

# Reliability Standards Standing Committee (RSSC)

Minutes of Meeting #33

Apr 5th, 2016 | 9:30 AM – 3:00 PM | IESO's Boardroom, 18th Floor, 120 Adelaide St. W., Toronto

## Attendance

Participant Name	Company Name	Attendance Status
Abbas Munir	Bruce Power	Present (on the phone)
Andrew Burmaster	Brookfield Renewable Power	Present (on the phone)
Ben Li	IESO	Present
Cristian Dragnea	MACD	Present (on the phone)
Dave Kwan	OPG	Present (on the phone)
David Dunn	IESO	Present
David Kiguel	<i>Observer</i>	Present
Esia Giaouris	Hydro One	Present
Evette Landon	ERCOT	Present (on the phone)
Gordon Bartels	Transcanada	Present (on the phone)
Hajar Kacem	Transalta	Present (on the phone)
Helen Lainis	IESO	Present
James Cook	Great Lakes Power (Transmission)	Present (on the phone)
Jay Jayaraman	Enbridge	Present
Jon Veldhuizen	Northland Power Inc.	Present
Juri Baroskov	Goreway Power Station	Present (on the phone)
Karen Demos	NextEra	Present (on the phone)
Khaqan Khan	IESO	Present
Laurie Reid	Ontario Energy Board	Present
Luis Zaragoza	Pattern Energy	Present (on the phone)
Mike Yealland	MYCON Inc.	Present
Nimesh Shah	Goreway Power Station	Present (on the phone)
Paul Malozewski	Hydro One	Present
Ron J. Falsetti	AESI	Present
Scott Berry	IESO	Present
Shahid Khan	Northland Power Inc.	Present (on the phone)
Soon Chua	Portlands Energy Centre	Present
Steve Dale	GLP Transmission	Present
Tracy Brason	Brookfield	Present
Yvette Landin	ERCOT	Present (on the phone)
<u>Scribe:</u> Navneet Singh, <a href="mailto:rssc@ieso.ca">rssc@ieso.ca</a> : Please report any corrections, additions or deletions to scribe.		

All meeting materials are available on the IESO's RSSC webpage at:  
<http://www.ieso.ca/Pages/Participate/Stakeholder-Engagement/Standing-Committee/Reliability-Standards-Standing-Committee.aspx>

**References:**

IESO MACD page: <http://www.ieso.ca/Pages/Participate/Market-Oversight/Compliance-Enforcement.aspx>

IESO Reliability Standards Compliance page: <http://www.ieso.ca/Pages/Participate/Reliability-Requirements/Reliability-Standards-Compliance.aspx>

NERC Standards page: <http://www.nerc.com/page.php?cid=2>

NPCC Regional Standards/Criteria page: <https://www.npcc.org/Standards/default.aspx>

FERC Electric page: <http://www.ferc.gov/industries/electric.asp>

Action Item Summary as of the 33 <sup>rd</sup> Meeting			
#	Date	Action	Status
1	April 5, 2016	IESO (H. Lainis) to provide clarity on the Ontario Energy Board Reliability Standards Review Process.	Completed

**1. Welcome and Introductions**

The thirty-third RSSC meeting commenced at 9:30 a.m. with brief introductions by each participant.

**2. Administrative Issues**

- a) The agenda for the meeting was reviewed and no new agenda items were added.
- b) The minutes of the last (thirty second) RSSC meeting were reviewed (page by page). No major concerns were raised. *L. Reid* noted some minor changes to Section 4. Motions to adopt the meeting minutes as final were made by *J. Jayaraman and T. Brason*.
- c) Updates on the open action item were provided as follows:
  - *There were no open action items from the last meeting.*
- d) RSSC Roster updates: Members were requested to send any updates to the list to S. Berry.

