



**RCC Meeting
November 18-19, 2009
Agenda Item 6.8**

**Reliability Assessment Program
(NRAP)
HIGHLIGHT REPORT**
*Prepared for the
Reliability Coordinating Committee
November 18-19, 2009*

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
Members, Task Force on Infrastructure Security and Technology
Chairmen, Working Groups
and
NPCC Staff



**Reliability Assessment Program
HIGHLIGHT REPORT**

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RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Regional Standards Committee

Item	Name	Assignment
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 Standards Development Procedure under a sector based voting structure as described in the NPCC, Inc. Bylaws. The NPCC RSC will consider requests for new or revised standards and be available for advisement to the NPCC Board on the standards. The NPCC RSC will work in coordination with the Regional Standards Process Manager (RSPM) who will be the administrator for the NPCC Regional Standards Development Procedure. In addition, the NPCC RSC will review, comment on and develop ballot recommendations for the NERC Reliability Standards under development.</p>
	Status/ Comments:	<p>The Regional Standards Committee is focusing on the review of each of the NERC Reliability Standards (as they are developed or revised). RSC is currently reviewing the FERC Orders and NOPRs that pertain to Reliability Standards. The RSC develops recommendations for the membership on ballots when posted. RSC has also commented on the Adequate Level of Reliability Definition, participates in the NERC Functional Model Working Group, and NERC Standards Committee. RSC is participating in the NERC Reliability Standards Manual revisions through the Standards Committee Process Subcommittee and also soliciting members for the NERC drafting teams as necessary to ensure NPCC is represented. RSC also developed a process to coordinate commenting on adjacent Regions' criteria and their standards development, as well as promoting NPCC criteria in adjacent regions, and encouraging NPCC member involvement on their drafting teams. RSC has developed and is maintaining a Regional Reliability Standards Development Process which has been approved by the NPCC BOD and filed with the FERC as part of the Regional Delegation Agreement. FERC has accepted the revised NPCC Standards Development Procedure and RSC will be involved with implementation. The RSC is overseeing the development of three Regional Reliability Standards: Underfrequency Load Shedding, Disturbance Monitoring, and Special Protection Systems. The RSC is also overseeing the development of the NPCC Regional Reliability Directories and is maintaining a work plan for completion of this project.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Standards Program

Directories

<u>Item</u>	<u>Name</u>	<u>Assignment</u>	<u>Latest Version:</u>	<u>New</u>
DIR-1	Basic Criteria for the Design and Operation of Interconnected Power Systems	This Directory presents the objectives, principles and requirements that govern the Areas in formulating plans and procedures to be followed for the design and operation of interconnected power systems.	Latest Version:	New
			Frequency of Reviews:	3 years
			Next Review Date:	
	Status/ Comments:	Directory #1 received comments during two successive 45 day postings to the Open Process. The Task Force on Coordination of Planning has reviewed and responded to all comments received and presented Directory #1 to the RCC for approval. Directory#1 was approved by the RCC and is currently under ballot with the Full Members. Concurrent with Full Member approval of Directory#1 NPCC documents A2, B4, B8, B10, C4, C13, C18, and C40 will be retired.		

<u>Item</u>	<u>Name</u>	<u>Assignment</u>	<u>Latest Version:</u>	<u>Oct. 21, 2008</u>
DIR-2	Emergency Operation Criteria	This Directory presents the objectives, principles and requirements that govern the Areas in formulating plans and procedures to be followed in an emergency or during conditions which could lead to an emergency.	Latest Version:	Oct. 21, 2008
			Frequency of Reviews:	3 years
			Next Review Date:	Oct. 2011
	Status/ Comments:	Directory #2 was approved by the Full Members on Oct. 21, 2008 and NPCC Document A-3 was retired on the same date. The Automatic UFLS language formerly contained within Directory #2 was transferred into Directory#12 (UFLS Program Requirements) effective with the Full Member approval of Directory #12 on June 26, 2009		



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Directories

Item	Name	Assignment	Latest Version:	July 2008
DIR-3	Maintenance Criteria for Bulk Power System Protection	This Directory establishes the maintenance interval and practices which should result in dependable and secure protection system operation.	Frequency of Reviews:	3 years
			Next Review Date:	Dec. 2009

Status/ Comments:

Directory #3 was approved by the NPCC Full Membership on July 11, 2008 and NPCC Documents A-4 and B-23 were retired on the same date.

