



**RCC Meeting
December 1, 2020
Agenda Item 8.9**

**Reliability Assessment Program
(NRAP)
HIGHLIGHT REPORT**
*Prepared for the
Reliability Coordinating Committee
December 1, 2020*

Distributed to:

Members, Reliability Coordinating Committee
Members, Compliance Committee
Members, Regional Standards Committee
Members, Task Force on System Studies
Members, Task Force on System Protection
Members, Task Force on Coordination of Planning
Members, Task Force on Coordination of Operation
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and
NPCC Staff



Reliability Assessment Program
HIGHLIGHT REPORT

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RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program Regional Standards Committee

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
RSC	Regional Standards Committee	<p>The NPCC Regional Standards Committee (RSC), a committee of the NPCC Board, is charged with management and maintenance of the NPCC Regional Standard Processes Manual (approved by FERC Dec. 23, 2014). The RSC considers requests for new or revised regional standards and be available for advisement to the NPCC Board of Directors on standards related matters. The RSC works in coordination with the Regional Standards Process Manager (RSPM) who is the administrator for the NPCC Regional Standard Processes Manual. In addition, the RSC reviews, comments on, and develops ballot recommendations for the NERC Reliability Standards under review or development. The RSC also provides oversight for the NPCC Regional Reliability Directories which contain NPCC’s more stringent regional Criteria and supporting procedures and guidelines. The RSC also conducts and coordinates the NPCC Cost Effectiveness Analysis Procedure (CEAP) for evaluation of the cost effectiveness of NPCC’s Regional Standards and Directories. The RSC provides input to the NERC “Periodic Review Projects” and the NERC version of the CEAP being referred to as cost effectiveness and is providing input into the “Standards Efficiency Review” (SER) project. The SER allows the industry the opportunity to identify potential standard requirements which could be candidates for retirement. The RSC also discusses potential avenues to address potential reliability related issues as well as opportunities to enhance reliability associated with the deployment of Distributed Energy Resources (DER). In addition, the RSC coordinates work with the RCC and CC to address any issues identified with standards to improve standards and reliability. The RSC also is sanctioned in the Compliance Guidance Policy process to vet potential approaches to compliance prior to submission to NERC and is engaged in revising the NPCC Regional Standard Processes Manual. The RSC will also serve as a liaison for the Northeast Region to the NERC RSTC for any Standards related recommendations.</p> <p>Status/ Comments:</p> <p>The RSC is focused on the review of each of the NERC Reliability Standards (as they are developed, revised or reviewed for reaffirmation or retirement). The RSC is currently reviewing all the FERC Orders and NOPRs that pertain to Reliability Standards. The RSC develops recommendations for the membership on ballots when posted. The RSC also supports the NERC Standards Efficiency Review, Functional Model Working Group, NERC Standards Committee, and the NERC Standards Committee Process Subcommittee. The RSC is in the process of reviewing the NPCC Regional Reliability Standards Development Procedure, renamed the Regional Standard Processes Manual. The RSC continues to participate in the NERC Standard Processes Manual revisions and the Results Based Standards Initiative through its support of the Standards Committee Process Subcommittee and solicits members for the NERC drafting teams as necessary to ensure NPCC is adequately represented. The RSC has been overseeing the Strategic Review of NPCC Criteria.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Regional Standards Committee

Item	Name	Assignment
RSC	Regional Standards Committee	<p>The RSC continues to consider enhancements to the NPCC Website to provide further uniformity and consistency with that of NERC and other Regions.</p> <p>The RSC is currently engaged in reviewing a potential approach to penetration of utility scale Distributed Energy Resources (DERs) on the distribution system, and adverse impact on the BES. The Distributed Energy Resource BES impact reporting form is posted on the NPCC website. The RSC hosted three DER forums in 2019 and 2020. The DER Forums are open to the public. The next DER Forum is tentatively scheduled on February 11, 2021. The DER Forums are hosted on the second day of RSC meetings. The NPCC Standards staff developed Version 1 of the DER Guidance Document which was endorsed by the members of RSC in 2019. All comments from the DER Guidance Document comment period were reviewed and responded by the NPCC Standards staff and members of RSC. Version 2 of the NPCC DER Guidance Document was posted for a 45-day comment period. All comments were addressed and reflected in Version 2 of the NPCC DER Guidance Document. The RSC, in conjunction with various industry participants, has approved Version 2 of the NPCC DER Guidance Document; it has been posted onto the NPCC website on November 20, 2020.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Directories, Appendices & Criteria

<u>Item</u>	<u>Name</u>	<u>Appendices</u>	<u>Lead TF</u>	<u>Current Version</u>
DIR-1	Basic Criteria for the Design And Operation of the Bulk Power System	Appendix A – ERO Standards Appendix B – Guidelines and Procedures for NPCC Area Transmission Review Appendix C – Procedure for Testing and Analysis of Extreme Contingencies Appendix D – Guidelines for Area Review of Resource Adequacy Appendix E – Guidelines for Requesting Exclusions to Sections 5.4.1 (B) and 5.5.1 (B) of NPCC Directory No. 1 - Design and Operation of the Bulk Power System Appendix F – Procedure for Operational Planning Coordination Appendix G – Procedure for Inter Reliability Coordinator Area Voltage Control	TFCP TFCP TFCP TFCP TFCP TFCO* TFCO*	September 30, 2015

Status/ Comments:

The Task Force on Coordination of Planning (TFCP) and the Task Force on Coordination of Operation (TFCO) completed a collaborative review of Directory No. 1 in 2015. The NPCC Full Member committee approved the most recent version of Directory No. 1 on September 30, 2015.

Currently the RCC is monitoring an Implementation Plan governing protection upgrades in New England.

The TFCP and TFCO will jointly develop a scope of work for the pending comprehensive review of Directory No.1. Conforming changes to Directory No. 1 which reflect the exclusion process contained in the recently approved A-10 and the Task Force on System Studies retirement of C-33 were approved at the September 2020 RCC meeting.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Directories, Appendices & Criteria

<u>Item</u>	<u>Name</u>	<u>Appendices</u>	<u>Lead TF</u>	<u>Current Version</u>
DIR-2	Emergency Operation	Appendix A – Definition of Terms Appendix B - Guideline and Procedure for Emergency Operation	TFCO TFCO TFCO	June 29, 2018

Status/ Comments:

The Task Force on Coordination of Operation (TFCO) and its CO-8 Working Group have posted a revised version of Directory No. 2 *Emergency Operations* to the Open Process on December 30, 2017.

The Directory No. 2 criteria has been reformatted into NERC style requirements and has been reviewed to ensure the criteria is consistent with recently approved ERO Standards.

The NPCC Open Process posting concluded on February 13, 2018 and the TFCO has considered comments received and developed responses to the comments. Subsequent to RCC approval, the NPCC Full Member Committee approved the revised version of Directory No. 2 on June 29, 2018.

<u>Item</u>	<u>Name</u>	<u>Appendices</u>	<u>Lead TF</u>	<u>Current Version</u>
DIR-3	Maintenance Criteria for Bulk Power System Protection	Appendix A – Definition of Terms Appendix B – Guidelines and Procedures for Maintenance of Bulk Power System Protection	TFSP TFSP TFSP	Retired April 1, 2015

Status/ Comments:

The Task Force on System Protection (TFSP) completed a technical comparison of the criteria in Directory No. 3 with PRC-005-2 *Protection System Maintenance* and recommended that the criteria in Directory No. 3 be retired.