**3. Applicability Guidance for Reliability Standards**

*H. Lainis* presented updates on the guidance document, Market Manual 11.1 – Applicability Criteria for Compliance with NERC Standards and NPCC Criteria. Members are requested to let us know if they have any updates to ensure we capture any issues in the guidance document. The guidance

document will go through the baseline process and market participants will have a chance to comment through that process.

*R. Falsetti* raised a question regarding the guidance document, specifically PRC-023 in section 7. The document speaks to the obligations under R6; however R6 is very limited in scope as it is written. It was noted that this will remain in effect until PRC-025 goes into effect. We need to ensure the clarity is there that it went beyond what R6 says.

Action Item 1: *H. Lainis* will verify and clarify in the guide and will send out an email.

#### 4. RCT Update

*S. Berry* presented an update on the Reliability Compliance Tool project. The current tool is at end of its life cycle and we are in the midst of replacing the tool. We are moving away from the MetricStream platform and adopting the Aviant platform we currently use for other tools, such as the Market Registration tool.

The tool will have a different look but will continue to have the same functionality, and will provide the same level of business services for self-certification and self-reporting. One of the project's objectives is to try to automate and minimize manual functionality on the market participant's side. The new tool is expected to have a five year life and will address security issues, hardware and software serviceability. One of the benefits of the new tool is that we will have staff on hand to fix issues rather than utilizing external resources for tool issues. We will continue to evolve the new tool to expand the tool's functionality as required.

*S. Berry* will be sending out a request in May for market participant involvement in the testing the tool. We will be asking market participants to help with testing the new tool with self-certification and self-reporting functionality. *J. Veldhuizen* asked if everyone will be involved in the testing and *S. Berry* indicated we will be asking for volunteers. The testing will take place through the Portal, and participants will be requested to update compliance and escalation contacts. Training for the new tool will be provided for contacts in August 2016.

*J. Jayaraman* asked about the submission process for the self-certification due by September 1, 2016. *C. Dragnea* has requested that participants use the portal for this year's submissions. The self-certification submissions for next year will be handled through the new tool.

The IESO noted that there will be a training webinar by MACD on this topic in the summer of 2016.

#### 5. ORCP Pool A Self-Certification

*S. Berry* provided an update on the ORCP Pool A Self Certification status. Pool A participants were asked to self-certify by April 1 on the following subset of standards:

- FAC-008-3
- PRC-001-1.1(ii)
- PRC-004-2.1a
- PRC-005-1.1b

- PRC-005-2(i)

The initial request for self-certification went out on March 1, and all those who were required to respond, responded by the deadline. The next set of standards for self-certification will be happening in the summer 2016 timeframe. Training will be scheduled in mid-May for these, with another session being scheduled later for the other requirements.

For Pool B CIP standards as of July 1:

- Will be all BES for CIP-002-5 and one requirement in CIP-003-5.
- High and medium rated will be reporting on all requirements.
- Low rating will only be for CIP-002-5 and one requirement in CIP-003-5.

*S. Berry* noted that CIP-002-5 has criteria for assessing your elements. First determine if you are BES, second look at facilities (for example, generation connected over certain threshold), and third determine which category you fall into. The IESO noted that the security measures are more stringent for high.

Compliance for rest of standards does not start until 2017. A participant asked if the standard has an effective date what prevails. The IESO stated it is the date the IESO has established.

The next step is to get a baseline for everyone that is incremental. You could be BES in the past but could have incremental facilities. The two schedule stream approach ensures continuity in compliance reporting for those with BPS elements, and establishes a baseline for compliance reporting for those with newly identified BES elements.

A participant asked if all facilities have been notified. The IESO noted that all MP medium impact facilities have been informed (assessment has occurred and relayed to participants). The IESO is asking participant to please let *S. Berry* know if you did not receive your information.

## 6. Assisting Compliance with MRs and MODs

*S. Burns* provided an update on the IESO program for NERC Modeling, Data and Analysis Standards-MOD-025, 026, 027 verifications. As noted by *S. Burns*, the NERC Protection and Control -PRC standards will be discussed at a later session.