The Task Force on System Protection conducted a review of this document to better clarify specific intent on a number of requirements. The document was posted for two rounds of Open Process review which also resulted in a number of clarifying and editorial changes in response to the comments received.

Additional language was also incorporated into Appendix B of the document to provide guidance that credit can be obtained for normal breaker operations if the equipment design permits verification and documentation of breaker tripping by each individual trip coil.

On July 14, 2009 the Full Members voted to approve these revisions.

Item	Name	Assignment	Latest Version:	New
DIR-4	BPS Protection Criteria	This Directory establishes the criteria and practices which result in dependable and secure protection system operation for the bulk power system	Frequency of Reviews:	3 years
			Next Review Date:	

Status/ Comments:

The initial draft of Directory #4 was posted to the Open Process by the Task Force on System Protection. TFSP reviewed and responded to all comments received and presented Directory #4 to the RCC for approval. Directory#4 was approved by the RCC and is currently under ballot with the Full Members. Concurrent with Full Member approval of Directory#4 NPCC documents A5, B5, B7, B24, and C22 will be retired.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Directories

Item	Name	Assignment	Latest Version:	Frequency of Reviews:	Next Review Date:
DIR-5	Operating Reserve Criteria	This Directory establishes the criteria and practices which result in dependable and secure operating reserve.	New	3 years	
	Status/ Comments:	The Task Force on Coordination of Operation with support from the CO-1 and CO-8 Working Groups has reviewed the initial draft of Directory#5 and has placed the document in the NPCC Open Process to receive comments for a 45 day posting period. (Open Process for D#5 expires on 11/19).			
DIR-7	Special Protection System Criteria	This Directory establishes the protection criteria, and recommends minimum design objectives and practices for Special Protection Systems (SPSs). The SPS is categorized according to the Criteria fault for which it is designed and the impact its failure would have on the network.	Dec. 27, 2007	3 years	Dec. 2010
	Status/ Comments:	Directory #7 was approved by the NPCC Full Membership on December 27, 2007. The Task Force on System Studies has recommended changes to Directory#7 that would eliminate certain internal inconsistencies within the Directory. Additionally, TFSS is also reviewing language to consider circumstances when an SPS is retired. TFSS will forward all of its recommended changes to TFSP for comment after which TFSP will review and post the proposed revisions to the Open Process.			



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Directories

Item	Name	Assignment	Latest Version:	Oct. 21, 2008
DIR-8	Black Start System Restoration Criteria	This Directory establishes the criteria and practices which result in dependable and secure black start and restoration for the bulk power system	Frequency of Reviews:	3 years
			Next Review Date:	Oct. 2011
	Status/ Comments:	<p>Directory #8 was approved by the NPCC Full Membership on Oct. 21, 2008.</p> <p>TFCO has proposed simplifying certain redundant reporting requirements within Directory#8, clarifying measures and assessments and removing other redundant language. Directory #8 has been posted in the NPCC the Open Process, and the TFCO will review and respond to all comments received at its meeting of November 2 and 3, 2009.</p>		

Item	Name	Assignment	Latest Version:	Dec. 22, 2008
DIR-9	NPCC Verification of Generator Gross and Net Real Power Capability	This Directory establishes the criteria and and practices which result in the verification of generator gross and net real power capability	Frequency of Reviews:	3 years
			Next Review Date:	Dec. 2011
	Status/ Comments:	<p>Directory #9 was approved by the NPCC Full Membership on December 22, 2008.</p>		



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Directories

<u>Item</u>	<u>Name</u>	<u>Assignment</u>		
DIR-10	NPCC Verification of Generator Gross and Net Reactive Power Capability	This Directory establishes the criteria and practices which result in the verification of generator gross and net reactive power capability	Latest Version:	Dec. 22, 2008
			Frequency of Reviews:	3 years
			Next Review Date:	Dec. 2011
	Status/ Comments:	Directory #10 was approved by the NPCC Full Membership on December 22, 2008.		

