



RCC Meeting  
June 3, 2009  
Agenda Item 7.11

**Reliability Assessment Program**  
**(NRAP)**  
**HIGHLIGHT REPORT**  
*Prepared for the*  
*Reliability Coordinating Committee*  
*May 27, 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

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
RSC	Regional Standards Committee	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.

**Status/ Comments:** 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 two Regional Reliability Standards: Underfrequency Load Shedding, and Disturbance Monitoring. The RSC is also overseeing the development of the NPCC Regional Reliability Directories and is maintaining a work plan for completion of this project.



# RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

## Reliability Standards Program

### Directories

<u>Item</u>	<u>Name</u>	<u>Assignment</u>	<u>Latest Version:</u>	<u>Frequency of Reviews:</u>	<u>Next Review Date:</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.		3 years	
<b>Status/ Comments:</b> Directory #1 Open Process review concluded on February 15, 2009. The Task Force on Coordination of Planning has reviewed and responded to comments received and will be posting Directory #1 to the open process for a second time in order to receive approval of document changes that resulted from the first posting.					

<u>Item</u>	<u>Name</u>	<u>Assignment</u>	<u>Latest Version:</u>	<u>Frequency of Reviews:</u>	<u>Next Review Date:</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.		3 years	
<b>Status/ Comments:</b> Directory #2 approved by the Full Members on Oct. 21, 2008; NPCC Document A-3 was retired on the same date.					

The existing automatic UFLS language within Directory #2 will be transferred into the new draft of Directory # 12 UFLS Program requirements. Additionally, a proposed revision to Directory #2 in Sect. 5.4.1 which addresses the responsibility for compensatory load shedding when a generator trips above the curve of Figure 1 of Directory#2 has been transferred into Directory #12 and the subject revision will be considered as part of the overall review and approval of Directory #12. The transfer of existing automatic UFLS language from Directory #2 will be presented to the RCC at its meeting of June 3, 2009, concurrently with the request to approve Directory #12.



## RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

### Directories

<u>Item</u>	<u>Name</u>	<u>Assignment</u>	<u>Latest Version:</u>	<u>July 2008</u>
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.	<b>Frequency of Reviews:</b>	<b>3 years</b>
			<b>Next Review Date:</b>	<b>Dec. 2009</b>

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

The Task Force on System Protection has conducted a review of this document to better clarify specific intent on a number of requirements. The document has been 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. It should be noted that there were no changes to any of the existing testing requirements in the document itself.

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.

<u>Item</u>	<u>Name</u>	<u>Assignment</u>	<u>Latest Version:</u>	<u>July 2008</u>
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	<b>Frequency of Reviews:</b>	<b>3 years</b>
			<b>Next Review Date:</b>	

**Status/ Comments:** Task Force on System Protection has reviewed the initial draft of Directory#4 and recommended that the document be submitted to the Open Process for member comment.



# RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

## Directories

<u>Item</u>	<u>Name</u>	<u>Assignment</u>		
DIR-5	Operating Reserve Criteria	This Directory establishes the criteria and practices which result in dependable and secure operating reserve.	<b>Latest Version:</b>	
			<b>Frequency of Reviews:</b>	<b>3 years</b>
			<b>Next Review Date:</b>	
	<b>Status/ Comments:</b>	Following a review of the initial draft by the Working Group on Control Performance (CO-01) and the System Operations Managers Working Group (CO-08), the Task Force on Coordination of Operation will review Directory #5 at its meeting of August 11 and 12, 2009.		
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.	<b>Latest Version:</b>	<b>Dec. 27, 2007</b>
			<b>Frequency of Reviews:</b>	<b>3 years</b>
			<b>Next Review Date:</b>	<b>Dec. 2010</b>
	<b>Status/ Comments:</b>	Directory #7 approved by the NPCC Full Membership on December 27, 2007.		
		TFSP reviewing draft SPS retirement language to be inserted into Directory #7 and forwarded to TFSP for open process posting.		
		TFSS has also recommended changes to Directory #7 that would eliminate certain internal inconsistencies within the Directory and forwarded these recommendations to TFSP for review and posting.		



## RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

### Directories

<u>Item</u>	<u>Name</u>	<u>Assignment</u>	<u>Latest Version:</u>	<u>Oct. 21, 2008</u>
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	<b>Frequency of Reviews:</b>	<b>3 years</b>
			<b>Next Review Date:</b>	<b>Oct. 2011</b>
<b>Status/ Comments:</b> Directory #8 approved by the NPCC Full Membership on Oct. 21, 2008. .				
Directory #8 is currently in the Open Process through June 21, 2009 to consider changes recommended by TFCO. Certain reporting requirements in the document have been simplified, redundant language has been removed, and measures and assessments have also been clarified.				

<u>Item</u>	<u>Name</u>	<u>Assignment</u>	<u>Latest Version:</u>	<u>Dec. 22, 2008</u>
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	<b>Frequency of Reviews:</b>	<b>3 years</b>
			<b>Next Review Date:</b>	<b>Dec. 2011</b>
<b>Status/ Comments:</b> Directory #9 approved by the NPCC Full Membership on December 22, 2008.				



## RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

### Directories

<u>Item</u>	<u>Name</u>	<u>Assignment</u>	<u>Latest Version:</u>	<u>Frequency of Reviews:</u>	<u>Next Review Date:</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	Dec. 22, 2008	<b>3 years</b>	Dec. 2011
<b>Status/ Comments:</b> Directory #10 approved by the NPCC Full Membership on December 22, 2008.					

<u>Item</u>	<u>Name</u>	<u>Assignment</u>	<u>Latest Version</u>	<u>Frequency of Reviews:</u>	<u>Next Review Date:</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.		<b>3 years</b>	
<b>Status/ Comments:</b> The draft of Directory #12 has been 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.					
Directory #12 has been posted to the open process and all comments have been reviewed and addressed by the Task Force on System Studies which has recommended the document for approval.					





# RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

## Regional Standards

<u>Item</u>	<u>Name</u>	<u>Assignment</u>	
PRC-002 NPCC-01	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.	<b>Latest Version:</b>  <b>Frequency of Reviews:</b> 3 years <b>Next Review Date:</b>
<b>Status/ Comments:</b>		Comments from the initial posting were received and have been evaluated by the Standard Drafting Team. Revisions to be incorporated and the Standard reposted.	

<u>Item</u>	<u>Name</u>	<u>Assignment</u>	
UFLS	Underfrequency Loadshedding	This Standard will provide the measures for implementing an automatic underfrequency load shedding program to respond to system underfrequency events.	<b>Latest Version:</b>  <b>Frequency of Reviews:</b> 3 years <b>Next Review Date:</b>
<b>Status/ Comments:</b>		The NPCC Regional Standard Drafting Team for UFLS has been meeting in order to draft regional requirements for NPCC's UFLS program. Major discussion topics within the drafting team have been coordination of program requirements and generator tripping and program requirements for small entities. The RSDT is working to post the initial draft of the regional standard by July 1, 2009.	



## 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 Mitigation Plans. The Compliance Committee will review the report on that assessment at its July meeting. The next assessment on Off-Site Audits will be conducted at the NPCC offices on June 24, 25, 2009. 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 developed a definition of "material generation" and a Guidance Statement has been posted on the NPCC website. The definition was 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.
	<b>Status/ Comments:</b>	The NPCC Compliance Committee reviewed the first draft of a Criteria Compliance and Enforcement Program (CCEP) document at its April 20 -21, 2009 meeting. A second draft of the CCEP document is to be discussed on the mid-June CC conference call. After CC approval the document will be posted to the NPCC Open Process for review and comment. The document will then be introduced at the September RCC meeting with formal approval being requested at the November, 2009 RCC meeting. The intention is for NPCC to transition away, from Document A-8, the <i>NPCC Reliability Compliance and Enforcement Program (RCEP)</i> , during 2009 and have that document be retired at the November 2009 RCC meeting with the expectation that the RCEP would be replaced by the CCEP starting in 2010.



