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**RCC Meeting
March 21, 2000
Agenda Item 8.3**

**Northeast Power Coordinating Council
Reliability Assessment Program**

STATUS REPORT

March 2000

Distributed to:

Members, Reliability Coordinating Committee
Members, Compliance Monitoring and Assessment Subcommittee
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 Energy Management Technology
and
Mr. Charles J. Durkin, Jr.
Mr. Robert A. Hiney
Mr. Edward A. Schwerdt
Ms. Jennifer Budd

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APPENDICES

- A) Budget Summary**
- B) NPCC Recommendation Tracking Database - Summary**
- C) Goals and Responsibilities**

HIGHLIGHTS

ITEM NUMBER

All Task Forces

- 1-20, 37-40, 57-63, 71-74 & 87-88)** *Restructuring of NPCC Documents*
The restructuring of NPCC Documents related to System Operation and System Planning is underway.

Task Force on Coordination of Operation

- 26)** As of February 2000, NY ISO has returned to compliance with Control Performance Standards CPS-2; however, the TFCO will continue to monitor compliance with CPS-1 and CPS-2 on an on-going monthly basis.
- 107)** At the March 21, 2000 meeting, the RCC will consider the final report by the Joint Working Group on System Restoration.

Task Force on Coordination of Planning

- 43)** **The New England Area Resource Adequacy Review**
At the March 21, 2000 meeting, the RCC will consider the New England Area Resource Adequacy Review as approved during a March 16, 2000 TFCP conference call.
- 48)** **The New England Comprehensive Area Transmission Review**
At the March 21, 2000 meeting, the RCC will consider the New England Comprehensive Area Transmission Review as approved by the TFCP at its March 2, 2000 Meeting.
- 53)** **Working Group on Review of NERC Planning Standards**
The former CP-7 working group has been reconstituted as CP-9, "Working Group on Review of NERC Planning Standards." CP-9's initial assignment will be to review and comment on the Phase I NERC Planning Standards that have been posted in Final NERC Due Process.

NPCC RELIABILITY ASSESSMENT PROGRAM

STATUS REPORT

Task Force on System Protection

57) A-4 Maintenance Criteria for Bulk Power System Protection

At the March 21, 2000 meeting, the RCC will consider the *Maintenance Criteria for Bulk Power System Protection* (Document A-4).

113) C-26 Procedures for Task Force on System Protection Compliance Monitoring and Surveys

114) C-30 Procedure for Task Force on System Protection Review of Disturbances

The TFSP has issued two new procedures with the above descriptive titles.

Task Force on System Studies

77) The New England Comprehensive Area Transmission Review

At the March 21, 2000 meeting, the RCC will consider the New England Comprehensive Area Transmission Review as approved by the TFSS and the TFCP.

Task Force on Energy Management Technology

109) TFEMT Scope

At the March 21, 2000 meeting, the RCC will consider a revised scope for the Task Force on Energy Management Technology (TFEMT).

108) Y2K Ad Hoc Working Group

After successful December 31, 1999 to January 1, 2000 and February 29, 2000 transitions, the Y2K Ad Hoc Working Group has been disbanded.

NPCC Open Review Process

As of March 16, 2000 six NPCC Document are posted for Open Process Review as shown in the *NPCC Open Process Document Status* on the Home Page <<http://www.npcc.org/scripts/OpenStat.pl>>.

The comment periods expires or expired as follows:

NPCC-NERC Policy 2, <i>Transmission</i> (NPCC Document Review Process):	April 24, 2000
NPCC-NERC Policy 4, <i>System Coordination</i> (NPCC Document Review Process):	April 24, 2000
Operating Reserve Criteria (Document A-6):	March 13, 2000
Procedures for Shared Activation of Ten Minute Reserve (Document C-12):	March 13, 2000
Procedures During Shortages of Operating Reserve (Document C-19):	March 13, 2000
Maintenance Criteria for Bulk Power System Protection (Document A-4):	January 31, 2000

NPCC Recommendation Tracking Database

The Summary of the Recommendation Tracking Database is included as Appendix B in this NPCC Reliability Assessment Program Status Report.

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Documents

1)A-3 Emergency Operation Criteria **Description:** Objectives, principles and requirements are presented 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:** January 1999
Frequency of Reviews: 3 Years
Next Review Date: January 2002

Status/ Comments: NPCC Document A - 3, Emergency Operation Criteria, was approved by the NPCC Full Members as a criterion in January of 1999. Also reference items 10, 18, 19 and 23.

2)A-6 Operating Reserve Criteria **Description:** Objectives, principles and requirements are presented that govern the amount, availability and distribution of operation reserve. **Latest Version:** September 1998
Frequency of Reviews: 3 Years
Next Review Date: September 2001

Status/ Comments: NPCC Document A - 6, Operating Reserve Criteria, was approved by the NPCC Full Members in September of 1998. As part of a review by the CO-8 Working Group, the document has just completed Open Process Review with the comment period ending March 13, 2000. The TFCO will review any comments at its May 2000 meeting. Also reference items 13, 18 and 27.

3)B-2 Control Performance Guide
During Normal Conditions **Description:** Standards are established with which the NPCC Areas and systems within the Areas may measure control performance. **Latest Version:** March 1999
Frequency of Reviews: 3 Years
Next Review Date: March 2002

Status/ Comments: NPCC Document B - 2, Control Performance Guide During Normal Conditions, was approved by the RCC meeting of March 2, 1999. Also reference items 12 and 26.

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Documents

4)B-3	Guidelines for Inter-AREA Voltage Control	Description: Procedures and principles are established for occasions where a deficiency or an excess of reactive power can affect bulk power system voltage levels in a large portion of an Area or in two adjacent Areas.	Latest Version: November 6, 1997 Frequency of Reviews: 3 Years Next Review Date: November 2000
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Status/ Comments: Also reference items 9 and 22.

5)B-9	Guide for Rating Generating Capability	Description: Standards for rating and verifying net generating capability are established.	Latest Version: November 1998 Frequency of Reviews: 3 Years Next Review Date: November 2001
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Status/ Comments: NPCC Document B - 9, Guide for Rating Generating Capability, was approved as an NPCC Guideline by the Reliability Coordinating Committee at its meeting of November 5, 1998. Also reference items 11 and 25.

6)B-13	Guidel for Reporting System Disturbances.	Description: This document establishes requirements and guidelines for reporting the details of a system disturbance to enable assessments and reviews of those disturbances which impact a significant part of one Area or which have inter - Area implications.	Latest Version: June 25, 1997 Frequency of Reviews: 3 Years Next Review Date: May 2000
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Status/ Comments: TFCO reviewed and approved the following modifications to B-13: 1) removed ad hoc from DAWG or to the appropriate Working Group; 2) when Policy 5 comes up-make sure the latest Appendix 5F form is attached; and 3) conduct BOTH NERC and NPCC reporting at the SAME TIME. The document will be posted for Open Process comments once these modifications have been added to the document.