<u>Item</u>	<u>Name</u>	<u>Assignment</u>		
DIR-12	UFLS Load Shedding Program Requirements	This Directory presents the basic criteria for the design and implementation of the UFLS program in order to arrest frequency decline and prevent system collapse under islanded conditions.	Latest Version	New
			Frequency of Reviews:	3 years
			Next Review Date:	
	Status/ Comments:	<p>The new Directory #12 was developed from the Automatic Under frequency Load Shedding requirements currently within the existing NPCC Directory #2 <i>Emergency Operations</i> and also from the recommendations and implementation plans provided in the 2006 Assessment of Under frequency Load Shedding Adequacy; and the 2008 Assessment of Under frequency Load Shedding Adequacy – Québec Area, both of which were approved by the Reliability Coordinating Committee on November 19, 2008.</p> <p>Directory #12 was approved by ballot of the NPCC Full Members on June 26, 2009. A revision to Directory#12 to consider UFLS requirements for small entities was posted to the Open Process from 9/19 to 11/03.</p>		



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Regional Standards

Item	Name	Assignment	Latest Version:	New
PRC-002	Disturbance Monitoring	This Standard will establish 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.		
			Frequency of Reviews:	3 years
			Next Review Date:	
	Status/ Comments:	Comments from the initial and second postings were received and evaluated by the Standard Drafting Team. The standard was reposted with revisions incorporated. Comments from the third posting have been reviewed by the Standard Drafting Team. The RCC will consider its RSC endorsement of PRC-002 at its November 2009 meeting.		

Item	Name	Assignment	Latest Version:	New
PRC-006	Under Frequency Load shedding	This Standard will provide the measures for implementing an automatic under frequency load shedding program in order to effectively respond to system under frequency events.		
			Frequency of Reviews:	3 years
			Next Review Date:	
	Status/ Comments:	The NPCC UFLS Regional Standard Drafting Team (RSDT) has completed the initial review of the draft standard and posted the document to the NPCC Open Process. The RSDT is currently reviewing and responding to comments received from the first posting and also developing the Measures and Compliance sections of the document.		



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Regional Standards Development Procedure

<u>Item</u>	<u>Name</u>	<u>Assignment</u>	
RRSDP	Regional Reliability Standards Development Procedure	The NPCC Regional Reliability Standards Procedure 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 Northeast North America.	Latest Version: Sept. 19, 2007 Frequency of Reviews: 3 years Next Review Date: Sept. 19, 2010
	Status/ Comments:	The Regional Reliability Standards Development Procedure is posted on the NPCC Website.	



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	The NPCC Compliance Committee (CC) shall be charged with providing independent policy 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. With regard to NERC Reliability Standards and Regional Reliability Standards, the CC shall provide an oversight role to the NPCC Compliance Staff's implementation of the CMEP. In this oversight role the CC will endorse the processes used by the NPCC Compliance Staff in the conduct of the CMEP. The CC shall be responsible for final approval of compliance assessments related to NPCC Reliability Criteria, which includes non-monetary sanction recommendations.

Status/ Comments:

The NPCC Compliance Committee continues to meet on a monthly basis either face to face or by conference call. The NPCC Compliance Committee Assessment Team recently did an assessment of the NPCC On Site Audit Program. The Compliance Committee will review the report on that assessment at its November meeting. Additional assessments, covering other aspects of the CMEP implementation, will be conducted over the next year. The NPCC Compliance Committee and NPCC Compliance Staff jointly continue to develop a definition of "material generation." Definition will be based on recent FERC Orders issued related to this issue.



