

Reliability Standards Standing Committee (RSSC)

Meeting Minutes – Meeting #42

Date: Sept 27, 2018	Time: 9:30am – 3:00 pm
Location:	IESO, 2635 Lakeshore Rd. W. Mississauga, Viewing Gallery
Meeting Sponsor:	Candice Trickey
Meeting Chair and Facilitator:	Scott Berry
Scribe:	Sean Lagan

Attendance

Name	Company	Attended in Person (A)/ Called in (P)
Scott Berry	IESO	A
Sean Lagan	IESO	A
Angie Turek	IESO	A
Helen Lainis	IESO	A
Robert Haromszeki	H1	A
Wang Fan	Kinetrics	A
Mike Zajmalowski	Northland	A
Kyle Smyth	Northland	A
David Dunn	IESO	A
Laurie Reid	OEB	A
Dennis Hall	Brookfield	A
Monica Adam	IESO	A
Payam Farahbakhsh	H1	A
Ben Li	On behalf of IESO	A
Hameed Zaman	Transcanada	A
Constantin Chitescu	OPG	A
David Kwan	OPG	A
Mike Cooke	OPG	A
Hassib El Murdea	OPG	A
Haider.Naveed	Hydro One	A
Tabasum Bandey	Bruce Power	P
Abbas Munir	Bruce Power	P

Mary Polk	FPL	P
Juri Baroskov	Goreway	P
Mike Beuthling	H1	P
Kevin Wozniak	H1	P
Shahid Khan	Northland	P
Jacinda Belisle	Brookfield	P
Dhvani Shah	H1	P
Paul Whitehead	Bruce Power	P
Joel Charlebois	AESI	P
Dave Kiguel	Independent Consultant	P
Serge Dumoulin	Brookfield	P
Luis Zaragoza	Pattern	P
Hajar Kacem	Transalta	P
Cristian Dragnea	IESO	P
Jon Veldhuizen	Brookfield	P

1. Welcome and Introductions

The forty second RSSC meeting commenced at 9:30 am with brief introductions by each participant. Housekeeping issues were discussed including a description of the location of exits, bathrooms, and the procedure for what to do in the event of a fire/fire drill. Also, in accordance with CIP Compliance, all guests classified as visitors must be escorted by IESO staff.

2. Administrative issues

- a) The agenda was reviewed, David Kiguel's slot was moved up until before lunch. A motion to adopt as final made by Dave Kiguel, which was seconded, and the agenda adopted as final.
- b) The minutes from the previous meeting were reviewed- there were minor adjustments- (status change to the action items (should have been listed as closed, and the ending time of the meeting was updated), there was a motion to adopt minutes as final, which was seconded, with all in favor, and the minutes were made final.
- c) There were no open action items to discuss
- d) Sean Lagan reviewed all submissions for roster changes to the RSSC mailing lists. All further updates can be submitted to sean.lagan@ieso.ca

3. NERC SER Update

Scott Berry provides an update on the second version of the SER SAR.

The comment period closed sept 26. The IESO did not change its comments of position since the informal period.

They are looking for standard drafting team members- presently the IESO does not have a member on the team, but that is subject to change. Phase 2 is set to kick off during Q4.

There are no questions on the standards review process.

4. TPL-007-2 Update

Helen Lainis was listed to provide an update on TPL-007-2, but deferred to Payam Farahbakhsh as he is on standard drafting team and present.

P. Farabakhsh indicated that Hydro One and the IESO are seeking a variation to TPL-007-2 with significant support from Canadian entities. NERC staff has been helpful in lobbying for support.

So far, a draft proposal has been posted for comment, and there has been feedback provided from industry. The team has met in Montreal to draft and Toronto to review and address the received comments and have issued a draft for further comment.

They have submitted a request to OEB for a stay on the standard until this effort with NERC to get the variance in effect is completed

Laurie Reid added that since the last RSSC meeting, as participants they have 2 ~~applications~~ requests from NERC and Electricity distributors association.