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Documents

8)C-3	Procedures for Communications During Emergencies	Description:	These Procedures direct NPCC's implementation of the Eastern Interconnection Hotline. The Eastern Interconnection Hotline is an emergency telecommunications network initiated through a preset conference call that interconnects one key Regional coordination center, staffed continuously, or a major utility control center serving the role of coordinator for the Region, in each Region of the NERC Eastern Interconnection. The North Texas Security Center in ERCOT is connected to the calls as well.	Latest Version:	March 1999
				Frequency of Reviews:	1 Year
				Next Review Date:	March 2001

Status/ Comments: No changes were recommended to the NPCC Document C - 3, Procedures for Communications During Emergencies after review by the Task Force on Coordination of Operation at its meeting of March 2000. Reference also item 16.

9)C-4	Monitoring Procedures for Guidelines for Inter-AREA Voltage Control	Description:	Procedures are established for the Task Force on Coordination of Operation's monitoring and reporting of conformance with NPCC's Guidelines for Inter-AREA Voltage Control.	Latest Version:	March 25, 1998
				Frequency of Reviews:	3 Years
				Next Review Date:	March 2001

Status/ Comments: Also reference items 4 and 22.

10)C-5	Monitoring Procedures for Emergency Operation Criteria	Description:	Procedures are established for the Task Force on Coordination of Operation's monitoring and reporting of conformance with NPCC's Emergency Operation Criteria.	Latest Version:	May 15, 1997
				Frequency of Reviews:	3 Years
				Next Review Date:	January 2002

Status/ Comments: Also reference items 1, 23 and 29.

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Documents

11)C-7	Monitoring Procedures for Guide for Rating Generating Capability	Description: Procedures are established for the Task Force on Coordination of Operation's monitoring and reporting of conformance with NPCC's Guide for Rating Generating Capability.	Latest Version: March 25, 1998 Frequency of Reviews: 3 Years Next Review Date: March 2001
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Status/ Comments: Also reference items 5 and 25.

12)C-8	Monitoring Procedures for Control Performance Guide During Normal Conditions	Description: Procedures are established for the Task Force on Coordination of Operation's monitoring and reporting of conformance with NPCC's Control Performance Guide During Normal Conditions.	Latest Version: March 1999 Frequency of Reviews: 3 Years Next Review Date: January 2002
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Status/ Comments: Also reference items 3 and 26.

13)C-9	Monitoring Procedures for Operating Reserve Criteria	Description: Procedures are established for the Task Force on Coordination of Operation's monitoring and reporting of conformance with NPCC's Operating Reserve Criteria	Latest Version: March 25, 1998 Frequency of Reviews: 3 Years Next Review Date: March 2001
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Status/ Comments: Also reference items 2 and 27.

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Documents

14)C-11	Monitoring Procedures for Interconnected System Frequency Response	Description: Procedures are established for monitoring and reporting the frequency responses to large generation losses.	Latest Version: March 25, 1998 Frequency of Reviews: 3 Years Next Review Date: March 2001
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Status/ Comments:

15)C-12	Procedure for Shared Activation of Ten Minute Reserve	Description: Procedures are established to provide for the shared activation of ten minute reserve on an Area basis.	Latest Version: March 25, 1998 Frequency of Reviews: 3 Years Next Review Date: March 2001
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Status/ Comments: A revised draft of Document C-12 has just completed Open Process Review with the comment period ending March 13, 2000. The TFCO will review any comments at its May 2000 meeting.

16)C-13	Operational Planning Coordination	Description: Procedures are established to coordinate the exchange of operational data, provide for the notification of planned facility outages among the Areas, and provide for formal communications among the Areas in anticipation of a period of capacity shortage or light load conditions. It also established the procedures for the routine NPCC conference call held weekly among the Areas.	Latest Version: March 15, 1997 Frequency of Reviews: 3 Years Next Review Date: May 2000
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Status/ Comments: Reference also items 8 and 28.

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Documents

17)C-15	Procedures for Solar Magnetic Disturbances on Electrical Power Systems	Description: Procedures are established providing for the reporting channels and information available to the operator during solar alerts and suggesting measures that may be taken to mitigate the impact of a solar magnetic disturbance.	Latest Version: March 25, 1998 Frequency of Reviews: 3 Years Next Review Date: March 2001
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Status/ Comments: This document is currently under review to address Space Environment Center (SEC) changes in the levels at which geomagnetically induced currents (GIC) event warning notifications are issued. An interim agreement on the notification process for the summer is being arranged.

18)C-19	Procedures During Shortages of Operating Reserve	Description: This Procedure establishes specific instructions for the redistribution of Operating Reserve among the Areas when one or more Areas is experiencing an Operating Reserve deficiency.	Latest Version: July 18, 1995 Frequency of Reviews: 3 Years Next Review Date: May 2000
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Status/ Comments: A revised draft of Document C-19 has just completed Open Process Review with the comment period ending March 13, 2000. The TFCO will review any comments at its May 2000 meeting. Also reference items 1 and 2.

19)C-20	Procedures During Abnormal Operating Conditions	Description: This Procedure complements the Emergency Operation Criteria by establishing specific instructions for the System Operator during emergency conditions in an NPCC Area or Areas.	Latest Version: March 1999 Frequency of Reviews: 3 Years Next Review Date: March 2002
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Status/ Comments: Also reference item 1.

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Documents

20)C-21	Monitoring Procedures for Conformance with Normal and Emergency Transfer Limits	Description: This Procedure establishes TFCO monitoring and reporting requirements for transfer limits during normal and emergency operations as stipulated in NPCC Document A-2, Basic Criteria for Design and Operation of Interconnected Power Systems.	Latest Version: January 21, 1997 Frequency of Reviews: 3 Years Next Review Date: May 2000
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Status/ Comments: Also reference items 24 and 38.

21)	Task Force Scope	Description: The overall charge to the TFCO, together with the scope of activities, is given to the Task Force through its scope.	Latest Version: June 29, 1999 Frequency of Reviews: 3 Years Next Review Date: June 2002
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Status/ Comments: The RCC approved the revised TFCO scope at its meeting of June 29, 1999.

Surveys/Reviews

22)	Survey on conformance with the Guidelines for Inter-AREA Voltage Control	Description: As charged in the Monitoring Procedure C-4, each Area must successfully respond to a set of directives in order to demonstrate conformance with the Guidelines for Inter-AREA Voltage Control.	Latest Version: January 1997 Frequency of Reviews: 3 Years Next Review Date: May 2000
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Status/ Comments: Also reference items 4 and 9.

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Surveys/Reviews

- 23) Survey on conformance with the Emergency Operation Criteria
- Description:** As charged in the Monitoring Procedure C-5, each Area must successfully respond to a set of directives in order to demonstrate conformance with the Emergency Operation Criteria.
- Latest Version:** November 1998
- Frequency of Reviews:** 3 Years
- Next Review Date:** November 2001

Status/ Comments: The 1998 survey has been concluded and was reviewed by the Task Force on Coordination of Operation at its meeting of November 3 and 4, 1998. Also reference items 1, 10 and 19.

- 24) Monitoring and reporting of conformance with the provisions of operating limits as specified in the Basic Criteria for Design and Operation of Interconnected Power Systems
- Description:** As charged in the Monitoring Procedure C-21, each Area must demonstrate conformance to the testing criteria stated in the Basic Criteria for Design and Operation of Interconnected Power Systems.
- Latest Version:** November 1998
- Frequency of Reviews:** 3 years
- Next Review Date:** November 2001

Status/ Comments: The 1998 survey has been concluded and was reviewed by the Task Force on Coordination of Operation at its meeting of November 3 and 4, 1998. Also reference items 20 and 38.