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>
RCP	Reliability Compliance and Enforcement Program	The process and requirements are defined for compliance assessment and enforcement of selected reliability criteria and standards.
	Status/ Comments:	The program is currently under development by the Compliance Committee. An interim Reliability Compliance and Enforcement program for 2009 will be presented to the RCC at their June Meeting.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Compliance Enforcement and Organization Registration and Certification Program

NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION (NERC)

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
CCC	Compliance and Certification Committee	Develop positions related to the NERC Compliance program.

Status/ Comments:

The CCC's subcommittee, Organization, Registration, and Certification (ORCS), has been working on revising Section 500 of the Rules of Procedure. This includes the requirements for a Regional Coordinator (RC), Balancing Authority (BA), and Transmission Operator (TOP) to get their NERC certification. A provisional letter has also been drafted for the CCC approval at their September meeting. Section 500 was also revised to add clarification to the Joint Registration Organization (JRO) criteria.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Training, Education, and Operator Certification Program

TASK FORCE ON COORDINATION OF OPERATION

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
CO-2	System Operator Training	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.

Status/ Comments:

The CO-2 Working Group met on Sept. 14-15, 2009. The agenda for the 64th NPCC System Operator Seminar was developed and it was agreed to by the CO-8 System Operations Managers Working Group. CO-2 members discussed and determined some of the training material and Individual Learning Assignments that can be shared and can be placed in an NPCC Repository. Some training material has already been placed on the CO-2 page and will be moved to the Training page. The Repository will be located on the NPCC secure web site on a separate page and will be available to all NPCC members.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

BLACKOUT 2003 FOLLOW-UP

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
BSP	Blackout Study Plan	Building on the Event Replication Study, perform additional analysis to evaluate possible risks for other rerating conditions, planned system changes, and possible system design changes.
	Status/ Comments:	The Blackout Study Recommendations Working Group's report and action plan was presented and approved at the March 2006 RCC meeting. Task 5 "Terms of Reference" was approved at the November 2006 RCC meeting. Work on Task 5 was kicked off at the January 27, 2009 meeting of the SS-38 Working Group. At this time completion of the technical study work is expected to complete by May 2010 instead of the end of 2009 with a final report to the RCC in September 2010 instead of March 2010 as per the schedule.



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	The Working Group insures coordination between adjacent control areas in establishing interchange schedules, Working Group 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.

Status/ Comments:

CO-1 met in September to address comments on the Directory #5 draft. Final revisions were made, it was provided to the TFCO, TFCO approved the draft for posting at the Sept. TFCO meeting and it was posted in NPCC Open Process. The closing date for comments is Nov. 19, 2009.



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-7	Operational Review Working Group	To assess, coordinate and evaluate regional operational issues and reliability concerns as directed by the TFCO. Periodically review the NPCC Regional Reliability Plan and the Registration and Certification of entities to achieve conformance with NPCC criteria and NERC Standards.
	Status/ Comments:	Working Group CO-07 is now drafting a revised NPCC Regional Reliability Plan incorporating the planning functions identified in the NERC Reliability Functional Model.

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
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 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 Working Group has: 1) provided the data requirements for the NPCC Operational Awareness wide area view, placed in service on May 27, 2009; and (2) identified the reliability issues to be addressed in incorporating inter-Area operating reserve in the recent draft of Directory #5; observed the actual switching procedures using the HQ alarm notification system at the Beauharnois generating station while isolating generation to Ontario. The alarm feature was expanded to include NY-QC transactions following the March 11, 2009, NY-QC synchronization