The procedure order is out and is asking for submissions from ~~applicants~~ participants.

~~There is support for the~~ The application requests that the OEB grant a Stay being in effect as version one of the standard is already in effect so there is no gap, and also that Version two has significant costs associated with it.

~~We~~ The applicants are hoping to have the stay in effect until the Canadian Variance is in effect, or the OEB finishes its review process.

Because this is a variance that would only apply to Canada, NERC does not feel as though they need to file it to FERC.

Dave Kiguel questions this assumption as he is of the understanding that it does need to go to FERC.

P. Farabakhsh adds some clarity to this noting that since this will become a standard with a section added to describing the variance and it will need to be filed to FERC for information purposes, but not for approval.

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Constantin Chitescu asks "Laurie, can you please tell us if there is a due date for OEB review?"

L. Reid: Hydro One and IESO have made the application for review within the 21 days so there is no timeline on the end date.

5. MOD-025/26/27/ Data Reporting Update

Sean Lagan provided an update on the MOD 25 26 27 reporting noting that Compliance Assurance is developing a procedure to work with market participants on completing their data submission requirements of MOD 25, 26, 27.

The details still need to be ironed out, but the plan will be to work with past due MP's as well as MP's who are identified as being of risk of being past due to help understand that information needs to be provided to the IESO in order to be compliant.

P. Farabakhsh indicates that some entities only have one unit, and their interpretation is they have the full 5 years to complete their submissions rather than the IESO schedule date.

The IESO needs sufficient time to review each submission to ensure they are compliant. As such, due to resourcing constraints, it is critical that MP's submit their data on the agreed upon dates.

Dennis Hall indicated there may be some schedule delays in getting a complete data set provided to the IESO noting that from the MP viewpoint it is critical the tests are completed, but finalizing their reports may take time.

S. Berry responded noting that best approach is to keep communication going. Let the IESO Performance Validation team know that the tests were completed and that the data will be arriving by a specified time. .

Mike Zajmalowski- what is trigger for us to manage submissions?

S Berry – manual responses- the IESO issued the notifications, the MP need to manually track their responsibilities, and submit the data on schedule. The IESO has provided workbooks to assist with this.

Kyle Smyth- what about cases of radio silence (where submissions have been provided, but there has not been a response from the IESO to provide a status on the requirement).

S Berry- if you haven't heard for confirmation, reach out to ORCP mailbox and we can help close loop.

6. Update on NERC Standards Committee Activities

Dave Kiguel provided an update on NERC Standards Committee Activities.

There have been three Standards Committee meetings since RSSC 41.

Technical Rationale for Reliability Standards

Endorsed the Guidelines and Technical Basis (GTB) Review Team member appointments as recommended by NERC staff.

- Technical Rationale Advisory Group (TRAG) developed approach to implement the SC's "Technical Rationale for Reliability Standards" policy.
- The TRAG developed the "Technical Rationale Transition Plan" process for removing the GTB section from the Reliability Standard template and replacing it with either Technical Rationale documents or Implementation Guidance.

Standards were divided into five separate groups for evaluation purposes:

- Cyber Security and Physical Security – CIP
- Operations and Data Exchange – BAL, INT, IRO, TOP
- Personnel and Emergency Planning – COM, EOP, PER

- Modeling and Long-term Planning – FAC, MOD, NUC, TPL
- System Performance – PRC, VAR

NERC solicited nominations for volunteers to serve on the 5 GTB Review Teams.

Total of 21 nominations received (none from Canada).

All appointed to one of the 5 groups.

Project 2015-09 Establish and Communicate System Operating Limits

Authorized initial posting of standards requiring review in the project.