## 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:**

Section 500 of the NERC Rules of Procedure has been posted for industry comment. This section includes a description of the requirements for a Reliability Coordinator (RC), Balancing Authority (BA), and Transmission Operator (TOP) to get their NERC certification. Section 500 was also revised to add clarification to the Joint Registration Organization (JRO) criteria. The CCC next meets on June 10-11, 2009.



## 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 63<sup>rd</sup> NPCC System Operator Seminar, scheduled for May 6 and 7, 2009 at Niagara Falls, Ont. had to be cancelled because of travel restrictions put in place due to the influenza (H1N1 virus) pandemic concerns. The travel restrictions prevented attendance by the majority of expected attendees and seminar presenters. The NPCC System Personnel Training standard PER-005 was approved and CO-2 members are preparing for implementation in all NPCC Areas. Coordination of the efforts is being done through CO-2.



## 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. The Work Plan calls for completion of the technical study work by the end of 2009, with a Final Report to the RCC by March 2010.



## 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:** The CO-1 Working Group met on May 14-15, 2009 and determined the CO-1 support that can be offered to the SS-38 Working Group to identify frequency response problems with generators in the NPCC Region. This included extensive analysis of selected actual generating frequency responses to system frequency changes. Improvements that could be made to generator operating modes were discussed.

CO-1 also reviewed and made revisions to the current draft of Directory #5, "Operating Reserve". A conference call and another CO-1 meeting in mid-June are planned to continue the Directory #5 work.



## 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.
<b>Status/ Comments:</b> 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 operation interconnected bulk power supply system, and specific concerns related to the integration of operation between	Provide a forum for the Managers of the NPCC control centers to identify and discuss security concerns in the Working Group of the 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.
<b>Status/ Comments:</b> The Working Group has: <ul style="list-style-type: none"> <li>✓ finalized the data requirements for the NPCC Operational Awareness wide area view, expected to be operation on June 1, 2009;</li> <li>✓ identified the reliability issues to be addressed in incorporating inter-Area operating reserve; and</li> <li>✓ is conducting a review of the newly drafted NPCC Directory 5, "Operating Reserve Criteria."</li> </ul>		





## 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 facilities components.	Restoration	The Restoration working Group addresses the issue of ensuring appropriate operation of key system restoration Working Group and their critical
	<b>Status/ Comments:</b>	The Working Group is currently finalizing a methodology to govern the annual peer review of the Reliability Coordinator Area restoration plans, and it will begin its annual review of the NPCC Area Restoration Plans at its September meeting.
<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.
	<b>Status/ Comments:</b>	The CO-12 Working Group completed the “Northeast Power Coordinating Council Reliability Assessment for Summer 2009 report on April 30, 2009 and the report was issued on May 1. CO-12 had revised the Working Group scope to incorporate the previous content of the draft C-45, “Seasonal Assessment Methodology” document. That had been done in response to NPCC Open Process comments. The TFCO accepted the change.
<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.
	<b>Status/ Comments:</b>	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.
	<b>Status/ Comments:</b>	The 2008 Maritimes Interim Review of Resource Adequacy and the 2008 Quebec Comprehensive Review of Resource Adequacy were approved at the March 11, 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) and projected use of Area Operating Procedures designed to mitigate resource shortages for the summer (May through September) period.
	<b>Status/ Comments:</b>	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

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
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 begin in September 2009, to be presented for approval at the November 18-19, 2009 Reliability Coordinating Committee meeting.

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
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 CP-8 Working Group reviewed the methodology in 2008, prior to the start of the next Tie Benefits study scheduled to begin in 2010. The CP-8 Working Group is in the process of drafting a scope and schedule for the analysis, to be reviewed by the Task Force on Coordination of Planning at their September 2009 meeting. RCC approval of the scope of work and schedule will be sought at the November 18-19, 2009 RCC meeting.