The RCC approved the TFSP recommendation and on October 15, 2014 the NPCC Full Membership voted to approve the retirement of Directory No. 3, effective April 1, 2015, upon the enforcement date of PRC -005-2 *Protection System Maintenance*.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Directories, Appendices & Criteria

<u>Item</u>	<u>Name</u>	<u>Appendices</u>	<u>Lead TF</u>	<u>Current Version</u>
DIR-4	BPS Protection Criteria		TFSP	January 30, 2020
		Appendix A – Guideline for Bulk Power System Protection	TFSP	
		Appendix B - Procedure for Reporting to TFSP New and Modified Protection Systems	TFSP	
	Status/ Comments:	An updated version of Directory No. 4 was approved at the December 3, 2019 RCC meeting. The NPCC Full Membership approved the proposed RCC revisions to Directory No. 4 on January 30, 2020.		



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Directories, Appendices & Criteria

<u>Item</u>	<u>Name</u>	<u>Appendices</u>	<u>Lead TF</u>	<u>Current Version</u>
DIR-5	Reserve	Appendix A – Monitoring Procedure for Operating Reserve Criteria Frequency Response	TFCO	September 27, 2019
		Appendix B – Procedures during Abnormal Operating Conditions	TFCO	
		Appendix C – Participation Request Form – Simultaneous Activation of Reserve and ACE Diversity Interchange	TFCO	
		Appendix D – Guidelines for Determining the Time T+0	TFCO	

Status/ Comments: The Task Force on Coordination of Operation (TFCO) completed a comprehensive review of Directory No. 5 in 2019 with the NPCC Full Membership approving the revised version of Directory No.5 on September 27, 2019. The review considered the impact of evolving ERO standards, NPCC Glossary updates and revisions, revised synchronized reserve criteria, and retired procedures detailed within the Appendices.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Directories, Appendices & Criteria

<u>Item</u>	<u>Name</u>	<u>Appendices</u>	<u>Lead TF</u>	<u>Current Version</u>
DIR-6	Regional Reserve Sharing		TFCO	September 27, 2019

Status/Comments:

The TFCO and its CO-8 Working Group recently completed a comprehensive review of Directory No. 6 and posted a revised version of the document to the NPCC Open Process. The TFCO review considered the impact of evolving ERO standards, emerging industry technologies and the recommendations contained in the Phase 2 Final Report on the A-10 Methodology. An updated version of Directory No. 6 will be presented to the RCC for approval at their September 4, 2019 meeting. The NPCC Full Membership approved the revised version of Directory No.6 on September 27, 2019.

<u>Item</u>	<u>Name</u>	<u>Appendices</u>	<u>Lead TF</u>	<u>Current Version</u>
DIR-7	Special Protection System	Attachment 1 – Definition of Terms	TFSP	July 9, 2013
		Appendix A – Guidance for Consideration in SPS Design Criteria	TFSP	
		Appendix B – Procedure for Review of Special Protection Systems	TFCP	

Status/ Comments:

The Task Force on Coordination of Planning (TFCP) is coordinating a review of Directory No. 7. The TFSP review is focused on the existing regional review process while the Task Force on System Protection (TFSP) is reviewing the existing criteria to ensure the criteria remains consistent with the requirements of PRC-012-2. The proposed Task Force revisions have been posted to the Open Process for two 45- day comment periods; the Task Forces have responded to all comments. Contingent upon RCC approval December 1, 2020, the document will be presented to the NPCC Full Membership for approval.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Directories, Appendices & Criteria

<u>Item</u>	<u>Name</u>	<u>Appendices</u>	<u>Lead TF</u>	<u>Current Version</u>
DIR-8	System Restoration	<p>Appendix A - Table 1 “Standard Test Procedures for key facilities and associated critical components required for system restoration.</p> <p>Appendix B: NERC ERO Reliability Standards</p> <p>Appendix C - Table 2: Comparison of Test Procedures for Critical Components of Key Facilities of the System Restoration Plan</p>	TFCO	September 25, 2018
	Status/ Comments:	<p>On October 6, 2017 the NPCC Full Membership approved revisions to Directory No. 8, which included reformatting the criteria into NERC style requirements, elimination of certain duplicative battery testing requirements contained in PRC-005 and revisions to three restoration Glossary terms. During 2018, the TFCO collaborated with the Task Force on System Protection (TFSP) and recommended further revisions to the Directory No. 8 criteria in order better align the criteria with the requirements of PRC-005-6. The RCC approved the revised version of Directory No. 8 and on September 25, 2018 the NPCC Full Membership approved the revisions. The TFCO and its CO-11 Working Group have developed a clarification on the applicability of the criteria to certain Key Facilities. The clarification was approved at the September 2020 RCC meeting. Additionally, an Implementation Plan governing the clarification has been developed and will be presented to the RCC in December 2020.</p>		

<u>Item</u>	<u>Name</u>	<u>Appendices</u>	<u>Lead TF</u>	<u>Current Version</u>
DIR-9	NPCC Verification of Generator Gross and Net Real Power Capability	<p>Appendix A – Definition of Terms</p> <p>Appendix B – Basic Flow Chart for Verification Generator Gross and Net Real Power Capability</p>	<p>TFCO/TFCP ¹</p> <p>TFCO/TFCP ¹</p>	Retired July 1, 2019
	Status/ Comments:	<p>On August 3, 2017, the NPCC Full Membership voted to approve the retirement of NPCC Regional Reliability Directory No. 9 <i>Verification of Real Power Capability</i> and seven existing NPCC Glossary terms contained solely within Directories No. 9 and No. 10, effective July 1, 2019. Directory No. 9 is posted on the NPCC website marked with a ‘retired’ watermark.</p>		



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Directories, Appendices & Criteria

<u>Item</u>	<u>Name</u>	<u>Appendices</u>	<u>Lead TF</u>	<u>Current Version</u>
DIR-10	NPCC Verification of Generator Gross and Net Reactive Power Capability	Appendix A – Definition of Terms Appendix B1 – Basic Flow Chart for Verification of Generator Gross and Net Reactive Power Capability Appendix B2 – Generator Reactive Capability Form	TFCO TFCO/TFCP ¹ TFCO/TFCP ¹ TFCO/TFCP ¹	Retired July 1, 2019

Status/ Comments:

The Task Force on Coordination of Operation has completed a technical comparison of the Directory No. 10 criteria with the requirements of MOD-25-2 and concluded that Directory No. 10 can be retired without creating a reliability gap. The RCC approved TFCO’s recommendation to retire Directory No. 10 along with seven existing NPCC Glossary terms contained solely within Directories No. 9 and No. 10 at its May 31, 2017 meeting, with the effective date to coincide with the completion of the MOD-25-2 Implementation Plan. On August 3, 2017, the NPCC Full Member Committee voted to approve the retirement of NPCC Regional Reliability Directory No. 10 Verification of Reactive Power Capability and seven existing NPCC Glossary terms contained solely within Directories No. 9 and No.10, effective July 1, 2019. Directory No. 10 is posted on the NPCC website marked with a ‘retired’ watermark.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Directories, Appendices & Criteria

<u>Item</u>	<u>Name</u>	<u>Appendices</u>	<u>Lead TF</u>	<u>Current Version</u>
DIR-11	Disturbance Monitoring Equipment Criteria		TFSP	October 24, 2016
		Appendix A – Guide to Time Synchronization of Substation Equipment	TFSP	
		Appendix B – Guide for Application of DME	TFSP	
		Appendix C – Guide for Generator Sequence of Events Monitoring	TFSP	

Status/ Comments:

On October 24, 2016 the NPCC Full Member Committee voted to approve regional Reliability Directory No. 11 *Disturbance Monitoring Equipment Criteria*.