- 45-day formal comment period, with ballot pool formed in the first 30 days
- Parallel initial ballots and non-binding polls on the Violation Risk Factors (VRFs) and Violation Severity Levels (VSLs) to be conducted during the last 10 days of the comment period. . ballot and comments to close on Oct 17th

Standards and their respective Implementation Plan included:

- CIP-014-3 Physical Security
- FAC-003-5 Transmission Vegetation Management
- FAC-013-3 Assessment of Transfer Capability for the Near-term Transmission Planning Horizon
- PRC-002-3 Disturbance Monitoring and Reporting Requirements
- PRC-023-5 Transmission Relay Loadability
- PRC-026-2 Relay Performance During Stable Power Swings

Project 2016-02 Modifications CIP-002-6 and CIP-003-8

Authorized initial posting of Standards and Implementation Plan for a 45-day formal comment period with an initial ballot and non-binding polls on the Violation Risk Factors (VRFs) and Violation Severity Levels (VSLs) to be conducted during the last 10 days of the comment period

SAR for Standards Efficiency Review

Accepted the SAR for Standards Efficiency Review (SER)

Authorized a 30-day formal comment period with a ballot open from tomorrow until Oct 9

Authorized the soliciting of nominations for SAR drafting team (DT) on a 21-day nomination period.

Project 2018-02 Modifications to CIP-008-5 Cyber Security Incident Reporting

SAR for CIP-008-5 developed in response to FERC Order No. 848.

SC Executive Committee (SCEC) took action without a meeting due to tight deadline.

SCEC Authorized:

- SAR posting for a 30-day comment period
- Soliciting SDT members during the 30-day period.

SC Approved the following waiver of provisions of the Standard Processes Manual (SPM):

- Initial formal comment and ballot period reduced from 45 days to as few as 20 calendar days with the ballot pool forming in the first 10 days and ballot conducted during the last 5 days of the comment period.
- Additional formal comment and ballot period(s) reduced from 45 days to as few as 15 calendar days with ballot(s) conducted during the last 10 days of the comment period, if an additional formal comment and ballot period is needed.

Appointed the SDT this includes Norm Dang from the IESO

There is a question (name is missed): “Does this still fall within ANSI standards?”

David Dunn provides a response: “it does, it has been expedited, but it is a smaller standard and they are still aligned with ANSI”

CAISO SARs for PRC-024-2 and Inverter Based Resources

CAISO submitted two SARs as follows:

- First SAR to revise PRC-024-2 (Generator Frequency and Voltage Protective Relay Settings) to address technical issues within the existing standard.
- Second SAR to either:
 1. develop a new controls-based standard to address the performance of BES inverter-based resources; or
 2. Incorporate requirements to address those issues in a revision of PRC-024.

SC rejected both SARs based on:

- IEEE is already addressing the issues CAISO discusses in the SAR (IEEE Standard 1547-2018).
- NERC technical committees recently issued guidance on the topic.

Ben Li comments that the Standards committee should not reject SAR. There was a precedent set a few years ago where a SAR was brought to RSC. The appropriate approach would be to vet it through RSC to assess risk level to determine if this needs a standard approach.

It should be the industry who is given the opportunity to review and comment on SAR not just the standard committee

Other SC Actions

Approved 2019-2021 Reliability Standards Development Plan (RSDP).

Approved Errata of Implementation Plans for MOD-026-1 and MOD-027-1 (replaces “verification date” with “transmittal date”, consistent with the language in the standards, as intended by the SDT).

Authorized call for nominations to replace or re-elect SC members whose 2-year term concludes in December 2018.

Ben Li commented that there was a recent posting on BAL-003 standard. This posting came up on Sept 6 asking for comment by the 20th sept. That’s only 14 days for informal. Ben raised issue, and was responded to that there is no requirement that there is no requirement for standards drafting team to get approval for this. Ben felt the standard process manual indicated there is no process authorizing any posting for comment less than 30 days. This could become an issue. If you post for 14 days- you can expect to have very low value comments by industry. We plan to raise it with NERC Sr staff in NYC to see if we need to beef up the language in standards process manual to avoid these situations.

Dave Kiguel indicated when this is brought to the standards committee he would support this.