- 25) Survey on conformance with the Guide for Rating Generating Capability
- Description:** As charged in the Monitoring Procedure C-7, each Area must state that it can verify the net capability of its generating capacity.
- Latest Version:** January 1997
- Frequency of Reviews:** 3 Years
- Next Review Date:** May 2000

Status/ Comments: Also reference items 5 and 11.

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Surveys/Reviews

- 26) Survey on conformance with the Control Performance Guide During Normal Conditions
- Description:** The Task Force on Coordination of Operation reports annually to the Reliability Coordinating Committee on the control performance of the Areas as demonstrated by conformance with the CPS1 and CPS2 standards as presented in the Monitoring Procedure C-8.
- Latest Version:** September 1999
- Frequency of Reviews:** See Status / Comments
- Next Review Date:** May 2000

Status/ Comments: As of February 2000, NY ISO has returned to compliance with Control Performance Standards CPS-2. All NPCC Control Areas are now in compliance with both CPS-1 and CPS-2; however, the TFCO will continue to monitor compliance with CPS-1 and CPS-2 on an on-going monthly basis. Also reference items 3 and 12.

- 27) Survey on conformance with the Operating Reserve Criteria
- Description:** The Task Force on Coordination of Operation reports annually to the Reliability Coordinating Committee on the conformance of the Areas with the Operating Reserve Criteria as demonstrated by surveying the ability of the Areas to return to pre-contingency conditions within ten minutes of a defined reportable event as outlined in the Monitoring Procedure C-9.
- Latest Version:** June 1998
- Frequency of Reviews:** 1 Year
- Next Review Date:** May 2000

Status/ Comments: The current status will be reviewed at the May 2000 meeting. Also reference items 2 and 13.

- 28) Survey of NPCC Transmission Facilities List
- Description:** An annual list of NPCC transmission facilities is established based on the criterion that, if removed from service, the transmission facility may directly or indirectly impact the reliability of another Area or other Areas.
- Latest Version:** February 1998
- Frequency of Reviews:** 1 Year
- Next Review Date:** May 2000

Status/ Comments: The current status will be reviewed at the May 2000 TFCO meeting. Also reference item 16.

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Surveys/Reviews

29)	Black Start Survey	Description: This is a survey of station emergency power start-up facilities.	Latest Version: April 1995
			Frequency of Reviews: 3 Year
			Next Review Date: May 2000

Status/ Comments: The Task Force on Coordination of Operation maintains the survey of station emergency power start-up facilities through NPCC Document C-5, Monitoring Procedures for Emergency Operation Criteria. The TFCO and the Task Force on Energy Management Technology have established a joint working group to identify all such facilities (communications, transmission, computer control) critical to the restoration of the interconnected systems and to develop criteria through which a definitive list of such critical facilities may be established. Reference item 107.

Testing procedure for restoration facilities has been completed by the System Restoration Testing Requirements Working Group. Changes to NPCC Policy to implement the new testing requirements are currently under TFCO review.

Working Groups/Ad Hoc Assignments

30)CO-1	Control Performance	Assignment: The Working Group insures 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, it conducts investigations of control performance problems.	2000 Budget: \$20,300
			Expense to Date: \$0
			\$0

Status/ Comments: The Control Performance Working Group (CO-1) has concluded the migration of the NPCC Areas from compliance with the former A1 and A2 control performance criteria to the NERC Control Performance Standard 1(CPS-1) and NERC Control Performance Standard 2 CPS-2).

The Control Performance Working Group (CO-1) has reconciled the NPCC inadvertent account as directed by the NERC Operating Committee.

**NPCC RELIABILITY ASSESSMENT PROGRAM
STATUS REPORT**

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

31)CO-2	Dispatcher Training	Assignment: The Working Group establishes a program for system dispatcher training relating to NPCC inter-Area matters, criteria, terminology, policies and operating instructions. It prepares and presents material at dispatcher training sessions exchanges information on internal dispatcher training methods. The Working Group CO-2 also evaluates and propose new techniques and training aids as they become available.	2000 Budget:	\$22,350
			Expense to Date:	\$650

Status/ Comments:

32)CO-7	Operation Review Team	Assignment: To enhance the relationship between the control room personnel and NPCC, and to insure a continued understanding and effective implementation of the criteria and guides.	2000 Budget:	\$25,000
			Expense to Date:	\$0

Status/ Comments:

33)CO-8	System Operations Managers Working Group	Assignment: 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.	2000 Budget:	\$25,000
			Expense to Date:	\$6,225

Status/ Comments:

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

- | | | | | |
|-----|---|---|-------------------------|----------|
| 35) | Lake Erie Circulation Working Group (LECWG) | Assignment: The Lake Erie Circulation Working Group was formed to address the charge stemming from the Northeast Power Coordinating Council Security Process Plan. The Lake Erie Security Process has established Lake Erie line loading relief procedures developed by representatives from Ontario Hydro, the New York Power Pool, the Pennsylvania-New Jersey-Maryland Interconnection Association and the Michigan Electric Coordinated Systems. | 2000 Budget: | \$30,000 |
| | | | Expense to Date: | \$3,250 |
| | | Status/ Comments: On May 12, 1999 FERC issued an Order on Interim Procedures granting conditional approval to the LEER process. On July 2, 1999 FERC accepted the LEER compliance filing thereby granting final approval of LEER. The LECWG is currently working on developing a coordinated Phase Angle Regulator (PAR) Operation agreement between the Lake Erie members. A revised LEER procedure is anticipated to be filed with FERC in April 2000. | | |
| | | | | |
| 36) | NPCC Ad Hoc Working Group on ATC | Assignment: Formulate NPCC's responses to the updated charges from the NERC Engineering Committee (EC) to the NERC ATC Implementation Working Group. These include: the development of an ATC compliance review schedule; the coordination of intra-/inter-regional ATC postings; the development of data exchange guidelines; the assessment of the commercial viability of ATC calculations; and the continued review of the TRM/CBM parameters | 2000 Budget: | \$10,000 |
| | | | Expense to Date: | \$1,950 |
| | | Status/ Comments: The NERC ATCWG has provided their comments on the "NPCC Methodologies" report which was presented at their December 1, 1999 meeting. The comments were discussed by NPCC ATCWG at their March 2000 meeting. | | |

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

107)	Joint Working Group on the Identification of Critical Facilities for Restoration	Assignment Identification of the key facilities required for system restoration purposes and development of appropriate test procedures for the key facilities and their critical components in order to ensure their suitable operation in the event of a system disturbance and possible loss of AC station service power supply.	2000 Budget: \$0 Expense to Date: \$0 Completion Date: March 21, 2000
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Status/ Comments: Testing procedure for restoration facilities has been completed by the System Restoration Testing Requirements Working Group. The final report will be considered at the March 21, 2000 RCC meeting. Upon approval, the recommended document revisions will be posted for comment through the NPCC Process for Open Review. Reference also items 10 and 23.