This program came about as a result of the analysis that we go through when registering facilities, and noticed things were becoming worse over time with governor systems. That is why we need to test on a regular basis, otherwise things drift. It was determined that in many cases, the settings and selections that have caused issues may not have not caused big issues initially, over time can create larger concerns.

We also recognized that we need to be more specific in identifying what we need from participants. In response, we will provide workbooks with instructions for MOD-025, MOD-026, and MOD-027 asking for measurements. For MOD-026 and MOD-027, the difference is we will require dynamic measurements, not just steady state. We will require the data in RAW format (comtrade format is

good) and are asking participants not to use proprietary format. Based on your submissions, we will tell if the model you provided fits the data, if not we will let you know, and you can decide what to do with that information.

The following questions were raised by participants during the meeting:

Question: Are there are a lot of plants retiring?

Answer: *S. Burns* noted there have been quite a few in the past; some have been repurposed. To compensate for those retirements, new gas plants have been added.

Question: For MOD-026 and MOD-027, do we see plants having their own ability to do their own tests.

A: In many cases if you only have one unit, lots of generators do their own testing

*S. Burns* noted that MOD-025 is more difficult, as many units have different capability curves, current state limiters. This can become a whole can of worms because in real-life it has a lot of assumptions built into it.

Question: When will the workbooks be posted?

Answer: *S. Burns* said that all workbooks will be posted in the June baseline process. Participants are asked to provide comments on the workbooks through the baseline process. He noted that the MOD-025 is out there for some people, and that is similar to the old form with some improvements. So far 10-15 groups of people have had to fill it out and have not had any questions.

Question: When will the webinar be?

Answer: April 2016.

Question: Are you lining with the criteria itself for MOD-025?

Answer: If the diagram in the MOD-025 standard an indication, the answer is yes.

Question: PRC-019 to PRC-024 (requirement for frequency) do not necessarily align with the rules, are the rules changing?

Answer: We are committed to following the more stringent of the two (NERC rules, MRs). *B. Ng* noted that the IESO is more stringent, as it is in our favour to provide a more reliable platform. *S. Burns* noted that in the 90s, NERC had guidelines for governors, however they no longer exist.

## 7. Standards Enforcement Dates Update

*H. Lainis* provided an update on the standards enforcement dates. Since the last meeting, the following standards were approved. All milestones have been updated and published.

Standard	Enforcement Date
PRC-026-1 R1	January 1, 2018
PRC-026-1 R2, R3, and R4	January 1, 2020
CIP-005-5	July 1, 2016
MOD-031-2	October 1, 2016

PRC-005-6	March 18, 2016 (implementation plan posted)
IRO-006-EAST-2	April 1, 2016
IRO-009-2	July 1, 2016

*H. Lainis* noted that for the vegetation management standard (FAC-003-4), we are waiting to see if they accept benchmark proposed by NERC.

## 8. NERC and NPCC (Part 1)

*B. Li* provided updates on the NERC/NPCC/FERC activities. Since the last report, we have had two Standards Committee (SC) meetings with NERC: one face-to-face and the other over the phone. The major items from the meetings and SC activities to report include:

- The number of standards of Q1 2016 is about the same as the number from Q4 2015.
- The approval rate of the last few standards has been in low 70s. There has been a strong push by NERC staff to have the standards approved.
- In Q1 2016, there were a number of postings to address directives and fulfill periodic review obligations.
- SC is also working to revise Standard Processes Manual. *B. Li* noted in Section 6, field testing, have a say on start and end test and will see a change in operating and planning process (no adverse impact wanted). They will be working with both the Operating Committee and the Planning Committee.
- SC will post guidelines however will not post compliance guidelines, which will be handled by another NERC department.
- He noted that there are 19 prequalified organizations that people can submit evidence to as examples. They are currently discussing how many out of the members do you need an affirmative vote to accept examples.