BREAK

7. CIP Standards Development

Dave Dunn provided an update on CIP Standards under development

CIP-002-6 Balloting

Previously balloted changes were accepted

Proposed control center definition moved from CIP-002- to CIP-012-1

The definition for “planned and unplanned changes” was moved into CIP-002-6 from the Implementation Plan as it makes more sense to have it in the standard)

Dave discussed some implementation plan timing issues around between CIP-007 and CIP-008

Payam Farahbakhsh asked: why do we think there may be an adverse impact? Is it just around timing?

Dave “CIP-007 compliance is expected to be in 2020 so MPs may be planning to implement by that point, but CIP-008 is coming into effect before 2020 that requires some of the same implementations as CIP-007, you may not have this in time and may need to revise your implementation plan.

Virtual Environments

Dave Dunn: The challenge is that the standards today are objective based (leaves more flexibility for MP on how to achieve it), the standards where they are today are very prescriptive, objective is better because it is more risk based.

Comment on phone: “whatever solutions are implemented that they need to be layered based.”

Dave Dunn responded that spoke to future proofing standards becoming more and more of a serious conversation. The need to revamp a number of standards. We will need to become more objective rather than prescriptive to ensure we can keep evolving.

Phone question- “Will the auditor make the call if you have enough controls in objective based risk controls?”
Dave Dunn “yes, we provide the auditor with the evidence and they will evaluate your effectiveness of meeting the objective”

CIP-008-

The current standard requires that we report any cyber security incidents that compromise the grid.

Since implementation of standard, there are zero reports of this nature.

FERC is saying there is not much value in monitoring anything that is zero- so we should be looking at incidents that there was an attempt to compromise grid operation.

FERC order 848 wants to expand CIP-008 to do this. the reports are presently sent to US government entity.

There are some Canadian concerns that Canadian entities have to report into a US gov entity.

NERC recognizes the challenge.

We are trying to accommodate a way to keep reporting requirements being separate from us entities.

Payam Farahbakhsh stated that the concern is how we define an attempt may have a broad interpretation?
What if the information is not available?

Robert Haromszeki added that that while it makes sense that they want to have some trending analysis, it doesn't look like they know exactly what to ask for.

Dave Dunn responded that ultimately they are looking at two definitions for attempt.

1- One that focuses on impact;

2- One that focuses on what it could impact

Within that definition there should be a list of criteria that determines what qualifies as an attempt. The IESO is paying very close attention to the definition.

The drafting team is very aware of these challenges.

We also will want to be more specific on the nature and type of information that is reported.

Attack vector, level of intrusion, functional impact.

CIP-008-5

Subject to tight timelines.

“Don’t delay comment today” first posting Oct 4 2018. Second posting and ballot Nov 14.
Scot Berry asked “What is driving these tight timelines? Seems to be a trend. May impact the quality of the feedback we get on these quick turnarounds.”
Dave Dunn responded that they are trying to accommodate the fast nature of change in the info security world. We are always going to be behind.
If you do have comments that you want considered or included, please come through the RSSC.

Payam Farahbakhsh commented “This incident reporting standing will be important for us. We don’t want to have to resource the volume of people that are needed to manage reporting ALL incidents of attempts if the language isn’t very specific.

Constantin Chitescu asked “Could reporting be automated?”
Dave Dunn responded that this is a possibility but is to be determined.

8. MACD Activities and CMP Status Update

Monica Adam from MACD provided an update on current MACD activities and on the status of the CMP.

2018 CMP Status Update

Q2 and Q3 self-certification reviews are underway;
RFIs went out to provide testing results for equipment samples for PRC-005-6;
Expect follow up RFIs for submissions that are unclear or incomplete;
Half of the Q2 self-certifications were closed without additional follow up;
Q4 self-certifications are about to go out; with MP’s having until about mid-November to submit evidence.