Also approved was the concurrent retirement of the following NPCC documents:

- A-15 – “*Disturbance Monitoring Criteria*”
- B-25 – “*Guide to Time Synchronization of Substation Equipment*”
- B-26 – “*Guide for Application Disturbance Monitoring Equipment*”
- B-28 – “*Guide for Generator Sequence of Events Monitoring*”

Directory No. 11 will augment PRC-002-2 *Disturbance Monitoring and Reporting Requirements* and guide the effective application of equipment necessary to capture the data required by the NERC standard.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Directories, Appendices & Criteria

Item	Name	Appendices	Lead TF	Current Version
DIR-12	UFLS Load Shedding Program Requirements	Appendix A – Definition of Terms	TFSS TFSS	July 9, 2013
	Status/ Comments:	Directory No. 12 was revised by the Task Force on System Studies (TFSS) to synchronize the UFLS program tolerance bands in Directory No. 12 with those in the UFLS Regional Standard PRC-006-NPCC-1, allowing Regional entities to implement a program that is consistent with the Regional Standard and the SS-38 Working Group design recommendations as part of the ongoing six-year UFLS Implementation Plan. The NPCC Full Membership approved the revised Directory No. 12 on July 9, 2013. Pending all regulatory approvals of recently revised PRC -006-NPCC-2 Directory No. 12 will be considered for retirement.		
Item	Name	Criteria	Lead TF	Current Version
A-01	Criteria for Review and Approval of Documents		TFCP	Retired Sept. 25, 2018
	Status/ Comments:	The Regional Standards Committee (RSC) updated the NPCC <i>Directory Development and Revision Manual</i> and relevant sections of the A-01 <i>Criteria for Review and Approval of Documents</i> have been incorporated into the Directory Manual for the purposes of retiring the A-01. The revised and updated NPCC Directory Manual, including sections of the A-01 document, was approved by the RSC in August 2018. Concurrent with the RSC review of the revised Directory Manual, the RCC approved the retirement of the A-01 document and on September 25, 2018 the NPCC Full Membership approved the retirement of the A-01 Document.		



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Directories, Appendices & Criteria

Item	Name	Criteria	Lead TF	Current Version
A-10	Classification of Bulk Power System Elements		TFCP	March 27, 2020

Status/ Comments:

The Task Force on Coordination of Planning (TFCP) and its CP-11 Working Group conducted a review of the A-10 methodology. The CP-11 Working Group effort focused on three objectives as highlighted by the TFCP in the project scope: 1) Identify critical facilities for the applicability of NPCC Directories; 2) improve consistency of application and outcome across the region; and 3) simplify the methodology to make it less resource intensive.

The RCC approved testing of three proposed methodologies developed by the CP-11 Working Group during Phase I of the review in 2017. These proposals included revisions to the existing methodology and two new methodologies. The CP-11 Working Group Final Report concluded that a revised and improved existing methodology is the most effective of the proposals in identifying those facilities critical to the design and operation of the BPS. The recommended improvements include revisions to the overall testing strategy (i.e. where to begin and conclude testing), base case set-up (i.e. load levels, interface stress and generation patterns) and the use of performance requirements to assess testing outcomes. The RCC approved the CP-11 Working Group's recommendations in December of 2018 and these recommendations have been incorporated into a revised version of the A-10 Document.

The TFCP posted a revised version of the A-10 to the Open Process for two Open Process comment periods and the TFCP has responded to all comments. The RCC approved the revised A-10 Document and an associated implementation plan at its February 27, 2020 meeting. The NPCC Full Member Committee voted to approve the revised A-10 Document on March 27, 2020.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Directory Development and Revision Manual

<u>Item</u>	<u>Name</u>	<u>Assignment</u>	<u>Current Version</u>
Directory	Directory Development and Revision Manual	<p>The NPCC Directory Development and Revision Manual is intended to provide guidance regarding the process of establishing a new or revised Directory and will clarify the roles and responsibilities of the NPCC Task Force responsible for Directory content.</p> <p>Status/ Comments:</p> <p>The Directory Development and Revision Manual was revised in 2013 to incorporate changes in the approval process for a Criteria Interpretation (clarification) and to consider revisions to the Manual that incorporate cost considerations for new or revised criteria.</p> <p>A revised version of the Directory Manual which incorporated relevant sections of the A-01 document to facilitate retirement of the A-01 was approved by the RSC in August 2018. A repeatable cost- effective evaluation has also been incorporated into the Directory Manual in order to ensure a cost- effective evaluation of the criteria during periodic Task Force reviews of each Directory. The RSC approved minor updates to the Manual in October 2020.</p>	October 3, 2014



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

NPCC Glossary of Terms

Item	Name	Assignment	Current Version
Glossary	NPCC Glossary of Terms	<p>The NPCC Glossary of Terms has replaced the A7 document and was approved by the RSC on October 26, 2011. The Glossary contains the definitions of all terms found within NPCC Directories, Guidelines, and Procedures.</p> <p>The Glossary is organized in sections containing those terms found in Directories (including Appendices) which support the NPCC criteria and another Section for definitions found within remaining NPCC B and C documents.</p> <p>The Glossary is located in the Directory section of the NPCC website.</p>	October 26, 2011



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Regional Standards

<u>Item</u>	<u>Name</u>	<u>Assignment</u>	<u>Current Version</u>	
PRC-002-NPCC-01	Disturbance Monitoring	This Standard establishes the technical and reporting requirements for disturbance monitoring equipment. This will lead to improved system reliability by providing the resources to do post event analyses.	Latest Version:	Retired
			Date:	August 16, 2016

Status/ Comments:

The proposal to retire PRC-002-NPCC-01 *Disturbance Monitoring* regional standard was approved by the NPCC Board on March 23, 2016 and by the NERC Board of Trustees on May 5, 2016. After NERC Board approval, a petition to retire the regional standard was filed with FERC on June 9, 2016 and it was filed with all Canadian Provinces on June 14, 2016.

FERC issued an approval letter for the retirement of Regional Reliability Standard PRC-002-NPCC-01 *Disturbance Monitoring* on August 16, 2016.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Regional Standards

Item	Name	Assignment	Current Version	
PRC-006 NPCC-1	Under Frequency Load Shedding (UFLS)	This Standard will provide the requirements for implementing an automatic under frequency load shedding program in order to effectively respond to system under frequency events.	Latest Version:	February 2020
			Frequency of Reviews:	3 years
			Next Review Date:	February 2023

Status/ Comments:

FERC approved PRC-006-NPCC-1 and its Implementation Plan on February 21, 2013. Based on the FERC approved Implementation Plan the enforcement date for requirements R1 – R7 is January 1, 2016. Requirements R8 – R23 became on enforceable on July 1, 2015.