*B. Li* spoke about the two subcommittees within the SC, the Standards Committee Process Subcommittee (SCPS) and the Project Monitoring and Oversight Subcommittee (PMOS). The SCPS is responsible for improving processes and are currently working on a guideline document. The example he gave is at the SAR phase, industry input should be requested on whether the SAR should be drafted and they should get support before it gets submitted to the standards drafting board team for approval. *B. Li* noted that he is hoping to have the guideline document to the SC for approval in June 2016. The SCPS is also working on developing a process for periodic update of resource documents. The SCPS is proposing for the CRRA (Cost of Risk Reduction Analysis) task termination as NERC is working on a similar project analyzing costs/benefits. For the PMOS, *B. Li* noted there were no new updates.

The Compliance Guidance Documents can be found in the following location:

<http://www.nerc.com/pa/comp/Pages/default.aspx>

## 9. CIP Standards

*D. Dunn* provided update on the CIP Version 5 and Version 6 standards. CIP V5 exists until it is superseded by V6. The date was originally April 1, 2016 and was changed to July 1, 2016 as result of

a petition to FERC by a number of agencies and groups. The petition was based on the burden placed on agencies to comply with three months before V6 comes into effect. He noted that the IESO abstained from the vote.

A group of three organizations petitioned FERC for a rehearing of Order 822 with the intent to remand all or part of Version 5/6. FERC approved a conditional acceptance of the petition to buy them more time for further analysis. The petition suggests there were procedural errors and FERC do not have authority to approve NERC submission of V6 based on NERC submissions. *J. Veldhuizen* asked if we would go back to V5 if V6 is not valid. *D. Dunn* stated that they would have to go back to V3 because V6 is based on V5.

*D. Dunn* noted that in FERC approved V6 they required NERC to go back and look at a few items for V7. For example, what constitutes a programmable logic device is not clear and we asked for better definition and clarity. Another example is the issue around TO function vs TOP function for control centres and that there needs to be clarified definition around for control centres. He noted that standards drafting team just stood up and will be starting up in approximately May/June. If you want to be included in mailing list and meetings for standards drafting team, you are welcome to. *P. Malozewski* asked if there is a schedule for drafting team to produce the standard and if V7 will remain V7. *D. Dunn* indicated that there is no schedule yet but will be when they get together. *D. Dunn* also stated that V7 will remain V7 but won't bump the version up until the previous version is approved.

For CIP-014, physical security standard, Hydro One and Great Lakes Power are the only organizations in Ontario that this standard applies to. *D. Dunn* noted that this standard will evolve as well over the next year. There is no concrete information regarding the changes to the next version but suspect NERC will want scope of this standard broadened to increase applicability in Ontario.

*D. Dunn* gave an update on the Supply Chain Risk Management (FERC Order 822). NERC was asked if it would be good to do in the cyber world supply chain management. For example, for a company that builds a car and has a different company that supplies their parts to build that car, they would want to make sure the supply is stable. In the cyber world it is similar. For example, the EMS SCADA system for the IESO is supplied by ABB, who have millions of lines of code developed over years on old technology and there are security flaws in them and going back and fixing these flaws is extremely expensive. We would also want to ensure developers are "good" people and will not add "bad" code and standards will have to address how we "control" the vendors. This initiative is the next big thing coming down the pipeline. *M. Yelland* asked what a solution might look like for an old vendor. *D. Dunn* stated that FERC recognizes that this is forward looking exercise. *E. Giaouris* asked does this contractually achieve what you want and are you auditing pre-installation. *D. Dunn* said that you can contractually require the vendor to certify by a third party their product is free of vulnerability. This forces the vendor to address the issues in their supply chain, which they are not doing currently. The standards would put the requirement on customer to demand security requirements through audit or certification. He noted that one of the intentions of this standard is spread the cost over the industry (more customers asking for security assurance).