## 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-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.
	<b>Status/ Comments:</b>	The CP-11 WG is tasked by TFCP with the development of a procedure for the review and approval of classification of bulk power system elements. The draft revised A-10 Document was posted in the NPCC Open Process Review to receive comments through April 30, 2009. The CP-11 Working Group has scheduled a meeting in June to begin the process of addressing the comments received.



## 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 begun and a new shoulder case will be included in this year's library of cases as required by the 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 and the Overall Transmission Assessment was also initiated at the meeting on January 27, 2009. The development of guideline for load modeling is anticipated to start in early 2010.



## 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 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:** Power Technologies Labs work has provided the centralized database for use by all parties. RFC will use the database to develop the 2009 set of MMWG cases concurrently with AEP, who will develop the same set of cases uses the previous method as a benchmark. The cases will then be compared to assess the effectiveness and usability of the database. The next meeting of the ERAG MC is scheduled for July 30-31, 2009 in St. Louis.



## RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

### Reliability Assessment and Performance Analysis Program RFC - NPCC Working Group

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
RFC- NPCC	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 has completed a final draft of the 2009 Interregional Summer study. The Report was reviewed at the ERAG SC meeting on April 30<sup>th</sup>, and forwarded to the ERAG MC as final on May 15<sup>th</sup>.



## 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>
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 “2009 Summer Reliability Assessment” conducted by the NERC Reliability Assessment Subcommittee was completed and the report was issued on May 19, 2009. The 2009 Long Term Reliability Assessment, assessing conditions for a ten-year window, will be released in the autumn of 2009.

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
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 May 18-19, 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 Planning Committee will be asked to consider approval of the revised DCWG scope and approval of the DOE Form EIA-411 recommendations at their June 2009 meeting. The next DCWG meeting will be scheduled sometime in September 2009.





## 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>
GTRPMTF	Generator Transmission Reliability Planning Model Task Force	The objective of the GTRPMTF 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 its recommendations at the June 2009 NERC Planning Committee meeting; recommending that existing models and methodologies could be used for composite G&T reliability assessments, and a proposed work plan for determining a common composite assessment methodology for NERC.

<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:**

NERC rolled out its production version of “WebTADS” for TO use. This version includes suggested improvements made by the NPCC’s REC. Registration and data entry for calendar year 2009 has started. The NERC Planning Committee will be asked to approve the draft NERC-wide TADS *2008 Automatic Outages Metrics and Data Report* at their June 2009 meeting.



## RELIABILITY ASSESSMENT PROGRAM HIGHLIGHTS

### Reliability Assessment and Performance Analysis Program

#### OTHER

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
Inter-ISO	Inter-ISO	The Inter-ISO Working Group was formed to address Inter-Regional planning and Inter-Area issues Working Group of projects that have “cross border” impacts while providing an open stakeholder forum and committee structure to allow market input.
	<b>Status/ Comments:</b>	The last face-to-face stakeholder meeting was held December 11, 2008 at the Wolf Road Holiday Inn in Albany, NY. Topics discussed included the draft Northeast Coordinated System Plan, environmental issues, and interregional Wind integration studies. The 2008 Northeast Coordinated System Plan was finalized and released March 1, 2009. The next face-to-face meeting is planned for June 30, 2009.



## 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	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.

**Status/ Comments:** The CO-10 is conducting a real-time tools survey to identify the readiness of the NPCC entities.



## 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.
		<b>Last Workshop:</b> May 2008
	<b>Status/ Comments:</b>	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 2010.

<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.
	<b>Status/ Comments:</b>	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

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
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.
	<b>Status/ Comments:</b>	The Cyber Security Working Group has been designated as an Ad-hoc Working Group by TFIST.

<u>Item</u>	<u>Name</u>	<u>Assignment</u>
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.
	<b>Status/ Comments:</b>	The Physical Security Working Group held its first meeting in February, 2009. The second meeting is planned for September 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 is scheduled for September 23-24, 2009 in Cambridge, MA; the Agenda is currently being developed and speakers are being approached concerning their availability to participate.

<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 next meeting will be scheduled in conjunction with the NPCC 2009 General Meeting.

<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 on-going communications coordination calls with NERC and the Regions.