Observations from SC reviews

Self-Reporting

MACD encourages market participants to self-report potential breaches at any time upon discovery and do not wait until the time of self-certification or audit;
Possible non-compliances of any applicable NERC/NPCC reliability standard or market rule should be self-reported, not only the ones in the monitoring list in a particular year;
Market participants are encouraged to use the IESO Reliability Compliance Tool to self-report potential breaches of NERC/NPCC reliability standards and the NCER for self-reports of market rules.
To receive the full self-report credit and the benefit of penalty mitigation, self-reports must meet certain content and timing requirements:

Content Requirements

- submitting it to MACD in writing and on a timely basis;
- providing details of the activities that were potentially non-compliant;
- providing reasons for the non-compliance;
- identifying all the market rules, reliability standards and market manuals that were potentially breached;
- providing a quantitative and qualitative assessment of the impact of the alleged breach on the

- IESO-controlled grid, the IESO-administered markets or on other market participants; and
- Describing in detail the timeline and steps to remediate the breach and prevent similar non-compliance in the future.

Timing Requirements (timing requirements- self report ASAP when you discover a potential breach.)

- MACD applies the following factors to assess the timeliness of a self-report:
- whether the market participant submitted the self-report before MACD became aware of the potential breach;
- the duration between the discovery of the potential breach by the market participant and the filing of the self-report; and
- Whether the market participant exercised due diligence in the discovery of the potential breach.

Monica added that reporting with mitigation plans are important as it helps to satisfy the content requirements

Dave Kwan commented: “we typically do not put in information in around the impact the incident has had on the IESO owned grid because we may not fully understand the magnitude of the impact at the time of the reporting.”

Monica Adam responded that- MACD’s expectation is that you can provide as much as you know. They don’t expect “IESO level” insight into the impact of the incident on the grid.

Cristian Dragnea added that some MP should have some understanding of their facilities and their components and their subsequent impact on the grid. This would be a good practice for MP’s to understand how their equipment can impact the reliability of BES.

Submission of Evidence

1) NERC FAC-008-3 Facility Ratings

FAC-008-3 appears to often be the most incomplete self-reported violation. It often requires follow up from MACD

- The Facility Ratings Methodology (FRM) must cover all series-connected elements in the facility;
- FRM must include both Normal and Emergency ratings;
- Documentation must show the assumptions used to determine the facility ratings and provide associated evidence;
- Include the ratings for all equipment subject to R1 and/or R2, and show the most limiting equipment;
- Include evidence to demonstrate that the Facility Ratings are consistent with the FRM. Evidence examples may include manufacturer’s ratings, nameplates, calculations, industry ratings, engineering drawings, etc.

Scott Berry added that a recent development from NPCC is that auditors are doing field testing. Is there any thought that MACD may also adopt a similar approach with similar methodology?”

Monica Adam responded: “we would rely on the registration data, and know that the IESO relies on data validation testing”

2) NERC COM-001/IESO Market Rules Ch. 2, App. 2.2

- Submit completed RSAW and IESO Guided SC Worksheet;
- Describe HOW your equipment meets the market rule requirements and NOT simply state that your equipment meets those market rules.

For example:

Provide a narrative on how your normal priority path facility meets the requirements of Chapter 2, App 2.2 s1.1.8 and MM 6, s3.4.1.

Response:

YES ACME has a dedicated phone to the IESO. It is on its own separate line from the plant systems, and is on the PSTN. The phone line is equipped with call display and call waiting, and does not have voice mail. It is answered 24/7 by a live person....

NO ACME meets the aforementioned market rules

2019 CMP - Quick overview

The CMP will be posted by end of December 2018;

It will take into consideration NERC CMEP, NPCC CMEP IP and IESO's reliability risks;

2019 CMP implementation tools are to be decided (self-certifications, audits, data submittals).

Constantin Chitescu stated that we need to know more about the testing approach they are going to take. (I.e. validating name plate information against engineering drawings), some of these tests may pose a risk or age equipment. MPs need to know the kind of testing that is going to be expected of them because of the impact to their equipment.