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-11	Restoration Working Group	The Restoration Working Group addresses the issue of ensuring appropriate operation of key system restoration facilities and their critical components.
	Status/ Comments:	The Working Group has completed a revised draft of NPCC Regional Reliability Reference Directory 8, "System Restoration," reviewed the posted comments, and provided the TFCO with its response to these comments. The CO-11 sponsored a wide area restoration drill on October 28, 2009, and it has reviewed the restoration plans of the ISO-NE and Hydro-Québec TransÉnergie.
<u>Item</u>	<u>Name</u>	<u>Assignment</u>
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 report of the 2009/2010 NPCC Winter Assessment has been approved by the TFCO and will be presented for approval to the RCC at its meeting of November 18 and 19, 2009. CO-12 revised its scope to incorporate the previous content of the draft C-45, "Seasonal Assessment Methodology" document. The RCC approved the revised scope at its September 10, 2009 meeting.
<u>Item</u>	<u>Name</u>	<u>Assignment</u>
CO-13	Available Transfer Capability Working Group	Review the procedures developed by the Regions (or sub-regions) for determining ATC to ensure that the procedures are in concert with the ATC Principles in NERC's June 1996 Available Transfer Capability Definitions and Determination report.
	Status/ Comments:	No present ATC issues at this time.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

TASK FORCE ON COORDINATION OF PLANNING

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
CP- 8	Working Group on Review of Resource and Transmission Adequacy	Review the overall reliability of the NPCC Inc. Areas and perform pre-seasonal resource adequacy assessments.
	Status/ Comments:	The 2009 New England Interim Review of Resource Adequacy is scheduled for approval at the November 18-19, 2009 RCC meeting. The 2009 Ontario Comprehensive Review of Resource Adequacy was approval at the September 10, 2009 RCC meeting.
<u>Item</u>	<u>Name</u>	<u>Assignment</u>
CP- 2009S	Summer 2009 Multi-Area Probabilistic Reliability Assessment	Assess NPCC Area reliability for the year 2009 by estimating the annual Loss of Load Expectation (LOLE) an projected use of Area Operating Procedures designed to mitigate resource shortages for the summer (May through September) period.
	Status/ Comments:	The Task Force on Coordination of Planning approved the NPCC 2009 Summer Multi-Area Probabilistic Reliability Assessment following RCC review and comment on April 24, 2009. The finalized assessment was presented at the April 28, 2009 NPCC BOD meeting; a summary report and Media Release was prepared, presented and released at the April 30, 2009 Media teleconference.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

TASK FORCE ON COORDINATION OF PLANNING

Item	Name	Assignment
CP- 2009W	Winter 2009-2010 Multi-Area Probabilistic Reliability Assessment	Assess NPCC Inc. Area reliability by estimating projected use of Area Operating Procedures designed to mitigate resource shortages for the winter (November 2009 through March 2010) period.
	Status/ Comments:	The 2009-2010 NPCC Winter Multi-Area Probabilistic Reliability Assessment will be presented for approval at the November 18-19, 2009 RCC meeting.

Item	Name	Assignment
CP - TIE	Review of Interconnection Assistance Reliability Benefits	On a consistent basis, estimate the amount of interconnection assistance available to the NPCC Inc. Areas and for the near term.
	Status/ Comments:	The RCC approved the scope of work and schedule at the September 10, 2009 RCC meeting; the CP-8 Work Group is in the process of developing a work plan.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

TASK FORCE ON COORDINATION OF PLANNING

Item	Name	Assignment
CP-11	<i>NPCC Basic Criteria For Design and Operation Of Interconnected Power Systems Review Working Group</i>	This Working Group is charged with the revision of the NPCC Inc. Basic Design Criteria Document A-02 and the NPCC Glossary of Terms Document A-07. In addition, the Task Force on Coordination of Planning (TFCP) charged the CP-11 Working Group with the development of the A-10 Classification of BPS Elements document.
	Status/ Comments:	The CP-11 Working Group has completed the review of Document A-10 and will be submitting the clean and marked versions of draft revised A-10 and an Implementation Plan for RCC review and approval at their September 10, 2009 meeting. Draft revised A-10 was submitted to the NPCC Task Forces for several rounds of review and to NPCC members for additional review and testing before it was submitted in the NPCC Open Process Review for a 45-day comment period through the end of April 2009. All comments received have been addressed by the CP-11 Working Group.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

TASK FORCE ON SYSTEM STUDIES

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
SS-37	Base Case Development Working Group	On an annual basis, develop a library of solved load flow cases and associated dynamic data.
	Status/ Comments:	Year 2009 development effort has been completed and submitted to MMWG.