As a result of developments regarding NERC PRC-006-1/PRC-006-2 *Automatic Underfrequency Load Shedding*, PRC-024-1/PRC-024-2 *Generator Frequency and Voltage Protective Relay Settings*, Project 2014-01 *Standards Applicability for Dispersed Generation Resources*, NPCC Directory No. 12 *Underfrequency Load Shedding Program Requirements*, and the *2013 NPCC UFLS Adequacy Assessment*, a Regional Standard Authorization Request (RSAR) for revision of Automatic Underfrequency Load Shedding PRC-006-NPCC-1 was approved by the Regional Standards Committee at its June 23, 2015 meeting. The RCC approved the Regional Standards Committee’s request to assign the TFSS to the project scope outlined in the RSAR and to populate the Drafting Team. On October 7, 2015, the RSC approved the drafting team roster as per the recommendation of the TFSS leadership. The PRC-006-NPCC-01 Automatic UFLS drafting team met eleven times and three conference calls. All requirements have been reviewed by the SDT and the draft standard was posted for three open process comment periods and for a 90-daya pre-ballot review. A ballot was then conducted which closed on February 10, 2019. The ballot achieved 80.95% quorum and approval of 76%. Due to an ERRATA, the standard was re-approved by the NPCC Board at their September 5, 2019 meeting. It was approved at the November 5, 2019 BOT meeting. The petition for approval is sent to FERC on December 23, 2019 and FERC has assigned Docket RD20-1-000 open for comment period which closed on January 22, 2020. The PRC-006-NPCC-02 was endorsed by FERC on February 18, 2020.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Regional Standards

Item	Name	Assignment	Current Version
BAL-002- NPCC-01	Regional Reserve Sharing Groups	The Standard provides the measures for implementing Reserve Sharing Groups within NPCC in order to meet their reserve obligations.	Latest Version: New Frequency of Reviews: 3 years Next Review Date:
	Status/ Comments:	A Regional Standard Authorization Request (RSAR) has been developed and approved by the RSC. The RCC has assigned the Task Force on Coordination of Operation to act as the drafting team and a request for drafting team members was sent to the NPCC membership. At its meeting of April 14 and 15, 2011, the TFCO established a sub-group of TFCO members and NPCC staff that will work on the Reserve Sharing Groups Standard's development. The development of Regional Standards has been held in abeyance pending further direction from NERC.	



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Regional Standards Development Procedure

Item	Name	Assignment	Current Version
RSPM	Regional Standard	The NPCC Regional Standard Processes Manual describes the procedures, policies, and practices implemented to ensure an “open, fair, and inclusive” process for the transparent initiation, development, implementation and revision of the NPCC Regional Standards necessary for the reliable operation of the Interconnected Bulk Power System in northeastern North America.	Latest Version: Dec, 23 2014 Frequency of Reviews: 3 years Next Review Date: Dec. 23, 2017

Status/ Comments:

The Regional Standard Processes Manual (RSPM) is posted on the NPCC Website. The RSC is actively reviewing the activities at the NERC level to ensure the regional procedure is consistent with the NERC Standard Processes Manual and achieves a consistency with the NERC common attributes adhered to by the other Regions. During the June 20, 2018 RSC meeting, a small team is formed to review the current RSPM for any potential updates. The RSC is in the process of reviewing and updating the existing RSPM. The revised RSPM is approved by the RSC for comment posting on August 7, 2019. The RSPM is posted for a 45-day comment period from September 11, 2019 to October 26, 2019. The RSPM is posted for a ballot period from January 17, 2020 to February 25, 2020. The results of the ballot were as follows: 81.65% quorum and 100% approval. The RSPM was approved by the NPCC Board at their meeting on May 6, 2020. The NPCC RSPM is posted by NERC for a 45-day industry wide comment period that concluded on July 29, 2020. Only two responses were provided by the industry. The proposal to approve Regional Standard Processes Manual was submitted to the NERC Board of Trustees and approved at their August 19-20, 2020 meeting. NERC and NPCC filed the joint petition to FERC on September 10, 2020. It will be filed with applicable provincial authorities after the endorsement from FERC.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Compliance Enforcement and Organization Registration and Certification Program Compliance Committee

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
CC	NPCC Compliance Committee	<p>The NPCC Compliance Committee is charged with providing objective stakeholder input for the NPCC Compliance Monitoring and Enforcement Program (CMEP). The NPCC CMEP covers compliance assessment and enforcement of NERC Reliability Standards, Regional Reliability Standards, and NPCC Reliability Criteria (NPCC Directories). Regarding NERC Reliability Standards and Regional Reliability Standards, the CC provides input on the NPCC Compliance Staff's implementation of the CMEP. In this role, the CC will endorse the compliance procedures (CP) used by the NPCC Compliance Staff in the conduct of the CMEP. In addition, the CC is responsible for providing non-monetary sanction recommendations to the RCC for incidents of non-compliance with monitored Reliability Criteria.</p> <p>Status/ Comments: At the June, July, August, September, and October CC calls, NPCC Staff shared with the CC updates and explanations on CIP-013 outreach and the CIP-013 FAQ, status of 2020 NPCC outreach to stakeholders, the status of the review of the ICP for self-logging and self-reporting entities, and explained NPCC FAC-008 outreach. On June 17, the CC accepted revisions to CP-01 CMEP Implementation, CP-04 Registration, and CP-07 TFE's that were presented by NPCC Staff. The CC Scope and Work Plan will be discussed at the December 3, 2020 CC webinar.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Compliance Enforcement and Organization Registration and Certification Program

NPCC Compliance Committee

Documents

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
CCEP	Criteria Compliance and Enforcement Program	<p>The CC will maintain the <i>NPCC Criteria Compliance and Enforcement Program Process Document (CCEP-1)</i> which documents the process for actively monitoring and enforcing compliance on a subset of the Reliability Criteria.</p> <p>The Compliance Committee will provide to the RCC for approval an annual CCEP Implementation Plan which identifies the Reliability Criteria that will be monitored in the upcoming CCEP compliance year and identifies the due dates for the Reliability Criteria Certification forms.</p> <p>The Compliance Committee will provide to the RCC for approval an annual written assessment of the submitted Reliability Criteria Certification forms which will include recommendations as necessary of non-monetary sanctions for incidents of non-compliance.</p> <p>Status/ Comments:</p> <p>At the December 3, 2019 meeting, the 2020 CC Scope and CC Work Plan were discussed and approved. Both documents were approved by the NPCC Board on January 29, 2020. The CCEPWG has updated the CCEP-1 process document and it was presented and endorsed by the CC on April 22, 2020. It was provided to the RCC and posted on the NPCC website. In addition, the CC provided a recommendation to the RCC on April 23, 2020 on how issues with Full Member Directory noncompliance due to COVID response should be documented. On July 15, the CC developed and endorsed the 2019 CCEP Assessment Report which was presented for acceptance at the September 9, 2020 RCC meeting. The 2021 CCEP Implementation Plan and the blank forms for the 2021 IP were approved at the September 16 CC meeting. The 2021 CCEP IP will be presented for acceptance at the December 1, 2020 RCC meeting.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Training, Education, and Operator Certification Program