TASK FORCE ON COORDINATION OF PLANNING

PROGRAM ITEM NUMBER

Documents

37)A-1 Criteria for Review and Approval of Documents **Description:** Criteria outlines the review and approval procedures for all NPCC and NERC documents and contains the NPCC Glossary. **Latest Version:** March 1997
Frequency of Reviews: 4 Years
Next Review Date: August 2000

Status/ Comments: All NPCC documents are being reviewed and restructured. Upon completion of this effort all existing NPCC Criteria will be reformatted and be utilized in the NPCC Reliability Compliance Program (RCP).

38)A-2 Basic Criteria for Design and Operation of Interconnected Power Systems **Description:** Criteria are established for proper design and operation concerning Resource Adequacy and Transmission Capability. **Latest Version:** August 1995
Frequency of Reviews: 4 Years
Next Review Date: August 2000

Status/ Comments: All NPCC documents are being reviewed and restructured. Upon completion of this effort all existing NPCC Criteria will be reformatted and be utilized in the NPCC Reliability Compliance Program(RCP).

39)B-8 Guidelines for Area Review of Resource Adequacy **Description:** Guidelines to help TFCP ascertain that each Area's resource plan is in accordance with the NPCC "Basic Criteria for Design and Operation of Interconnected Power Systems". **Latest Version:** February 14, 1996
Frequency of Reviews: 3 Years
Next Review Date: March 2000

Status/ Comments: A draft of this document was finalized at the March 2, 2000 TFCP meeting. It will be redistributed to TFCP and then placed in the NPCC Open Process for review and comment.

TASK FORCE ON COORDINATION OF PLANNING

PROGRAM ITEM NUMBER

Documents

40)C-16	Procedure for NPCC Review of New or Modified Bulk Power System Special Protection Systems	Description: This document outlines procedures for reporting new or modified Bulk Power System Special Protection Systems.	Latest Version: September 28, 1995
			Frequency of Reviews: 3 Years
			Next Review Date: March 2000

Status/ Comments: Document reviewed by TFCP and approved for submittal to NPCC Open Process.

41)	Task Force Scope	Description: The Task Force on Coordination of Planning scope of activities.	Latest Version: February 26, 1997
			Frequency of Reviews: 3 Years
			Next Review Date: May 2000

Status/ Comments: TFCP deferred discussion of its Task Force Scope until its May 19, 2000 meeting. TFCP will also be discussing the development of a business plan at this meeting.

Surveys/Reviews

42)	Resource Adequacy — Coordination and Review of Area Studies	Description: Review of the New York Area resource adequacy study.	Latest Version: June 29, 1999
			Frequency of Reviews: 3 Years
			Next Review Date: June 2002

Status/ Comments: The New York Area Resource Adequacy Study was approved by the RCC at its June 29, 1999 meeting.

TASK FORCE ON COORDINATION OF PLANNING

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Surveys/Reviews

- 43) Resource Adequacy — **Description:** Review of the New England Area resource adequacy study. **Latest Version:** June 1997
Coordination and Review of Area **Frequency of Reviews:** 3 Years
Studies **Next Review Date:** June 2000

Status/ Comments: TFCP addressed all outstanding issues the NE Area Resource Adequacy Assessment during a conference call on March 16, 2000. The assessment was approved and it will be presented to the RCC at their March 21, 2000 meeting.

- 44) Resource Adequacy — **Description:** Review of the Ontario Area resource adequacy study. **Latest Version:** June 1997
Coordination and Review of Area **Frequency of Reviews:** 3 Years
Studies **Next Review Date:** June 2000

Status/ Comments:

- 45) Resource Adequacy — **Description:** Review of the Québec Area resource adequacy study. **Latest Version:** June 29, 1999
Coordination and Review of Area **Frequency of Reviews:** 3 Years
Studies **Next Review Date:** June 2002

Status/ Comments: The Hydro Quebec Area Review of Resource Adequacy was approved by the RCC at its June 29, 1999 meeting.

TASK FORCE ON COORDINATION OF PLANNING

PROGRAM ITEM NUMBER

Surveys/Reviews

46) Resource Adequacy — **Description:** Review of the Maritime Area resource adequacy study. **Latest Version:** March 1999
Coordination and Review of Area **Frequency of Reviews:** 3 Years
Studies **Next Review Date:** March 2002

Status/ Comments:

47) NPCC Area Transmission Review **Description:** Review of the New York Area future transmission plans (5-7 years out) **Latest Version:** February 1999
Frequency of Reviews: 1 Year
Next Review Date: November 2000

Status/ Comments: New York Comprehensive Review underway. To be discussed by TFSS at their March 23-24, 2000 meeting.

48) NPCC Area Transmission Review **Description:** Review of the New England Area future transmission plans (5-7 years out) **Latest Version:** March, 1999
Frequency of Reviews: 1 Year
Next Review Date: March 2000

Status/ Comments: Review completed and approved by TFCP. Submitted to RCC for approval at their March 21, 2000 meeting.

TASK FORCE ON COORDINATION OF PLANNING

PROGRAM ITEM NUMBER

Surveys/Reviews

49) NPCC Area Transmission Review **Description:** Review of the Ontario Area future transmission plans (5-7 years out) **Latest Version:** December 1999
Frequency of Reviews: 1 Year
Next Review Date: December 2000

Status/ Comments: Review approved by TFCP at their December, 1999 meeting.

50) NPCC Area Transmission Review **Description:** Review of the Québec Area future transmission plans (5-7 years out) **Latest Version:** September 1999
Frequency of Reviews: 1 Year
Next Review Date: September 2000

Status/ Comments: Approved at September 23, 1999 TFCP meeting.

51) NPCC Area Transmission Review **Description:** Review of the Maritime Area future transmission plans (5-7 years out) **Latest Version:** June 1999
Frequency of Reviews: 1 Year
Next Review Date: August 2000

Status/ Comments:

**NPCC RELIABILITY ASSESSMENT PROGRAM
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TASK FORCE ON COORDINATION OF PLANNING

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

52)CP-8	Working Group on the Review of Interconnection Assistance Benefits	Assignment Review the overall reliability benefits of the interconnections, for each Area, within the NPCC Region and perform pre-seasonal resource adequacy assessment of the NPCC Region.	2000 Budget: \$0.00 Expense to Date: \$0.00 Completion Date: December 2000
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Status/ Comments: CP-8, has been created to address the recommendations in the report as well as to conduct an NPCC pre-seasonal resource adequacy assessment. A status report on the Working Group's efforts will be presented at the March 21, 2000 RCC Meeting.

53)CP-9	Working Group on the Review of NERC Planning Standards	Assignment Initially review the Phase I NERC Planning Standards that have been placed into final NERC due process. Recommend changes to those NERC Planning Standards that are scheduled for implementation in latter phases of the NERC Compliance Program.	2000 Budget: \$0 Expense to Date: \$0 Completion Date: Ongoing
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Status/ Comments: Initial assignment of CP-9 will be to review and comment on the Phase I NERC Planning Standards that have been posted in Final NERC Due Process.