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
SS-38	Inter-Area Dynamic Analysis Working Group	Assigned to analyze dynamic phenomena, which may affect interconnected system reliability, especially in the area of low frequency oscillations.
	Status/ Comments:	Work on the NPCC Regional UFLS standard began in January 2009. Work on NPCC Blackout Recommendation Task 5 has been delayed until March 2010, following completion the Overall Transmission Assessment and sensitivity on Wind integration. The development of guideline for load modeling is anticipated to start next year.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

Eastern Interconnection Reliability Assessment Group

Study Committees

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
ERAG	Eastern Interconnection Reliability Assessment Group	The Eastern Interconnection Reliability Assessment Group (ERAG) Management Committee (MC) oversees the Multi-Regional Modeling Group steady state and dynamics base case development, all Eastern Interconnection interregional assessment activities and other interregional matters of interest. Eastern Interconnection assessment forums include: RFC-NPCC, RFC-SERC East and RFC-MRO-SPP-SERC West.

Status/ Comments:

ERAG MC met July 30-31, 2009 in St. Louis. NERC had issued an industry alert indicating there were errors in MMWG power flow and dynamics base cases. A process had been put in place in 2007 to improve the accuracy of the MMWG cases and significant improvements have been made. The ERAG MC decided not to directly respond to NERC on the issue. A meeting was held between ERAC MC, NERC staff and MMWG members to agree on the process to improve the models. The revised process will be put in place for MMWG use.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

RFC - NPCC Working Group

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
RNWG	RFC-NPCC Working Group	The RFC-NPCC Operating Studies Working Group, under the direction of the RFC-NPCC Steering Committee, conducts appraisals of the RFC-NPCC interconnected systems for expected summer and winter periods.

Status/ Comments:

The RFC-NPCC Working Group (RNWG) is currently involved in a future study of the 2014 summer period in place of doing the normally scheduled 2009-10 winter season study. RNWG is proceeding along its work schedule and expects the study to be completed by December 2009.



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 systems of the eight 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 eight Regional Reliability Entities.
	Status/ Comments:	The annual Long Term Reliability Assessment, projecting reliability and industry issues ten years in the future, was released on October 29, 2009. The “2009/2010 Winter Reliability Assessment” NPCC section was provided to NERC RAS on schedule. Revisions were made based on RAS peer review comments. The final RAS report is scheduled to be issued by mid- November
Item	Name	Assignment
DCWG	Data Collection Working Group	Serve as the electric utility industry’s coordinator with the Department of Energy (DOE) and the Energy Information Administration (EIA) in submitting yearly data and in negotiating the requirements for data submission to the EIA.
	Status/ Comments:	A meeting of the NERC DCWG and DOE EIA representatives was held on October 20-21, 2009 in Washington DC to review the progress on the DCWG work plan, revision to the DCWG scope, and discuss future DOE EIA reporting requirements. The NERC PC will be asked to consider approval of the revised DCWG scope and approval of the DOE Form EIA-411 recommendations at their December 2009 meeting.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION (NERC)

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
G&TRPMTF	Generation & Transmission Reliability Planning Model Task Force	The objective of the G&TRPMTF is to determine if a reliability modeling methodology can be used to forecast regional reliability in the NERC Long Term Reliability Assessment.

Status/ Comments:

The GTRPMTF will present a preliminary recommendation regarding models and methodologies that could be used for composite G&T reliability assessments at the December2009 NERC Planning Committee.

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
TADS	Transmission Availability Data System	Serve as the Regional Entity Coordinator (REC) in support of the NERC TADS outage data collection and the analysis of the NPCC Transmission Owners (TO) outage information. As the REC, oversee the use of and the data entry of automatic outage information by the TO in the NERC Internet based data management tool - webTADS.