TASK FORCE ON COORDINATION OF OPERATION

Item	Name	Assignment
CO-2	System Operator Training	<p>This Working Group establishes a program for system operator training relating to NPCC Inc. inter-Area matters, Working Group criteria, terminology, policies, and operating instructions. It prepares and presents material at system operator training sessions, exchanges information on internal system operator training methods. The CO-2 Working Group also evaluates and proposes new techniques and training aids as they become available.</p>
	Status/ Comments:	<p>The 2020 Spring 85th NPCC System Operator Seminar, originally scheduled to be held on May 5-7, 2020 in Portland, Maine, was cancelled due to COVID-19 pandemic related travel restrictions. The CO-2 Working Group met on June 18-19, 2020 via WebEx and will move forward at the request of TFCO with conducting the 2020 Fall System Operator Seminar in a virtual format, to be held in November 2020. The members met again on July 29, 2020 to discuss topics, ideas, and activities to be presented in a virtual format for the Operator Training Seminar. Lessons learned from the virtual seminar will be incorporated into future seminars if needed. The CO-2 Working Group is scheduled to hold their planning meeting for the Fall 2020 seminar on September 10-11, 2020 via WebEx and perform a “dry run” of the proposed topics, ideas, and activities. Suggested seminar topics will include focus on Human Performance factors, NPCC Physical System Characteristics, shared experiences of operations during the COVID-19 pandemic, Power System Restoration and a look at each area’s respective EMS and tool functionality. The group continues to evaluate options for System Operator Credential Maintenance with social distancing measures and other pandemic related restrictions. The CO-2 Working Group members continue to make enhancements to their training programs and share lessons learned in order to provide system operators with the necessary CEHs and safe training opportunities for reliable system operations during the COVID-19 pandemic. These continued efforts are frequently discussed at the CO-2 Working Group meetings.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

TASK FORCE ON COORDINATION OF OPERATION

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
CO-1	Control Performance Working Group	<p>The Working Group ensures coordination between adjacent control areas in establishing interchange schedules, reviews time error correction procedures, and monitors the conformance of the Areas with NPCC Control Performance Criteria and Operating Reserve Criteria. At the request of the Task Force on Coordination of Operation (TFCO), it conducts investigations of control performance problems.</p>
	Status/ Comments:	<p>The CO-1 Working Group most recently met via WebEx on November 16 and 18 due to COVID-19 pandemic related travel restrictions. In addition to the regular periodic Control Performance monitoring activities, the CO-1 Working Group actively monitor the 2019 NERC Generator Owner (GO) Survey and provided informal feedback on the BAL-003.1 Phase II SDT Whitepaper. The Working Group continues to also conduct periodic monitoring as required by NERC and NPCC Control Performance and Operating Reserve Criteria, and in coordination with the CO-8 Working Group and the TFCO. No discernable operational trends have been identified. The CO-1 Working Group continues to closely industry related storage integration discussions and monitor developments to their relevant BAL and FAC standards. The Working Group will meet next on February 9-10, 2021 via WebEx.</p>

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
CO-7	Operational Planning Working Group	<p>The Working Group CO-07 was restructured to serve the Task Force on Coordination of Operation as an Ad Hoc Working Group, populated and charged to address specific issues as required to assist the TFCO. It has been renamed the “Operational Planning Working Group.”</p>
	Status/ Comments:	<p>There are currently no active CO-7 Working Group assignments.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

TASK FORCE ON COORDINATION OF OPERATION

Item	Name	Assignment
CO-8	System Operations Managers Working Group	Provide a forum for the Managers of the NPCC control centers to identify and discuss security concerns in the operation of the interconnected bulk power supply system, and specific concerns related to the integration of operation between and among the evolving ISOs. The System Operations Managers Working Group will also assist the Task Force on Coordination of Operation (TFCO) in their work on issues related to system security and the operation of the ISOs, and provide advice to the TFCO, as requested.
	Status/ Comments:	The CO-8 Working Group is performing a triennial review of the C-15 – <i>Procedures for Geomagnetic Disturbances Which Affect Electric Power System</i> and the NPCC Regional Reliability Plan (RRP) document. Draft C-15 document was approved by TFCO at its May 13-14, 2020 for posting to the NPCC Open Process for a 45-day Comment Period, which concluded on July 13, 2020. The CO-8 Working Group drafted responses to the comments received in the Open Process and made non-substantive conforming changes to the C-15 document at its August 26-17, 2020 meeting. TFCO approved the responses and the final version of C-15 document via an email vote on October 1, 2020. Responses to comments and updated C-15 document will be posted on the NPCC website and the revised C-15 will be presented to the RCC as informational item at its December 1, 2020 meeting. CO-8 completed its review of the NPCC RRP during its November 4-5, 2020 meeting, including conforming changes with the NERC Reliability Coordinator Reliability Plan Reference Document. Latest draft of the RRP was sent to the TFCO for their review and comments and will be included on the TFCO December 3-4, 2020 meeting for approval to go to the NERC Real Time Operating Subcommittee (formerly ORS) for endorsement.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program TASK FORCE ON COORDINATION OF OPERATION

Item	Name	Assignment
CO-11	Restoration Working Group	<p>The CO-11 Restoration Working Group facilitates effective and coordinated power system restoration among the NPCC Reliability Coordinator areas, and with adjacent Regions. It annually reviews the restoration plans of the NPCC Reliability Coordinator areas to identify in each individual plan the physical points requiring coordination, the general elements of the restoration plan, the Key Facilities associated with the restoration plan, the communication protocols employed, and the roles and responsibilities of the restoration participants. It identifies opportunities for mutual assistance during restoration and the extent to which each system can rely on its neighbors for assistance. Coordinates Reliability Coordinator restoration exercises and develops and supervises annual wide-area restoration drills. CO-11 monitors the NERC Reliability Standards EOP-005, <i>System Restoration from Blackstart Resources</i>, and EOP-006, <i>System Restoration Coordination</i>. The CO-11 Working Group provides comments to the NPCC Task Force on Coordination of Operation and the NPCC Regional Standards Committee as revisions to these Standards are posted for consideration, and weighed for implementation.</p> <p>Status/ Comments:</p> <p>The CO-11 Restoration Working Group completed reviews of all NPCC Reliability Coordinator (RC) Area Restoration Plans at CO-11 Working Group and Task Force on Coordination of Operation (TFCO) meetings in 2020. The reviews included descriptions of the elements of coordination of the Restoration plans with neighboring Reliability Coordinators (desired points of interconnection and control parameters). The CO-11 Working Group will meet next on March 4, 2021 via WebEx due to COVID-19 pandemic related travel restrictions. In addition, the 2020 NPCC RC-to-RC Restoration Exercise was held virtually on October 21, 2020 with 31 System Operators and participants. The exercise incorporated lessons learned from the 2019 exercise and addressed the impacts of critical infrastructure interdependencies on Area Restoration plans consistent with enhancements to the NPCC Power System Restoration Reference Document and as presented on the November 2020 RCC Informational Webinar. The CO-11 Working Group and the TFCO recently developed a clarification on the applicability of the NPCC Criteria in Regional Reliability Directory No. 8 to certain Key Facilities. The clarification was approved at the September 2020 RCC meeting, and Implementation Plan was developed for approval at the December 1, 2020 RCC meeting.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

TASK FORCE ON COORDINATION OF OPERATION

Item	Name	Assignment
CO-12	Operations Planning Working Group	Review the overall reliability of the generation and transmission system in the NPCC Region for the Summer and Winter Seasonal conditions.
	Status/ Comments:	The CO-12 Working Group held a kickoff call for the NPCC 2020-21 Winter Reliability Assessment effort on August 31, 2020 to review the upcoming effort scope, schedule and potential assessment enhancements. Working Group efforts were made to develop the NPCC assessment in conjunction with the NPCC CP-8 Working Group and coordinate alignment with the 2020-2021 NERC Winter Reliability Assessment (WRA). Results were presented to the NPCC Task Force on Coordination of Operation (TFCO) in early October. Task Force on Coordination of Planning and the TFCO approved the assessment on November 4 and 12, 2020 respectively. The final report will be presented to the RCC at its December 1, 2020 meeting for approval.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

TASK FORCE ON COORDINATION OF PLANNING

Item	Name	Assignment
CP- 8	Working Group on Review of Resource and Transmission Adequacy	Review the overall reliability of the NPCC Areas and perform pre-seasonal resource adequacy assessments.
	Status/ Comments:	The Task Force on Coordination of Planning approved the NPCC 2020 Long Range Adequacy Overview and the NERC ProbA – NPCC Region at their November 4, 2020 meeting; both will be presented for RCC approval on December 1, 2020.