54)EMWG	Environmental Matters Working Group	Assignment Serve as the primary resource to the TFCP on all environmental matters. This includes but is not limited to review of reliability implications, review of legislative and regulatory existing and emerging issues, evaluation of the effects of proposed system modifications, operating procedures or environmental equipment, identification of the need for special environmental studies, performance of assignments, etc.	2000 Budget: \$0 Expense to Date: \$0 Completion Date: Ongoing
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Status/ Comments:

**NPCC RELIABILITY ASSESSMENT PROGRAM
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TASK FORCE ON COORDINATION OF PLANNING

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

55)LCFWG Load, Capacity & Fuels Working Group	Assignment General: Serve as the primary resource to the TFCP on matters relating to load, capacity energy and fuels data within NPCC. Specific: 1) Provide load, capacity, energy, fuel and other data in electronic format through NERC to the DOE-EIA as part of the annual EIA-411 filing. 2) Prepare an NPCC load, capacity, energy, fuel and transmission data report.	2000 Budget: \$5,000 Expense to Date: \$0 Completion Date: 1) EIA-411 data: April 2000 2) NPCC Report: June 2000
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Status/ Comments: The deadlines for submitting NERC/EIA-411 year 2000 data to NERC are: Existing and planned generating unit data: March 15, 2000. Demand, energy, capacity and transmission data: April 3, 2000. The Area/NPCC Staff effort is scheduled for completion in April 2000 with final data to be submitted by NERC to EIA in June 2000. Also reference item 104.

56)JGWG Joint Glossary Working Group	Assignment To maintain the NPCC Glossary of Terms (Document A-7) and to expand the Glossary to include new terms as necessary.	2000 Budget: \$5,000 Expense to Date: \$0 Next Review Date: Ongoing
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Status/ Comments: Reference Item 112 below.

Documents

112)A-7 NPCC Glossary of Terms	Description: The NPCC Glossary of Terms (the Glossary) includes terms from NPCC Criteria (A), Guideline (B) and Procedure (C) Documents, as well as the North American Electric Reliability Council (NERC) Glossary of Terms, August 1996.	Latest Version: September 1998 Frequency of Reviews: 1 Year Next Review Date: June 2000
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Status/ Comments: The JGWG has initiated the review of Document A-7.

TASK FORCE ON SYSTEM PROTECTION

PROGRAM ITEM NUMBER

Documents

57)A-4	Maintenance Criteria for Bulk Power System Protection	Description: This document establishes the maintenance intervals and practices which should result in dependable and secure protection system operation.	Latest Version: September 1998 Frequency of Reviews: 3 years Next Review Date: September 2001
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Status/ Comments: Even though the next triennial review of this document is not due until 2001, the Task Force on System Protection has done an interim review because of changes occurring in the industry. A revised draft has undergone Open Process Review and will be considered at the March 21, 2000 RCC meeting.

58)A-5	Bulk Power System Protection Criteria	Description: This document establishes the minimum design objectives and recommends design practices to minimize the severity and extent of system disturbances and to minimize possible damage to system equipment.	Latest Version: September 1998 Frequency of Reviews: 3 Years Next Review Date: September 2001
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Status/ Comments: Also reference item 69.

59)B-1	Guide for the Application of Autoreclosing to the Bulk Power System	Description: This document establishes guidelines for automatic reclosing to facilitate restoration of the system to normal following automatic tripping of transmission facilities.	Latest Version: March 2, 1999 Frequency of Reviews: 3 Years Next Review Date: March 2002
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Status/ Comments:

TASK FORCE ON SYSTEM PROTECTION

PROGRAM ITEM NUMBER

Documents

61)B-7	Automatic Underfrequency Load Shedding Program Relaying Guideline	Description: This guideline establishes requirements for application and testing of underfrequency threshold relays that are necessary to accomplish the objectives of the NPCC automatic underfrequency load shedding program established in the Emergency Operation Criteria (Document A-3).	Latest Version: March 2, 1999 Frequency of Reviews: 3 Years Next Review Date: March 2002
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Status/ Comments:

62)B-11	Special Protection System Guideline	Description: This guideline categorizes the Special Protection System (SPS) according to the Criteria fault for which it is designed and the impact its failure would have on the network. It further provides guidelines for the design, testing and operation of the SPS.	Latest Version: March 2, 1999 Frequency of Reviews: 3 Years Next Review Date: March 2002
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Status/ Comments:

63)C-22	Procedure for Reporting and Reviewing Proposed Protection Systems for the Bulk Power System	Description: This procedure indicates how new facilities or modifications to existing facilities are to be presented to the TFSP in order to ascertain compliance with the principles of the Protection Criteria.	Latest Version: April 14, 1999 Frequency of Reviews: 3 Years Next Review Date: April 2002
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Formerly Document B-5

Status/ Comments: The latest revision of the Document has been distributed to the RCC and other holders of the NPCC Reference Manual.

TASK FORCE ON SYSTEM PROTECTION

PROGRAM ITEM NUMBER

Documents

64)	Task Force Scope	Description: This document outlines the Task Force on System Protection scope of activities.	Latest Version: June 29, 1999 Frequency of Reviews: 3 Years Next Review Date: June 2002
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Status/ Comments:

Surveys/Reviews

65)	Minimum Maintenance Compliance Survey	Description: This report summarizes member system compliance with the Maintenance Criteria for Bulk Power System Protection (Document A-4).	Latest Version: June 29, 1999 Frequency of Reviews: 1 Year Next Review Date: June 2000
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Status/ Comments: Through CMAS, the TFSP has issued the annual survey for compliance with the Maintenance Criteria for Bulk Power System Protection (Document A-4) for the period ending December 31, 1999. Prior to issuing the request, CMAS sent a screening survey to all NPCC Full Members to determine which member systems are required to provide detailed responses.

66)	Survey of Compliance with the NPCC Underfrequency Load Shedding Program	Description: These reports summarize Area compliance with sections 4.6 and 4.9 of the "Emergency Operation Criteria" (Document A-3)	Latest Version: June 29, 1999 Frequency of Reviews: 1 Year Next Review Date: June 2000
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Status/ Comments: Through CMAS, the TFSP has issued the annual survey for compliance with section 4.6 (load shedding) and section 4.9 (equivalent MW load shed) of the "Emergency Operation Criteria" (Document A-3) for the period ending December 31, 1999. Prior to issuing the request, CMAS sent a screening survey to all NPCC Full Members to determine which member systems are required to provide detailed responses.

TASK FORCE ON SYSTEM PROTECTION

PROGRAM ITEM NUMBER

Surveys/Reviews

67)	Special Protection System List	Description: This document lists Special Protection Systems on the NPCC Bulk Power System.	Latest Version: June 29, 1999
			Frequency of Reviews: 1 Year
			Next Review Date: June 2000

Status/ Comments: Through CMAS, the TFSP has issued the request for updates to the NPCC Special Protection System List to members of the TFSP and TFSS.

68)	Review protection systems for proposed installations or existing installations undergoing substantial modifications	Description: Review, in accordance with the Procedure for Reporting and Reviewing Proposed Protection Systems for the Bulk Power System (Document C-22) proposed protection systems, including special protection systems, for new major installations as well as existing installations undergoing substantial modifications, before such facilities are constructed or modified and report on the findings with respect to compliance with the NPCC Bulk Power System Protection Criteria (Document A-5).	Latest Version: Ongoing
			Frequency of Reviews: As Required

Status/ Comments: At its recent meetings, the TFSP discussed a number of protection system changes, including SPS installations and modifications.