Status/ Comments:

TADS reporting TO are currently engaged in data entry for calendar year 2009. For 2009, only automatic outage of reportable transmission elements is required. In 2010, the outage data requirement will include non-automatic outages.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Reliability Assessment and Performance Analysis Program

OTHER

Item	Name	Assignment
Inter-ISO	Inter-ISO Working Group	The Inter-ISO Working Group was formed to address Inter-Regional planning and Inter-Area issues of projects that have “cross border” impacts while providing an open stakeholder forum and committee structure to allow market input.
	Status/ Comments:	The next face-to-face stakeholder meeting is scheduled for December 18, 2009. A WebEx was held on November 6, 2009; materials presented are available on the “Inter-ISO” link, accessible from the NPCC website. Topics presented included: status of the Vermont-New York New Interconnection, the NYISO/PJM Reliability Analysis, the NYISO/PJM Market Efficiency Analysis, Common Economic Database and Analysis, and Other Interregional Planning Activities.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Situation Awareness and Infrastructure Security Program

TASK FORCE ON COORDINATION OF OPERATION

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
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 is working with the five Reliability Coordinators to implement the control room displays for the NPCC Operational Awareness displays. It is also concluding a real-time tools survey to identify the readiness of the NPCC entities.</p>



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Situation Awareness and Infrastructure Security Program

TASK FORCE ON INFRASTRUCTURE SECURITY AND TECHNOLOGY

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
IST-1	Infrastructure Security and Technology Workshop	Periodic workshops to address timely issues and update member system personnel associated with the provision of on-line computer systems for operation of the power system.
	Status/ Comments:	A successful Cyber Security Workshop was held in Albany, NY in May 2008, and was coordinated with the Spring 2008 Compliance Workshop. The next workshop is planned for June 2010.
		Last Workshop: May 2008

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
IST-3	TFIST EMS-SCADA Working Group	Provide a forum to identify, discuss and advance the technology of EMS-SCADA for the reliable operation of the NPCC Bulk Power System. The EMS-SCADA Working Group (IST-3) will also support TFIST in their work on issues related to EMS-SCADA.
	Status/ Comments:	The EMS-SCADA Working Group has been designed as an Ad-hoc Working Group.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Situation Awareness and Infrastructure Security Program

TASK FORCE ON INFRASTRUCTURE SECURITY AND TECHNOLOGY

Item	Name	Assignment
IST-4	TFIST Cyber Security Working Group	Provide a forum to identify, discuss and advance the technology of Cyber Security for the reliable operation of the NPCC Bulk Power System. The Cyber Security Working Group (IST-4) will also support TFIST in their work on issues related to Cyber Security.
	Status/ Comments:	The Cyber Security Working Group has been designated as an Ad-hoc Working Group by TFIST.

Item	Name	Assignment
IST-5	TFIST Physical Security Working Group	Provide a forum to identify, discuss and advance the use of Physical Security for the reliable operation of the NPCC Bulk Power System. The Physical Security Working Group (IST-5) will also support TFIST in their work on issues related to Physical Security.
	Status/ Comments:	The Physical Security Working Group held its first meeting in February, 2009. The second meeting is planned for December 2009.



RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

Administrative Services

MEMBERS' FORUMS

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
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 NPCC 2009 General Meeting was held September 23-24, 2009 in Cambridge, MA – this year’s theme was “Reliable Renewable Development.” Presentations have been posted on the NPCC public website.

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
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 NPCC Governmental/Regulatory Affairs Advisory Group met via a WebEx teleconference call on May 21, 2009, conducted from NPCC’s New York City office. Topics discussed included Joint Con Edison Offshore Wind Power Integration Project, an overview of Ontario Green Economy Act, the Eastern Interconnection Planning Collaborative, and the status of the DOE 2009 Congestion Study. The meeting planned in conjunction with the NPCC 2009 General Meeting was postponed and will be rescheduled.

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
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 the monthly communications coordination calls with NERC and the Regions.