Item	Name	Assignment
CP- 2020S	Summer 2020 Multi-Area Probabilistic Reliability Assessment	Assess NPCC Area reliability by estimating the projected use of Area Operating Procedures designed to mitigate resource shortages for the summer (May through September) period.
	Status/ Comments:	The <i>NPCC 2020 Summer Reliability Assessment</i> was approved by the Task Force on Coordination of Planning on April 15, 2020 and the Task Force on Coordination of Operation on April 16, 2020. The assessment was presented to the NPCC Board on May 6, 2020. The NPCC 2020 Summer Media release was held on May 7, 2020. The assessment has been posted on the NPCC website.

Item	Name	Assignment
CP- 2020-21W	Winter 2020-2021 Multi-Area Probabilistic Reliability Assessment	Assess NPCC Area reliability by estimating projected use of Area Operating Procedures designed to mitigate resource shortages for the winter (November through March) period.
	Status/ Comments:	The Task Force on Coordination of Planning approved the assessment at their November 4, 2020 meeting; it will be presented for RCC approval on December 1, 2020.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

TASK FORCE ON COORDINATION OF PLANNING

Item	Name	Assignment
TIE	NPCC 2019 Tie Benefits Report	Estimate NPCC Area Annual Tie Benefits for a five-year period, assuming a hypothetically “At Criteria” and “As Is” system representation, applying consistent methodology and assumptions to all NPCC Areas, using the same multi-area reliability model.
	Status/ Comments:	The <i>NPCC 2019 Tie Benefits Report</i> was approved by the Task Force on Coordination of Planning at their December 16, 2019 meeting, and was approved at the February 27, 2020 RCC meeting. Work will begin on the <i>NPCC 2020 Tie Benefits Report</i> next year.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

TASK FORCE ON SYSTEM STUDIES

Item	Name	Assignment
SS-38	Inter-Area Dynamic Analysis Working Group Status/ Comments:	<p>Assigned to analyze dynamic phenomena, which may affect interconnected system reliability, especially in the area of low frequency oscillations.</p> <p>The SS-38 Working Group has initiated the effort to conduct a new study of the NPCC transmission system in 2020. The SS-38 Working Group completed the terms of reference for the study with approval from Task Force on System Studies. The SS-38 Working Group has completed the <i>2020 NPCC Overall Transmission Assessment</i> and is submitting the draft report for review and approval at the December 1, 2020 RCC meeting.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

TASK FORCE ON SYSTEM STUDIES

Item	Name	Assignment
SS-37	Base Case Development Working Group	On an annual basis, develop a library of solved power flow cases and associated dynamic data.
	Status/ Comments:	<p>2020 Series Base Case Development - Ongoing</p> <p>The NPCC SS-37 Working Group on Base Case Development is currently working with the MMWG Coordinator to address issues with NPCC dynamics data that arose after merging with Eastern Interconnection dynamics data as part of the 2020 Series dynamics case development effort. The final dynamics cases are expected to be complete during February 2021.</p> <p>The SS-37 Working Group has also taken the initiative to formally determine which processes can be automated to increase efficiency and accuracy of the case development effort. A meeting was held on November 12 2020 to determine processes that could be automated during 2021.</p>
Item	Name	Assignment
SS-39	Geomagnetic Disturbance Working Group	Develop a White Paper recommending voluntary guidelines to address R3, R4, and R8 of NERC Standard TPL-007-4.
	Status/ Comments:	<p>The SS-39 Working Group has divided its scope of work into the following tasks; 1) develop criteria for acceptable system steady state voltage performance; 2) define “events” to use for vulnerability assessments; 3) develop common practices for GMD related case set-up and conditioning; and 4) develop common practices on methodology for applying and studying the effects of the “events” defined in 3). Progress has been made on Tasks 1,3, and 4 with Task 2 to follow completion of the other three. At present, SS-39 is collecting information from various sources such as NERC and EPRI documents.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

TASK FORCE ON SYSTEM PROTECTION

Item	Name	Assignment
SP-7	Working Group on Review Of Protection System Misoperations	Review and analyze misoperations of transmission and generation protection systems and special protection systems on the bulk electric system and report on the statistics of misoperations as they occur in the NPCC region including lessons learned and implementation of corrective action plans by registered entities.
	Status/ Comments:	<p>The Task Force on System Protection reviewed the status of SP-7 Working Group on Protection System Misoperation Review as completed through Q2 of 2020. The total number of misoperations for Q2 is 33 compared to the NPCC Q2 quarterly average of 39 misoperations. This is the second lowest misoperation reported for the Q2 in the past four years.</p> <p>The misoperation rate for Q2 2020 is 7.99%. This is the highest misoperation rate reported for the Q2 in the past four years. Note that during this quarter, 413 operations were reported compared to the Q2 quarterly average of 515 operations.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

Eastern Interconnection Reliability Assessment Group

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
ERAG	Eastern Interconnection Reliability Assessment Group	The Eastern Interconnection Reliability Assessment Group (ERAG) oversees the Multi-Regional Modeling Group steady state and dynamics base case development, Eastern Interconnection interregional assessment activities and other interregional matters of interest.
	Status/ Comments:	<p><u>Eastern Interconnection (EI) MOD-032 Designee</u> A new MOD-032 designee agreement is currently being developed for execution by NERC and the EI Regional Executives to codify ERAG as the permanent MOD 032 designee. At a future ERAG meeting, NERC staff will provide a progress update on the new MOD-032 designee agreement.</p> <p><u>Protection and Control Workshop</u> The Protection and Control Workshop was held on October 27, 2020 as a virtual workshop. Topics covered included modeling of converter-interfaced renewable resources in short circuit studies, transmission line protection for systems with IBRs, IEEE P2800 update, mis-operation improvement initiatives, PRC-027, and NATF impacts.</p> <p><u>FERC Order 1000 Planning Protocol</u> FERC Order 1000 requires neighboring regions to have planning protocols. This order applies to US entities. Planning protocols between US entities and Canadian entities within NPCC are addressed as part of NPCC processes. A potential gap in interregional planning protocols has been identified involving the Ontario IESO and the MISO. A subgroup of ERAG was formed to further understand the potential issue and to seek an appropriate solution.</p> <p><u>MMWG Update</u></p> <ul style="list-style-type: none"> • 2020 Series Power Flow Cases have been completed and published to the SS-37 Sharefile site for SS-37 members to retrieve and distribute to appropriate staff within their organizations; • A draft Request for Proposal (RFP) for the future case builder was submitted to ERAG for review and issuance. ERAG accepted the RFP for legal review and issuance during 2021; and, • A revision to the MMWG Charter was made to clarify the role of a liaison on MMWG and the approval process of guests.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

Eastern Interconnection Reliability Assessment Group

ERAG Seasonal Working Group

Item	Name	Assignment
ERAGWG	ERAG Seasonal Working Group	The ERAG Seasonal Working Group conducts appraisals of the Eastern Interconnection. Appraisals are conducted for weather scenarios, including drought and polar vortex type conditions, to determine the impacts on power flows across the Eastern Interconnection.
	Status / Comments:	The ERAG Working Group is and will remain inactive until an ERAG-conducted system study is initiated.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