69)	Review protection system performance following major system events or disturbances	Description: In conjunction with other task forces, review and analyze the detailed performance of protection systems following major power system disturbances and events and participate in the preparation of reports, which would include appropriate recommendations.	Latest Version: Ongoing
			Frequency of Reviews: As Required

Status/ Comments: The NERC/DAWG Reports on 1996, 1997, 1998 and 1999 System Disturbances have not been issued yet. At its December 1999 and February 2000 meetings, the TFSP discussed system disturbances that have been reported to NPCC and NERC since the previous TFSP meetings. Also reference items 57 and 58.

TASK FORCE ON SYSTEM PROTECTION

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

70)	Protection System Maintenance Practices	Assignment: Collect Bulk Power System protection system maintenance data on an annual basis to enable the TFSP to evaluate protection system maintenance costs and the impact on Bulk Power System performance due to alternative methods and intervals for protection system maintenance.	Completion Date: Deferred Frequency of Reviews: 3 years Next Review Date: September 2001
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Status/ Comments: The TFSP has deferred action on the update of the actual performance database. The situation will again be reviewed at the next triennial review of the Maintenance Criteria (Document A-4). Also reference item 57.

Documents

113)C-26	Procedures for Task Force on System Protection Compliance Monitoring and Surveys	This document describes the TFSP's procedures for annually completing its compliance surveys and updating the Special Protection System List.	Latest Version: November 3, 1999 Frequency of Reviews: 3 years Next Review Date: November 2002
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Status/ Comments: This is a new Procedure.

114)C-30	Procedure for Task Force on System Protection Review of Disturbances	This document outlines the process the TFSP follows to review and analyze the performance of protection systems following selected major power system events, inside as well as outside NPCC.	Latest Version: December 6, 1999 Frequency of Reviews: 3 Years Next Review Date: December 2002
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Status/ Comments: This is a new Procedure.

TASK FORCE ON SYSTEM STUDIES

PROGRAM ITEM NUMBER

Documents

71)B-4	Guidelines for NPCC Area Transmission Reviews	Description: Guidelines to help TFSS ascertain that each Area's transmission expansion plan, based on its pro-posed generation additions, has been developed in accordance with the NPCC "Basic Criteria for Design and Operation of Interconnected Power Systems."	Latest Version: August 7, 1996 Frequency of Reviews: 3 Years Next Review Date: March 2000
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Status/ Comments: The Interim Document iB-4 has been field tested as part of the NERC Phase I Pilot Program in 1999. The document will be reviewed by the TFSS based at their March meeting.

72)B-10	Guidelines for Requesting Exclusions to Section 5.1 (B) and 6.1 (B) of the NPCC "Basic Criteria for Design and Operation of Interconnected Power Systems"	Description: Establishes procedures for requesting exclusion from certain contingencies in the Basic Criteria. Note: Member Representatives shall be advised of approvals by the Reliability Coordinating Committee of applications for exclusions.	Latest Version: June 26, 1998 Frequency of Reviews: 3 years Next Review Date: June 2001
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Status/ Comments:

73)C-18	Procedure for Testing and Analysis of Extreme Contingencies	Description: This document establishes a procedure for the testing and analysis of Extreme Contingencies.	Latest Version: January 1999 Frequency of Reviews: 3 years Next Review Date: January 2002
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Status/ Comments:

TASK FORCE ON SYSTEM STUDIES

PROGRAM ITEM NUMBER

Documents

74)C-25 Procedure to Collect Real Time Data for Inter-Area Dynamic Analysis
Description: This document establishes a procedure for the collection of real time data following a power system disturbance for the purpose of analyzing the dynamic performance of the NPCC bulk power system.
Latest Version: February 1, 1996
Frequency of Reviews: 3 years
Next Review Date: April 2000

Status/ Comments: A final draft of interim document iC-25 that addresses NPCC Conformance with NERC Planning Standards I.F was field tested during the 1999 pilot program and the final review will be conducted in April 2000.

75) Task Force Scope
Description: The Task Force on System Studies scope of activities.
Latest Version: February 1997
Frequency of Reviews: 3 Years
Next Review Date: March 2000

Status/ Comments: The scope of the Task Force on System Studies will be reviewed at the March 23-24, 2000 meeting.

Surveys/Reviews

76) NPCC Area Transmission Review
Description: Review of New York Area future transmission plans (5-7 years out)
Latest Version: February 1999
Frequency of Reviews: 1 Year
Next Review Date: November 2000

Status/ Comments: The New York Area comprehensive Transmission Review is underway and will be discussed by the TFSS at their March 23-24, 2000 meeting.

TASK FORCE ON SYSTEM STUDIES

PROGRAM ITEM NUMBER

Surveys/Reviews

- 77) NPCC Area Transmission Review **Description:** Review of New England Area future transmission plans (5-7 years out) **Latest Version:** March 1999
Frequency of Reviews: 1 Year
Next Review Date: March 21, 2000
- Status/ Comments:** New England's comprehensive review was approved by the TFSS and the TFSP. It will be sent to the RCC for approval at their March 21, 2000 meeting.
- 78) NPCC Area Transmission Review **Description:** Review of Ontario Area future transmission plans (5-7 years out) **Latest Version:** November 1999
Frequency of Reviews: 1 Year
Next Review Date: November 2000
- Status/ Comments:** The Ontario Area Interim Transmission Review was approved at the November 18-19, 1999 meeting of the TFSS. The review report is available on the NPCC website under TFSS.
- 79) NPCC Area Transmission Review **Description:** Review of Québec Area future transmission plans (5-7 years out) **Latest Version:** September 1999
Frequency of Reviews: 1 Year
Next Review Date: September 2000
- Status/ Comments:** The Quebec Area Interim Review submission by Hydro Quebec was approved by the TFSS at its Sept. 23-24, 1999 meeting. It is available on the NPCC website under TFSS.

TASK FORCE ON SYSTEM STUDIES

PROGRAM ITEM NUMBER

Surveys/Reviews

80) NPCC Area Transmission Review **Description:** Review of Maritime Area (New Brunswick and Nova Scotia) future transmission plans (5-7 years out) **Latest Version:** June 1999
Frequency of Reviews: 1 Year
Next Review Date: June 2000

Status/ Comments: The Maritime Area Interim Review submission by Nova Scotia and New Brunswick were approved by the TFSS at its June 3-4 1999 meeting. The reviews are available on the NPCC website under TFSS.

81) Adequacy of Automatic Load Shedding Programs **Description:** Assessment of the adequacy and suitability of existing underfrequency load shedding settings. **Latest Version:** February 1998
Frequency of Reviews: 3 Years
Completion Date: February 2001

Status/ Comments:

82) Creation of Base Case Library **Description:** On an annual basis, develop a library of solved load flow cases and associated dynamic data. **Latest Version:** November 1999
Frequency of Reviews: 1 Year
Completion Date: November 2000
 Note: The present assessment is being conducted by the SS-37 Working Group.

Status/ Comments: Eight load flow models will be assembled as part of the 2000 Base Case Development effort. These cases form the basis for the twelve models that will be submitted to the NERC MMWG. Also reference item 85.

