



NERC Emerging Reliability Standards: Part II - Updates - Involvement & Needs

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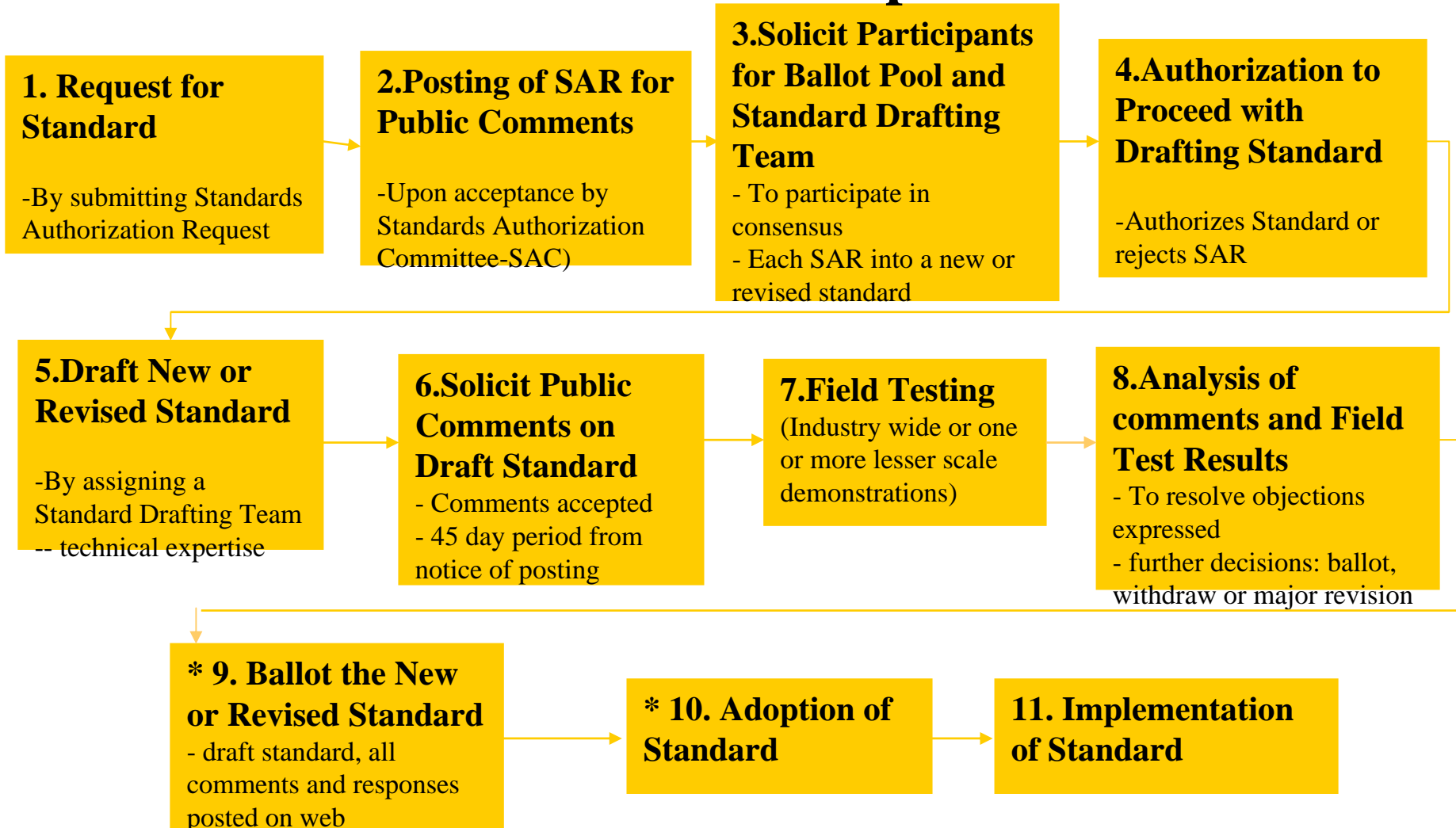
Objective of Presentation

- To inform participants about latest status/updates on:
 - NERC Standards Development Process
 - Emerging NERC Reliability Standards
- To make the market participants aware of IMO's active involvement
- To highlight opportunities for more involvement of market participants

Introduction

- NERC develops reliability standards, certifies personnel and companies, monitors compliance
- ANSI certified (American National Standards Institute) - Process
- Continuing & rapid improvements/changes in standards
- Emerging & New NERC Standards (Version's '0' & '1')

NERC Standards Development Process



Updates: Proposed Revisions in NERC Reliability Standards Process Manual (RSPM)

- Present requirements: Any revision in RSPM must go through full-standards approval process

- New Proposal:

- (i) Only Fundamental Tenets-revisions require full approval process/balloting

- (ii) For other procedural/admin revisions:

- public posting/revisions/re-posting

- no balloting required - only summary submissions to Board

IMO Involvement/Activities

- Adherence to reliability standards - key step towards ensuring reliability
- IMO adheres to standards established by:
 - NERC, NPCC & IMO Market Rules
- Participation in industry forums in North America
- Emerging two phased Reliability Standards Version '0' & Version '1'
 - Version '0' - draft 1 comments completed, draft 2 posted on Sept 3-2004, implementation Feb-2005
 - Version '1' - on-going/continuing activity

IMO Reliability Standards Program - Activities

IMO - Reliability Standards Program Activities															
Version 1 Progress Through the Steps in the Standards Development Process															
Version 1 Standards Under Development	SAR Development			Standard Development			Approval & Implementation		NERC Status	NERC Comments / Deadlines	NERC Voting Period	IMO's Target Dates		IMO Status	
	Submit	Post	Solicit	Auth.	Draft	Post	Test	Anal.				Ballot	Adopt		Impl.
Urgent Action															
1200 - Cyber Security (Urgent Action)										Adopted by Board for 1 year extension				Completed	
Reliability Standards															
000 - Version 0 Reliability Standards															
100 - Coordinate Operations										Second Draft by Sept. 3rd	August 9, 2004		21-Jul	23-Jul	Comments (1st Posting) to- date Completed
200 - Operate Within Interconnection Reliability Operating Limits										Second Draft Under Review	July 2, 2004		18-Jun	29-Jun	Comments (1st Posting) to- date Completed
300 - Balance Resources and Demand										Potential Conflict Under Review	April 14, 2004				Comments (3rd Posting) to- date Completed
400 - Coordinate Interchange										Second Draft Under Review	July 2, 2004		18-Jun	29-Jun	Comments (2nd Posting) to- date Completed
500 - Assess Transmission Future Needs and Develop Transmission Plans										First Draft Under Review	Feb 12, 2004				Comments (1st Posting) to- date Completed
600 - Determine Facility Ratings, Operating Limits, and Transfer Capabilities										Second SAR Under Review	June 5, 2004			04-Jun	Comments (1st Posting) to- date Completed
700 - Define (Physical) Connection Requirements										Will be posted in October	Jan 21, 2004				Comments (2nd Posting) to- date Completed
800 - Design, Install, and Coordinate Control and Protection Systems										Draft not Started yet					
900 - Monitor and Analyze Disturbances, Events, and Conditions										Draft not Started yet					
1000 - Prepare for and Respond to Abnormal or Emergency Conditions										Draft not Started yet					
1100 - Prepare for and Respond to Blackout or Island Conditions										Draft not Started yet					
1300 - Cyber Security (Permanent)										First Draft in Progress	Jan 19, 2003				Comments (1st Posting) to- date Completed
1900 - Transmission System Vegetation Management										Drafting Team Formed	June 21, 2004		10-Jun	16-Jun	Comments (1st Posting) to- date Completed
Certification Standards															
1400 - Certification of the Balancing Authority Function															
1500 - Certification of the Interchange Authority Function										Second Draft in Progress	May 17, 2004				Comments (1st Posting) to- date Completed
1600 - Certification of the Reliability Authority Function										Drafting Underway					
1700 - Certification of the Transmission Operator Function										Drafting Underway					
Other															
Amend Standards Process Manual															
										Under Review	July 16, 2004	August	28-Jun	13-Jul	Comments (1st Posting) to- date Completed
Reliability Functional Model															
										On hold until Feb. 2005	Feb 12, 2004				Comments (2nd Posting) to- date Completed
For any further questions related to these activities contact Khaqan Khan, Team Leader, IMO Reliability Standards Program at 905-855-6288															

IMO Activities: Dedicated Web Page

- Established for benefit of the market participants
- Provides information on IMO activities towards reliability
 - link: <http://www.theimo.com/imoweb/ircp/reliability.asp>
- IMO submissions, comments and position papers (NERC, NPCC & other key Forums)
 - link: <http://www.theimo.com/imoweb/ircp/reliabilitySubmissions.asp>
- Dedicated email folder: Reliability@theIMO.com
(for any questions/comments regarding emerging reliability standards)

IMO Activities: Sample of Web Page (Highlights) link: <http://www.theimo.com/imoweb/ircp/reliability.asp>

INSIDE THE MARKET

- ABOUT THE IMO
 - Corporate Information
 - Regulatory Affairs
 - Careers
- THE MARKET
 - Overview
 - Participants
 - Today's Market
 - Market Data
 - Market Summaries
 - Calendars and Notices
 - Transition Information
 - Participant News
 - Events Calendar
- THE POWER GRID
 - Forecasts
 - Reliability
 - Emergency Preparedness
- DOCUMENTS
 - Rules & Manuals
 - Technical Interfaces
 - Pending Changes
- SERVICES
 - Marketplace Training
 - Market Entry
 - Metering
 - Connection Assessments
- MARKET INTEGRITY
 - Compliance
 - Surveillance
 - Dispute Resolution