North American Electric Reliability Corporation (NERC)

Item	Name	Assignment
RAS	Reliability Assessment Subcommittee (RAS)	Conduct an annual review of the overall reliability of the existing and planned generation and transmission system of the seven Regional Reliability Entities for the ten-year horizon. Conduct semiannual seasonal assessments of the overall reliability of the existing generation and transmission systems of the seven Regional Reliability Entities.
	Status/ Comments:	<p>The 2020 NERC Summer Reliability Assessment was released by June 1, 2020.</p> <p>NERC has requested each Region’s assistance in assessing the 2020 Long-Term(10-year) reliability of their Region. Each NERC Region was asked to submit their respective data on an Assessment Areas-basis. Narratives will be completed based on responses to questions in the 2020 Long-Term Reliability Assessment (LTRA) Narrative Guide. The narrative guide for the 2020 LTRA includes questions pertaining to the projections for each Assessment Area. The NPCC response, coordinated by the NPCC CP-8 Working Group was submitted to NERC and finalized at the end of July, 2020. New England’s LTRA submittal was revised in August 2020 to reflect recent news related to the retirement of Mystic units 8 and 9 in 2024.</p> <p>The RAS met on November 10 and 12, 2020 to review the draft 2020 LTRA Summary Section, the consolidation of emerging issues, the Area dashboards and the overall LTRA Report. The 2020 LTRA is scheduled to be reviewed by the NERC Reliability and Security Technical Committee, and released December 17, 2020, following NERC Board of Trustees approval.</p> <p>NERC requested the initial Narratives and Operational Risk Scenario (waterfalls) submissions for the 2020-21 NERC Winter Reliability Assessment (WRA) by September 2, 2020. The NPCC CO-12 Working Group coordinated the submittal for the NPCC Areas. The NERC 2020-21 WRA was released on November, 18 2020.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

North American Electric Reliability Corporation (NERC)

Item	Name	Assignment
ProbA	NERC Probabilistic Assessment (ProbA)	Advance the work initiated by the NERC Generation & Transmission Reliability Planning Models Task Force (GTRPMTF) and the Probabilistic Assessment Improvement Task Force (PAITF) in the conduct of NERC's Core probabilistic assessments. Coordinate and promote the alignment of probabilistic resource adequacy assessments conducted by the ERO and industry.
	Status/ Comments:	The NERC Probabilistic Assessment Working Group (PAWG) met on November 9, 2020, to review the NERC Area 2020 ProbA Base Case Assessment results and the draft Regional Risk Scenario Cases, scheduled to be released in Q1-2021. The group is also working on planning efforts for the 2021 Probabilistic Analysis Forum (PAF).



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

North American Electric Reliability Corporation (NERC)

Item	Name	Assignment
TADS	Transmission Availability Data System	<p>Serve as the Regional Entity Coordinator in support of the NERC TADS outage data collection and the analysis of the NPCC Transmission Owners (TO) outage information. Oversee the use of and the data entry of automatic outage information by the TO in the NERC Internet based data management tool - webTADS.</p>
	Status/ Comments:	<p>The TADS Working Group held a call on April 21, 2020. The Working Group has held monthly calls; the last one was on September 15, 2020.</p> <p>The TADS Working Group has been assigned the creation of a data collection system for reactive devices. The group felt that there was sufficient expertise within the current members and that adding new members specifically for this task was unnecessary at this time. It is expected that the data collection will be incorporated into the TADS 1600 data request and the group would like to use this opportunity to re-evaluate what information is currently being collected and whether any information needs changed. A methodology is being developed by the working group to address cascading outages. The methodology being employed to identify and study transmission element outages recorded in TADS from 2015 to 2018 that could lead to cascading outages.</p> <p>The group also revised the TADS reporting workbook; the OATI portal will contain a news item when the updated workbook is available. The TADS Working Group also worked on the training material for 2020. NERC has conducted one virtual training session and one upcoming session with the schedule below:</p> <p>Session 1 – TADS 101 October 28, 2020 10:00 a.m. – 12:00 p.m. and 1:00 – 3:00 p.m. Eastern Session 2 – TADS 201 November 12, 2020 10:00 a.m. – 12:00 p.m. and 1:00 – 3:00 p.m. Eastern</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

North American Electric Reliability Corporation (NERC)

Item	Name	Assignment
DADS	Demand Availability Database System	Serve as the Regional Entity Coordinator in support of the DADS data collection and analysis for NPCC. Oversee the collection of the data in the NERC Internet based data management tool – web DADS.
	Status/ Comments:	<p>In response to the recent coronavirus (COVID -19) developments, NERC has extended the Q1 reporting deadline for all Section 1600 applications to June 29, 2020.</p> <p>The DADS Working Group worked on its Scope to develop a process for soliciting and evaluating DADS changes and recommend selected improvements, such as changes to definitions, metrics, Demand Response Programs. The DADS Working Group also discussed the Severity Risk Index correlation with Demand Response Event Days. The DADS Working Group has started working on clarification of DADS reporting criteria.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

North American Electric Reliability Corporation (NERC)

Item	Name	Assignment
GADS	Generator Availability Data System	<p>Serve as the Regional Entity Coordinator in support of the Generator Availability data collection and Data System analysis for NPCC. Oversee the collection of the data in the NERC Internet based data management tool – web E-GADS.</p> <p>Status/ Comments:</p> <p>There was a conference call on October 27, 2020. NERC has completed three GADS/GADS-Wind trainings in 2019. NERC has added Cause Code 9015 – Pandemic in order to allow explicit reporting on events affected by COVID19, whether it’s direct (reduced staffing) or indirect (parts delayed). A code for “High Water Level in Tailrace (too much water)” has been added to the Hydro cause codes.</p> <p>The GADS Solar team continues to make progress on the Data Reporting Instructions (DRI). Site-level event reporting criteria and cause codes for events are in development. Solar reporting will be similar to the GADS Wind application. A phased in approach will be used. Configuration and performance reporting will be at the inverter sub-group level. Reporting data requirements for Solar have been initiated with a target goal of beginning data submittal by 2021.</p> <p>The GADS Wind Turbine Generation Data Reporting Instructions have been developed to assist wind plant personnel in reporting information to NERC’s GADS Wind Reporting application. The instructions detail the procedures, schedule, and format to follow when reporting data. Wind plants with a Total Installed Capacity of 75 MW or more with a commissioning date of January 1, 2005 or later will be required to report on a quarterly basis.</p> <p>2020 is the first year of having complete data for GADS Wind. Mandatory Reporting for all wind plants with a Total Installed Capacity of 75 MW or greater. GADS Wind DRI Addendum was added to the NERC site – to help guide users on how to identify data errors and references on how to correct them. The full year of the phased in reporting for GADS Wind will be completed at the end of March 2021. After the completion of phased in reporting, additional GADS wind Validations may be developed in the future as analysis and metrics on data developed.</p> <p>Due to the current COVID-19 pandemic, training sessions scheduled in 2020 for conventional GADS and GADS Wind have been postponed.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

North American Electric Reliability Corporation (NERC)