Several load flow base case models and associated dynamic data for Overall Transmission study will also be developed. These cases will be used for simulating contingencies to determine the robustness of the system from inter area and inter regional perspective. It is anticipated that MAAC, ECAR and SERC will also participate in this exercise. See Item # 83

TASK FORCE ON SYSTEM STUDIES

PROGRAM ITEM NUMBER

Surveys/Reviews

83)	Overall Transmission Reliability Study	Description: Evaluate the need to perform an overall assessment to evaluate the thermal, and dynamic performance of the NPCC Region. If necessary perform this assessment including the calculation of Inter-Area transfer capabilities and Extreme contingency performance.	Latest Version: September 1997 Frequency of Reviews: 3 Years Completion Date: September 2000
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Status/ Comments: Several load flow base case models and associated dynamic data for Overall Transmission study are being developed. These cases will be used by SS-38 for simulating contingencies to determine the overall robustness of the system from inter area and inter regional perspective. It is anticipated that MAAC, ECAR and SERC will also participate in this exercise. See Item # 83

84)	Review of Dynamic Analysis Recording Devices	Description: This review summarizes the characteristics of recording devices used to capture power system dynamic phenomena.	Latest Version: June 4, 1999 Frequency of Reviews: 3 Years Next Review Date: June 2002
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Status/ Comments: The survey and associated report is available on the NPCC web site under TFSS.

TASK FORCE ON SYSTEM STUDIES

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

85)SS-37	Base Case Development	Assignment: On an annual basis, develop a library of solved load flow cases and associated dynamic data.	2000 Budget:	\$20,000
			Expense to Date:	(\$1,500)
			Completion Date:	Ongoing

Status/ Comments: The User Written Models have been converted to PSS/E Rev 25. The coordination with PTI to incorporate these models in PSS/E is continuing. The progress in this area had been slow due to restructuring at PTI.

Dynamic data for 2001 Summer Pk and 2003/4 Winter were submitted to the NERC SDDWG in February 2000. Reference items 82, 101 and 105.

Several load flow base case models and associated dynamic data for Overall Transmission study are being developed. These cases will be used by SS-38 for simulating contingencies to determine the overall robustness of the system from inter area and inter regional perspective. See Item # 83

86)SS-38	Working Group on Inter- Area Dynamic Analysis	Assignment: Assigned to analyze dynamic phenomena, which may affect interconnected system reliability, especially in the area of low frequency oscillations.	2000 Budget:	\$20,000
			Expense to Date:	\$2,500
			Completion Date:	Ongoing

Status/ Comments: The RCC at their November 9, 1999 meeting approved an updated scope for the "Working Group on Inter-Area Dynamic Analysis ", SS-38.

As assigned by TFSS, SS-38 will conduct the Overall Transmission study to determine the overall robustness of the system from inter area and inter regional perspective. It is anticipated that MAAC, ECAR and SERC will also participate in this exercise.

TASK FORCE ON ENERGY MANAGEMENT TECHNOLOGY

PROGRAM ITEM NUMBER

Documents

87)B-12	Guidelines for On-Line Computer System Performance During Disturbances	Description: This document establishes guidelines for the performance of NPCC Area on-line computer systems during a power system disturbance.	Latest Version: November 1998 Frequency of Reviews: 3 Years Next Review Date: November 2001
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Status/ Comments: Reference also item number 88.

88)C-17	Monitoring Procedures for Guidelines for On-Line Computer System Performance During Disturbances	Description: This document establishes monitoring and reporting procedures for the B-12 Guideline, and specifically details on-line computer response objectives.	Latest Version: September 1998 Frequency of Reviews: 3 Years Next Review Date: September 2001
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Status/ Comments: Reference also item number 87.

Surveys/Reviews

89)	Review of the NERC Disturbance Analysis Working Group's report on "1996 System Disturbance."	Description: Review of on-line computer performance during system events or disturbances including all NERC regions.	Latest Review: February 2000 Frequency of Reviews: 1 Year Next Review Date: February 2001
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Status/ Comments: The Task force is currently awaiting the completion of the 1996, 1997, 1998 and 1999 NERC Disturbance Reports by the NERC/DAWG. These reports have not been distributed by NERC yet.

The TFEMT contacted Mr. Eugene F. Gorzelnik, the NERC representent of the NERC Disturbance Analysis Working Group (DAWG) to find out when will complete and distribute these reports. Mr. Gorzelnik mentione that the report should be out in a few months.

TASK FORCE ON ENERGY MANAGEMENT TECHNOLOGY

PROGRAM ITEM NUMBER

Surveys/Reviews

90)	Review of NPCC Area disturbances	Description: Review of on-line computer system performance during disturbances, as required by Document B-12.	Latest Review	February 2000
			Frequency of Reviews: As Required	

Status/ Comments: At its February 2000 meeting, the TFEMT discussed system disturbances that have been reported to NPCC. The Task Force reported that all computer systems worked well.

91)	Review On-Line Computer System Status Reports	Description: Review of member on-line computer system statuses and plans.	Latest Review:	February 2000
			Frequency of Reviews: As Required	

Status/ Comments: Member system status reports were reviewed at the February 9-10, 2000 Task Force meeting. Such reviews include highlights of each system's Energy Management System status and planned system enhancements. A review of the benefits due to actions each Area took towards year 2000 computer system transition preparations was also conducted.

Working Groups/Ad Hoc Assignments

92) EMT-1	Energy Management Technology Workshop Working Group	Assignment: Bi-Annual workshop to address timely issues and update member system personnel associated with the provision of on-line computer systems for operation of the power system.	2000 Budget:	\$5000
			Expense to Date:	\$0
			Last Workshop:	May 14-15, 1998
			Next Workshop:	2000/To be scheduled

Status/ Comments: The topic for the next workshop will be decided at the April TFEMTmeeting.

TASK FORCE ON ENERGY MANAGEMENT TECHNOLOGY

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

- 94) Correspondence with other regional and national groups associated with on-line computer systems
- Assignment:** Exchange of meeting minutes and other correspondence with representatives from other Regions. Also monitor IEEE and CIGRÉ efforts.
- Latest Review:** February 2000
- Frequency of Reviews:** As Required

Status/ Comments: This is an ongoing effort to facilitate communications with other groups pursuing similar interests in order to enhance the knowledge of the Task Force on Energy Management Technology regarding current technologies. The majority of efforts in this area are currently being directed at participation in the NERC Data Exchange and Telecommunications Working Group efforts.

The TFEMT plans on inviting a member of the Telecommunication Working Group along with a member Data Exchange Working Group to the April 2000 meeting.

- 95) Ad Hoc Working Group on Information Exchange
- Assignment:** Develop a document discussing communication channels, company contacts and coordination of outages.
- Latest Review:** February 2000
- Frequency of Reviews:** As Required
- Next Review Date:** April 2000

Status/ Comments: The Ad Hoc Working Group on Information Exchange has prepared a collection of presentations related to communication or operating tools, communication channel descriptions which is available on the web site at the following URL: ftp://www.npcc.org/bbs/NPCC_task_forces/TFEMT/Information_Exchange_Pres/.

TASK FORCE ON ENERGY MANAGEMENT TECHNOLOGY

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

108)	Y2K Ad Hoc Working Group	Assignment	Identify Y2K initiatives within NPCC to address threats to interconnected system security. Work closely with the NERC Y2K Coordination Task Force to ensure that all NPCC responsibilities and deliverables are met. Coordinate Y2K preparation and risk assessment efforts for NPCC and provide status reports to the NPCC TFEMT and other Task Forces indicating the preparation status and lessons learned.	2000 Budget:	\$7,500
				Expense to Date:	\$4,800
				Expected Completion	Year 2000

Status/ Comments: NPCC staff participated in the transition by coordinating the flow of information during the rollover. A close out summary will be forwarded to the TFCO for information.