[Market Home](#) < Reliability

• **Consultation**
Looking ahead

• **Keep Up To Date**
Sign-up for our email distribution service

• **Have a Question?**
1-888-448-7777
905-403-6900
helpcentre@theIMO.com

Reliability

In Ontario, reliability standards are mandatory and enforced through the market rules that govern the operation of the electricity marketplace and bulk electric system. The IMO oversees reliability of the system through the enforcement of the market rules, and adheres to the standards established by the Northeast Power Coordinating Council ([NPCC](#)) and the North American Electric Reliability Council ([NERC](#)).

The IMO works to improve reliability in a number of ways including:

- Advocating through NERC and the NPCC for stronger, more effective, enforceable and mandatory [Reliability Standards](#) throughout North America.
- Working with market participants as well as monitoring and enforcing their adherence to reliability standards through the IMO [Reliability Compliance Program](#).
- Submitting to peer reviews and audits by other NERC and NPCC members of its reliability processes and procedures.
- Participating in the review and audit of other system operators to ensure that others processes meet required standards
- Ensuring that all IMO system operations staff are appropriately qualified and trained, including NERC certification of Control Room staff.
- Participating in ongoing joint efforts within NPCC and NERC including the U.S.-Canada Joint Task Force on the [August 14, 2003 Blackout](#).
- Monitoring electricity system reliability within Ontario

Related Information

- [Reliability Standards](#)
- [Reliability Compliance](#)
- [August 14, 2003 Blackout](#)
- [Voltage Reduction Testing](#)

**IMO Activities: Compliance -
IMO Reliability Compliance Program (IRCP)**

- Standards and Compliance - inter-linked
- Compliance with Standards: NERC, NPCC, IMO Market Rules
- Monitoring of MPs Compliance via IRCP
- NPCC compliance audit found IRCP to be exemplary
- Link: <http://www.theimo.com/imoweb/ircp/ircp.asp>
- email address: IRCP@theIMO.com

MPs Involvement: Guidelines for MPs Participation

- MPs may participate/join NERC Registered Ballot Body (RBB)
- RBB - Comprises all organizations, and entities that:
 - Qualify for one of the segments, and
 - Registered with NERC as potential ballot participants
 - Current with any designated fees.

Segments

1. Transmission Owners
2. RTOs, ISOs, and RRCs
3. Load Serving Entities (LSEs)
4. Transmission Dependent Utilities (TDUs)
5. Electric Generators
6. Brokers, Aggregators, & Marketers
7. Large End-Use Customers
8. Small End-Use Customers
9. Regulators or Other Gov't Entities

Information: Statistics of Canadian Representation in RBB

Segments	# of Registered Canadian Members
Segment 1: Transmission Owners	8
Segment 2: Regional Transmission Organizations (RTOs), Independent System Operators (ISOs) and Regional Reliability Councils	4
Segment 3: Load-Serving Entities (LSEs)	3
Segment 4: Transmission Dependent Utilities	0
Segment 5: Electric Generators	3
Segment 6: Electricity Brokers, Aggregators and Marketers	1
Segment 7: Large Electricity End Users	0
Segment 8: Small Electricity Users	0
Segment 9: Federal, State, and Provincial Regulatory or other Government Entities	0

Total members of Registered Ballot Body (North America) = 423
 Total Canadian Members = 19 (equivalent to 5% of total RBB)

Conclusions and Next Steps

- Emerging Reliability Standards (Version '0' & Version '1')
- Version '0' upon implementation (2005) becomes part of IMO's Compliance (IRCP)
- Market Participants may:
 - participate in NERC Standards Development Process
 - join in balloting for consensus development of standards
- A dedicated web-page for benefit of MPs
- The IMO shall continue to represent Ontario in the Reliability Standards Development Process

References and Links

- NERC Reliability Standards
<https://www.nerc.net/standards/ReliabilityStandards.aspx?tabindex=0&tabid=23>
- NERC Reliability Standards Process Manual
<http://www.nerc.com/standards/newstandardsprocess.html>
- Registered Ballot Body Listing
<https://www.nerc.net/standards/ReliabilityStandards.aspx?tabindex=1&tabid=5>
- Standards Under Development (emerging standards)
<https://www.nerc.net/standards/ReliabilityStandards.aspx?tabindex=2&tabid=14>
- IMO Web page on Reliability related activities
<http://www.theimo.com/imoweb/ircp/reliabilitySubmissions.asp>
- IMO Web page on Reliability Standards and submissions
<http://www.theimo.com/imoweb/ircp/reliability.asp>