Item	Name	Assignment
MIDASWG	Misoperation Data Analysis System Working Group	Serve as the Regional Entity Coordinator in support of the Misoperation data collection and Data System analysis for NPCC. Oversee the collection of the data in the NERC Internet based data management tool – MIDAS.
	Status/ Comments:	<p>The NERC MIDAS Working Group (MIDASWG) had its kickoff conference call on January 30, 2020 at Schweitzer’s office in Phoenix, AZ. A Web-Ex call was held on November 4, 2020.</p> <p>The following items are in the scope of MIDASWG:</p> <ul style="list-style-type: none"> ▪ Draft and maintain MIDAS Data Reporting Instructions (DRI); ▪ Assist with development of addition industry assisting content (i.e. training); ▪ Solicit and/or evaluate recommended changes and improvements to MIDAS data collection (1600 & Portal); ▪ Assist with development and production of public reports; and, ▪ Develop additional specialized analysis reports. <p>The group made several changes to the 1600 Data Request Excel file and has added several new examples for the 2021 MIDAS DRI. MIDASWG discussed conducting MIDAS Virtual Training in 2020 and reviewed proposed FAQs and training videos.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

OTHER

Item	Name	Assignment
IPSAC	Interregional Planning Stakeholder Advisory Committee	The Interregional Planning Stakeholder Advisory Committee (IPSAC) is an open stakeholder group that provides input for the development of the Northeast Coordinated System Plan (NCSP). The NCSP outlines activities conducted jointly by ISO New England, New York ISO, and PJM.
	Status/ Comments:	The IPSAC held a WebEx meeting on May 15, 2020. Agenda items included PJM, ISO-New England, and New York ISO Regional Planning Needs and Solutions: Interconnection Coordination for Interconnection Queue and Long-Term Firm Transmission Requests; and presentation of the Final 2019 Northeastern Coordinated System Plan and Planning and Interregional Plan. The next stakeholder meeting is scheduled for December 12, 2020.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Situation Awareness and Infrastructure Security Program

TASK FORCE ON COORDINATION OF OPERATION

Item	Name	Assignment
CO-10	Operational Tools Working Group	<p>The Operational Tools Working Group (CO-10) is responsible for taking a lead role in the development of NPCC and NERC operational tools (e.g. electronic tagging, the NERC Interchange Distribution Calculator and electronic scheduling), including hardware, software and integrated systems. The Operational Tools Working Group will define the need for operational tools, evaluate the cost benefits of operational tools, coordinate their implementation within NPCC and coordinate common training in the use of operational tools.</p>
	Status/ Comments:	<p>The CO-10 Working Group continues to review of tool failures and associated lessons learned as generated from the NERC Event Analysis Program and also develops regional insights templates from the review of NERC EMS/SCADA lessons learned to further aid NPCC entities in utilizing these valuable lessons.</p> <p>Along with working on the review and analysis of tool failures within the NPCC and the review and comment of NERC published 'Lessons Learned' regarding EMS outages, the Working Group has reviewed the results of the Critical Operating Tools Survey and is presently preparing a report to be presented to the Task Force of Coordination of Operation (TFCO) at their March 2021 meeting. The Working Group developed and distributed the Critical Operating Tools Survey to the BAs, RCs TOs, and TOPs on May 19, 2020. There were 23 respondents to the 2020 survey. Upon receipt of approval of the report from TFCO, the report will be distributed to the participants of the survey as information indicating where they and their peers stand on the survey topics, as well as informing them of the trends observed.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Situation Awareness and Infrastructure Security Program

TASK FORCE ON INFRASTRUCTURE SECURITY AND TECHNOLOGY (TFIST)

Item	Name	Assignment
IST-1	Infrastructure Security and Technology (TFIST) Workshop	Periodic workshops presentations to address timely issues and update member system personnel associated with the provision of on-line computer systems for operation of the power system. Last Workshop: November 2019
	Status/ Comments:	The TFIST presented at NPCC's Fall 2019 Standards & Compliance Workshop. TFIST expected to present at NPCC's 2020 Standards & Compliance Workshop, but the virtual workshops format did not have time for the TFIST update. TFIST expects to present at NPCC's Spring 2021 Standards & Compliance Workshop.
Item	Name	Assignment
IST-2	TFIST Telecommunications Working Group	Provide a forum to identify, discuss and advance the technology of Telecommunications Infrastructure for the reliable operations of the NPCC Bulk Power System. The Telecommunications Working Group (IST-2) will also support TFIST in their work on issues related to Telecommunications
	Status/ Comments:	The 2019 annual Cross Border Emergency Telecommunications Report was presented to the NPCC RCC at their May 27, 2020 meeting. The IST-2 Working Group continues to support this testing.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Situation Awareness and Infrastructure Security Program

TASK FORCE ON INFRASTRUCTURE SECURITY AND TECHNOLOGY (TFIST)

Item	Name	Assignment
IST-5	TFIST Physical Security Working Group	The Physical Security Working Group shall exchange information regarding approaches to physical security that will enhance the reliability and resiliency of the BPS. and further address any physical The Physical Security Working Group (IST-5) also supports TFIST in their work on issues related to Physical Security.

Status/ Comments:

The IST-5 Working Group continues to develop confidential guidance by industry physical security experts and members of the NPCC PSWG on better practices and technologies, that also includes lessons learned as a result of the current COVID-19 pandemic. Member entities continue to contribute changes and adaptations that were needed to their plans as new issues and situations arose. This continues to be an ongoing exercise until the COVID-19 pandemic is over. A physical security pandemic survey was developed by the work group with entities sharing physical security approaches and mitigations to unique situations posed by the COVID-19 pandemic. The work group has held their Q3 meeting in a virtual setting that had over 50 attendees. Meetings will continue to be held in virtual settings until the end of the COVID-19 pandemic. Members of the work group and NPCC staff are working closely with the NERC E-ISAC and Pacific Northwest National Labs to develop a virtual version of the Design Basis Threat program. To date, two virtual programs have been presented with lessons learned now being incorporated into the development process.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Administrative Services

MEMBERS' FORUMS

Item	Name	Assignment
General	NPCC General Meeting	To promote the reliable and efficient operation of the interconnected bulk power systems in Northeastern North America, NPCC invites high level policy makers from Federal, Provincial, and State regulatory and/or Governmental authorities and senior executives within NPCC to identify and discuss emerging issues related to the reliability of the NPCC Region.
	Status/ Comments:	The 2019 NPCC General Meeting was held on December 4, 2019 in Montreal, Quebec. The theme of the 2019 General Meeting was “Reliable Transformation of the Power Grid.” Due to the current COVID-19 pandemic, the 2021 NPCC General meeting will be rescheduled later in 2021.
Item	Name	Assignment
Gov/Reg	NPCC Governmental Regulatory Affairs Advisory Group	To provide a forum where industry and governmental and/or regulatory representatives can exchange views and strive to develop consensus policy recommendations on reliability issues specific to the NPCC Region and share actionable information related to regional energy and reliability matters.
	Status/ Comments:	The 2019 NPCC Governmental/Regulatory Affairs Advisory Group meeting was held in conjunction with the NPCC 2019 General Meeting. The meeting focused on NPCC Distributed Energy Resources initiatives and associated activities. Due to the current COVID-19 pandemic, the 2020 NPCC Governmental/Regulatory Affairs Advisory Group meeting will be rescheduled later in 2021.
Item	Name	Assignment
PIC	Public Information Committee	To highlight and summarize NPCC activities and accomplishments and disseminate appropriate information to the media, as well as respond to related requests for information.
	Status/ Comments:	NPCC continues to participate in communications coordination with NERC and the Regions. The NPCC 2020 Summer Media release was held on May 7, 2020.