Scott Berry responded that it is really down to if MACD want to take this approach to validate audit submissions. As of right now they aren't. But down the road they may.

9. Event Reporting

There is a revision in the event reporting section of Market Manual 7.1 (Section 6) from the requirement for MP to report any event that causes a potential or actual market rule violation, to MPs being strongly encouraged to report violations.

There is a change to the structure for EOP-004 and CIP-008, and also including CIP-003.

EOP-004

If you determine an event reaches the reporting threshold of EOP-004 – MPs must report that to IESO immediately.

The IESO will assess the event and then report “reportable events” on your behalf to NERC and NPCC. (Unless reporting to those entities is specified in your event reporting operating plan in which case the MP must continue to do so.)

Additionally, there is a requirement for a preliminary report within 48 hours of an event or potential event resulting in a reliability concern. Going forward, 48 hours has been changed to “within the time frame specified by the IESO) this is to assist with timelines for identifying reporting events

Question from Robert Haromszeki on how this will work?

Angie Turek responds that MP's will report to IESO control room for review. The IESO does a log review the following morning, if more information is required, they will contact the MP and direct them to report in

greater detail.

The Cyber Security Incident Form has been added to appendix C of Market Manual 7.1.

Dave Kwan asked: "When will this take effect?"

Angie Turek responded: "This is a draft right now, it must go through appropriate approvals, and also go out to MP's for review before year end. Market Rules go through baseline, not technical panel.

10. NERC 2018 Lessons Learned

Lessons learned were presented by Angie Turek.

Since our last RSSC meeting we have had 4 Lessons Learned posted on the NERC website.

Item 1: Risk of Internet Accessible Cyber Assets

Interest Groups: GO/GOP/TO/TOP/DP

Problem Statement:

An electronic access point connected to the internet from a low-impact facility for remotely accessing a capacitor bank was compromised by unauthorized internet users for seven months prior to discovery.

Corrective Action:

- Compromised device was removed from service.
- Forensic analysis performed to identify malware and reveal (to the extent possible) the underlying activities and motives of the compromise.
- Virus scan performed on all devices as well as a review of logs on all devices to look for anomalous activity.

Lessons Learned:

- Installation, inaccurate identification of, and failing to provide adequate security protections for a device connected to network led to the compromise of the cyber asset.
- Policy and Procedure
 - Catalog cyber assets at low-impact facilities to facilitate accurate records.
 - Evaluate potential risks and impacts of internet-facing cyber assets at low-impact facilities.
 - Conduct cyber device inventory checks; consider using a checklist.
- Cyber Security
 - Identify and secure cyber assets at low-impact facilities capable of remote connectivity.
 - Where possible, implement network access controls within the system to prevent installation of unauthorized hardware

Item 2: Preparing Circuit Breakers for Operation in Cold Weather

Interest Groups:

Problem Statement:

After two sequential line faults, an entire substation and a 1,150 MW nuclear plant tripped off-line due to consecutive breaker failures during cold weather (4°F/-15.6°C)..

Corrective Action:

- Defective component on breaker was replaced.
- Breaker manufacturer engineered a fix consisting of additional heaters to prevent moisture from freezing inside the pneumatic control valve.

- Diagnostic service performed on 3 breakers to ensure breakers were ready to be returned to service.

Lessons Learned:

- Annually perform pre-cold weather checks of breakers for cold-sensitive components.
- Identifies cold weather breaker issues.

Item 3: Loss of Substation Data Circuits to SCADA

Interest Groups: TO/TOP/BA/RC

Problem Statement:

While initiating a transfer of SCADA from the company's alternate control center (ACC) to primary control center (PCC), an interruption of vendor-provided substation data circuits occurred that resulted in a temporary and partial loss of SCADA operating and monitoring capability for more than 30 min.

Corrective Action:

- Schedule future SCADA data circuit transfers during daytime hours on business days to facilitate/enhance response times in staffing BES substations.
- With the TelCo, develop a script used to disconnect and reconnect SCADA data circuits that splits the process into blocks. One block would have to first be run and completed before initiating another block; mitigates risk of outage to all SCADA data circuits.

