. Berry	
9:35	2. Administrative Issues a. Review 48th Meeting Agenda b. Review and Approval of Minutes from 47th meeting c. Update on “Open” Action Items d. RSSC Roster Update	S. Berry	Approve and decide Information and Discussion
Standing Items			
10:20	3. CIP Standards Development Update	R. Antonishen	Information and discussion
10:30	4. NERC 2020 Lessons Learned	H. Shahbaz	Information and discussion
10:40	5. Standards Enforcement Dates Update/Roadmap	H. Shahbaz	Information and discussion
10:50	BREAK		
11:00	6. MACD Activities • CMP Status Update • Market Manuals	M. Adam	Information and discussion
11:20	7a. NERC Standards Development	H. Lainis	Information and discussion

Time	Agenda Item	Responsible Party	Expected Actions
	7b. NPCC Standards Development		
11:45	8. Update on NERC Standards Committee Activities	D. Kiguel	Information and discussion
12:00	LUNCH BREAK		
Open Items			
1:00	9. Review ToR for Cyber Forum WG , and revised RSSC ToR	S. Berry/ R. Antonishen	Information and discussion
1:45	10. OPSRP/Restoration Workshops 2020 Update	A.Tschirhart	Information and discussion
2:15	11. Milestones Spreadsheet Update	S. Lagan	Information and discussion
3:00	Adjourn	All	Information and discussion

WebEx Conference Line Information:

[Join Event](#)

Call-in toll-free number: 1-800-974-5902

Call-in number: 1-416-874-8100

Conference ID: 7888254

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