## 10. NERC and NPCC (Part 2)



B. Li provided an update on the standards recently posted for comment/ballot.

Remedial Action Systems: PRC-012:

- Started mid-2015 and is intended to combine standards PRC-012-1, PRC-013-1, PRC-014-1, PRC-015-1, and PRC-016-1 into one.
- One of the key features of the consolidated standard is that the IESO will be responsible to approve the use of RAS but only before RAS is put into service.
- Type categorization no longer exists, however if does have wide area impact does not need to be duplicated
- The NPCC directory is being updated to reflect the NERC standard; however there will be a lag before elimination of the NPCC directory.
- As far as NERC is concerned, SPS is eliminated.

Hydro One voted negative as they were mainly concerned about maintenance and misoperation reporting and looking at substantial cost if required to upgrade.

BAL-005-1, BAL-006-2 and FAC-001-3:

- For BAL-005 AND BAL-006, there is a linkage to FAC-003-1 standard.
- The revision tries to stipulate tool and data accuracy requirements, and equipment capability should be placed in organization certification requirements.
- We voted negative as we disagree with stipulating tool quality in a Reliability Standard. The standard passed.

Real-time Monitoring and Analysis Capabilities: IRO-018-1 and TOP-010-1 (applicable to RC and TOP):

- We were expecting requirements to address minimum capabilities but there was nothing included.
- We voted negative based on the same reasoning for voting no in BAL-005-1. The standard passed.

Knowledge of Composite Protection Systems and RASs: PER-006

- We voted against it, and in response NERC took PRC-001 R1 and translated into TOP-009. We argued against because PER-005 already requires system training for all reliability tasks.
- SDT dropped TOP-009 and put in to PER-006 but the new twist is the operator training covers training to understand purpose of protection systems and RASs.
- We plan to vote in favour of PER-006. Hydro One noted that they view this as not applicable to them but will comment on definitions.

Internal Communication Capability COM-001-3:

- NERC did not included “geographically separate” in the language, which caused the initial ballot to fail. They came back with a change to the language in the standard and we plan to support the standard.

FERC Directives on TOP and IRO standards: SAR



- The latest set of TOP and IRO standards were approved by FERC and asked NERC to modify TOP-001-3 and IRO-002-4 standards.
- The IESO supports the changes to the standards.

#### NPCC Document C-29 System Modelling:

- The comment period for the proposed revisions has ended.
- Low serving entities still have obligations even though NERC has removed these from
- There is nothing really new except they have added in more specifics.
- The requirements here are contained in the Market Rules. A participant raised a concern that there may be duplication. The IESO noted that this it is procedural, so you do not get audited.

#### NPCC Procedure Documents C-30 and C-39:

- The IESO agrees with the proposed retirements.

#### NPCC Guideline B-27 Regional Critical Asset Identification:

- The IESO agrees with the proposed retirements.

#### NPCC Document C-01 NPCC Emergency Preparedness Communications Procedures:

- There is a protocol in place to emergency call in place between NPCC entities. The changes will require a test of the call once a month (five areas plus NPCC on a call).

## 11. Other Items

*L. Reid* provided an update on the new sections to the Federal Power Act. *L. Reid* reported back to FERC at tri-lateral meeting that Generating Availability Data System (GADS) and Transmission Availability Data System (TADS) database is not applicable in Canada. She noted that it is vulnerability as it may not be a North American view in the future because of Canada's sensitivity to data. NERC is looking to put together information sharing working group and *L. Reid* noted she is trying to ensure there is a Canadian voice in the group.

## 12. Next Meeting

The 34th RSSC meeting (Q2 for 2016) is scheduled for Tuesday June 28, 2016 at 120 Adelaide Street West (downtown Toronto).

No further items were brought up and the meeting ended at 02:30 PM. Motion to adjourn was made by *L. Reid* and *P. Malozewski*.