Lessons Learned:

- Events occurring during the nighttime hours present unique challenges due to the limited immediate availability of key personnel. By planning and scheduling maintenance activities that require critical steps during daytime hours on business days, response times in staffing BES facilities to regain operational control can be significantly reduced.
- The transfer of SCADA circuits from one control center to another is a critical operation. Close collaboration with communication vendors who own and/or operate the circuits is essential in determining ways to manage and mitigate the risk of an event leading to the total disruption of data communications to substations.

Item 4: Firewall Failure After Time Limit Exceeded

Interest Groups: BA/RC/GOP/TOP/TO that operates an EMS

Problem Statement: Due to a firmware error, a firewall stopped processing network traffic without proper failover after an internal run-time limit was exceeded. This resulted in persistent RTU communication issues.

Corrective Action:

- Entity rebooted backup firewall then shut down the outside interface on the online polling firewall to force a failover. This restored network traffic and RTU communications.
- Entity scheduled proactive reboots of the control center firewalls and other affected firewalls.

Lessons Learned:

- To prevent recurrence of the issue, maintain network devices on a planned schedule in accordance with latest vendor information, security bulletins, technical bulletins, and other recommended updates.
- If available, enroll in automated notification services for updates

No questions were asked

11. Standards Enforcement Dates Update/Roadmap

Angie Turek provided a walkthrough of the Standards Enforcement Dates/ and Roadmap

Since last meeting, we have not had any standards become enforceable or any that will become enforceable in the remainder of this third quarter

Standards becoming enforceable next quarter are:

- PRC-025-2, TOP-001-4
- Both become enforceable on October 1

For 2019, standards becoming enforceable in Q1 are:

- BAL-005-1, FAC-001-3, TPL-007-1 R5 and sub-requirements
- These become enforceable on January 1

Standards becoming enforceable April through June are:

- EOP-004-4, EOP-005-3, EOP-006-3, EOP-008-2
- These become enforceable on April 1, 2019

There are no other standards that become enforceable for the remainder of 2019.

Standards that will become enforceable in 2020 and beyond are:

- CIP-003-7 R2 for low impact

Standards that will become enforceable in 2020 and beyond are:

- CIP-003-7 R2 for low impact
- PRC-002-2, Requirements 2 through 4 and 6 through 11
- PRC-012-2
- PRC-026-1, Requirements 2 through 4
- TPL-007-1, Requirements 3, 4, 6, and 7
- Two new standards that have been added here are PER-006-2 and PRC-027-1. There were approved by FERC in an order this past June and become enforceable October 1, 2020.

Payam Farahbakhsh commented regarding FAC -001-3 “our understanding is that the change of this standard only impact IESO (Jan 1)- because it has some overlap with market rules I just want to confirm it only impacts IESO.(there may be entanglement with Bal-005)”

Helen Lainis will look into this and provide a response at RSSC Meeting #43.

In light of the frequent revisions to the CIP standards, members considered whether alternative approaches, including a more active participation of FERC staff at drafting team meetings, would ensure that FERC’s concerns would be adequately captured earlier in the process and be more efficient for industry.

Some discussion is had around the impact of the reduced comment period. We are getting standards drafted more quickly, but we are having so many more revisions. There needs to be a conversation around the quantity and quality and how to reduce the number of revisions by improving the quality of each revision. There is a definite need to do things faster than we have done things in the past. But it is possible we are going the wrong way?

There is some general conversation around the role of the regulators in standard development. This is wrapped up and the group breaks for lunch at 12:10 pm.

The meeting reconvened at 12:50 pm

12a. NERC Standards Development

Helen Lainis provided an update of NERC Standards Development

Revisions to TPL-001 Standard Addressing FERC Directives

- Project initiated to address three key issues:
 - (a) Planned outages lasting less than 6 months,
 - (b) Consideration of spare equipment strategy in stability analysis, and,
 - (c) Single point of failure in protection systems
- Fourth draft was voted on September 17, 2018 and received 69% support.
- In the last round, there was overwhelmingly a negative response from the industry in that creating a planning event for an extreme event was inconsistent and went beyond how other low probability events (e.g., breaker failure) are treated in the NERC Transmission Planning Standard.
- The recent draft reverted back and makes no change to the existing evaluation of the 3 phase fault in the Table 1 Stability Performance Extreme Events, except to separate the breaker failure from the SPF in the Protection System Event (i.e., eliminates the P8 Event and does not mandate the implementation of a CAP to meet the performance requirements caused by 3-phase faults with delayed clearing).

Establish and Communicate System Operating Limits (FAC Standards)

- Second draft – comments due October 17, 2018
- Changes to the SOL definition and FAC standards made to align with TPL, TOP, and IRO standards and revised definitions of Operational Planning Analysis (OPA) and Real-Time Assessments (RTA)
- The definition of SOL and the reliability standards that address SOLs – FAC-010, FAC-011, and FAC-014 – have remained essentially unchanged since their initial versions.
- Maintains system performance criteria through FAC-011-4 Requirement R6, similar to the approach in the currently effective FAC standards, rather than through the creation of an SOL Exceedance Definition
- IESO plans to support these versions

BAL-003-1.1 Frequency Response and Frequency Bias Setting

- Review issues identified in Phase 1 of the SAR:
 - Proposing new methodology for determining Resource Loss Protection Criteria that is consistent across all interconnections
 - An IFRO (Interconnection Frequency Response Obligation methodology that makes changes only when technically justified
 - Limiting the IFRO changes by no more than 10% annually and implementing percentage of change over the time period necessary to achieve appropriate IFRO levels

- Move items from Attachment (not related to compliance) to a procedure document
- Unofficial comment period was greatly shortened which did not allow sufficient time to assess changes and make detailed comments

Functional Model (FM)

- The FM is a guidance document that attempts to identify the reliability-related tasks that the individual functional entities perform to ensure the reliability of the BES.
- It is not intended to identify entities for NERC registration, nor does it dictate compliance obligations.
- The most important question asked, as part of the comments sought to the proposed revisions, was whether the FM is still relevant to the industry, and if not, what if anything should replace it.
- The IESO relies on the FM to develop its control room training/operations training, and we strongly believe that it is still relevant.

Ben Li provided some historical context to the Functional Model.

FERC approved the reregulation of the 3 entities, it was suggested that the Functional Model should be revised to reflect the registered entities. When industry reviewed it was felt there were too many changes. It was asked, if you are making these changes, is there a value for keeping the functional model. Ben had argued that it serves a valued function to the industry. There is no conflict between the standards and the functional entities largely because the model can provide the context.

PRC-006-NPCC-02 - Automatic Underfrequency Load Shedding,

- Proposed revisions included incorporation of certain Criteria attributes from Directory #12 Automatic UFLS Program Requirements which will facilitate the retirement of Directory #12 and removal of redundancy with the PRC-006-2 Continent-wide NERC standard
 - The IESO generally supports the proposed revisions, but commented on the need to fully align the frequency restoration criteria with the NERC Standard and the lack of rationale for revising certain VRFs
 - Standard Drafting Team (SDT) accepted our comments and IESO supported this version
- Constantin Chitescu commented OPG provided comment around the nuclear facilities. This is around the compensatory load for nuclear plants.

12b. NPCC Standards Development

Helen Lainis provided an update of NPCC Standards Development

Directory 2 – Emergency Operations

- The changes were mostly cosmetic and pretty straight forward – stylized to look like NERC requirements.
- IESO voted in favor of the version

13. Other Items

No other items provided.

14. Next Meeting

Tentative date for RSSC 43 is December 10 at the Adelaide office

With no other items, the meeting was adjourned at 1:22pm