NPCC staff will archive all the Y2k realted information and provide a copy to each of the TFCO member.

The task of Y2kWG has been successfully completed by ensuring an uneventful transition on December 31, 1999 and February 29, 2000. The Working Group has now been disbanded.

Documents

109)	Task Force Scope	Description:	This document outlines the Task Force on Energy Management Technology scope of activities.	Latest Review	September 1999
				Frequency of Reviews:	3 Years
				Next Review Date:	March 21, 2000

Status/ Comments: A revised scope that addresses the RCC concerns raised at the November 9, 1999 meeting was approved by the TFEMT and has been submitted to the RCC for approval at the March 21, 2000 meeting.

MAAC - ECAR - NPCC (MEN)

PROGRAM ITEM NUMBER

Study Committees

96) MEN SC MEN Study Committee

Assignment: The MEN Study Committee directs the activities of the MEN Operating Studies and Future Systems Working Groups and reports to the Joint Interregional Review Committee (JIRC) on study activities and other interregional matters of interest.

Completion Date: Ongoing

Status/ Comments: The studies for the 2000 Summer MEN Interregional Transmission System Reliability Assessment are underway.

A report on a study of the proposed phase angle regulators in the Michigan-Ontario interface from an interregional perspective was approved at the November 4, 1999 JIRC meeting. The report was forwarded to the Lake Erie Security Procedure Working Group with a recommendation that the LESP WG review operational aspect of these and existing phase angle regulators. Also reference item 97.

Working Groups/Ad Hoc Assignments

97) OSWG MEN Operating Studies Working Group

Assignment: The MEN Operating Studies Working Group, under the direction of the MEN Study Committee, conducts appraisals of the MAAC-ECAR-NPCC (MEN) interconnected systems for expected summer and winter periods.

2000 Budget: \$12,000

Expense to Date: \$0

Completion Date: May 2000

Status/ Comments: The studies for the 2000 Summer MEN Interregional Transmission System Reliability Assessment are underway.

**NPCC RELIABILITY ASSESSMENT PROGRAM
STATUS REPORT**

MAAC - ECAR - NPCC (MEN)

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

98)FSWG	MEN Future Systems Working Group	Assignment: The MEN Future Systems Working Group, under the direction of the MEN Study Committee, conducts appraisals of the MAAC-ECAR-NPCC (MEN) interregional system performance for projected future conditions.	2000 Budget: \$0 Expense to Date: \$0 Completion Date: February 2001
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Status/ Comments: The MEN and VEM Study Committees recommended to the Joint Interregional Review Committee (JIRC) that a proposed future study (2003 or 2004 summer conditions) be postponed for six months. The recommendation was accepted by the JIRC at the November 4, 1999 meeting. Also reference item 96.

**NPCC RELIABILITY ASSESSMENT PROGRAM
STATUS REPORT**

NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL (NERC)

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

99)RAS	Reliability Assessment Subcommittee	Assignment: Conduct an annual review of the overall reliability of the existing and planned generation and transmission systems of the ten Regional Reliability Councils for the ten year horizon. Conduct semiannual seasonal assessments of the overall reliability of the existing generation and transmission systems of the ten Regional Reliability Councils.	Completion Date: March 2000
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Status/ Comments: The Reliability Assessment Subcommittee's reports, Reliability Assessment 2000-2009, and NERC 2000 Summer Assessment are in progress. The NOx SIP Call study, which is being performed by a contractor, is nearing completion; an informational report will be presented at the March 28-29, 2000 NERC AC meeting.

100)PSS	Planning Standards Subcommittee	Assignment: The PSS, as charged by the NERC Engineering Committee, assesses and evaluates the NERC Planning Standards	Completion Date: Ongoing
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Status/ Comments: The PSS is has submitted a revised set of Phase I NERC Planning Standards into the NERC Final Due Process. Comments are due by April 17, 2000.

101)MMWG	Multiregional Modeling Working Group	Assignment: Develop a library of solved load flow models for use by the Regions and their member systems in planning and evaluating future systems and current operating conditions.	2000 Budget: \$12,000
			Expense to Date: \$2,610
			Completion Date: Ongoing

Status/ Comments: In 2000, NERC MMWG will assemble twelve load flow models that will constitute the 2000 base case library. NPCC's input to the MMWG effort is provided by the NPCC staff from the cases developed by SS-37 Working Group on Base Case Development. Also reference item 82.

NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL (NERC)

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

102) LFWG Load Forecasting Working Group **Assignment:** Annually develops sensitivity bandwidths (for completion each July) about the US and Canadian forecast aggregations of peak demand and annual net energy for load. Develop the LFWG Position Paper on Preparing Demand Forecasts in a Deregulated Market to aggregate Transco/Disco forecasts within the Regions. **Completion Date:** June 2000

Status/ Comments: The LFWG is scheduled to meet March 16-17, 2000 to discuss the impact of industry restructuring on the accuracy of NERC aggregated projections and the data collection process. A schedule for activities and assignments for the development of a draft "Peak Demand and Energy Projection Bandwidth: 2000-2009 Projections" report will be determined.

103) Generating Availability Working Group **Assignment:** The Working Group provides guidance on industry issues related to generating availability and the collection of electric utility generator unit performance data for NERC's Generating Availability Data System (GADS) **Completion Date:** Ongoing

Status/ Comments:

104) DOE/EIA Data Coordination Working Group **Assignment:** Serve as the electric utility industry's coordinator with the Department of Energy (DOE) and the Energy Information Administration (EIA) in negotiating the requirements for data submission to the DOE and EIA. **Completion Date:** April 2000

Status/ Comments: The deadlines for submitting NERC/EIA-411 year 2000 data to NERC are: Existing and planned generating unit data: March 15, 2000. Demand, energy, capacity and transmission data: April 3, 2000. The Area/NPCC Staff effort is scheduled for completion in April 2000 with final data to be submitted by NERC to EIA in June 2000. Also reference item 55.

**NPCC RELIABILITY ASSESSMENT PROGRAM
STATUS REPORT**

NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL (NERC)

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

105) SDDWG System Dynamics Database Working Group	Assignment: Develop a library of dynamic simulation models for use by the Regions and their member systems in planning and evaluating future systems and current operating conditions.	2000 Budget: \$15,000 Expense to Date: \$0 Completion Date: Ongoing
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Status/ Comments: Ontario Hydro Service Corporation, acting as a contractor for the SDDWG, is assembling dynamic data for 2001 Summer Peak and 2004/5 Winter peak conditions. The NPCC SS-37 working group on Base Case Development provided the NPCC data to the SDDWG in February 2000. The two dynamic models will be released by NERC in the fall of 2000. Also reference item 85.

106)	ATC Implementation Working Group	Assignment: 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.	Completion Date: Ongoing
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Status/ Comments: The NERC ATCWG has provided their comments on the "NPCC Methodologies" report which was presented at their December 1, 1999 meeting. The comments were discussed by NPCC ATCWG at their March 2000 meeting.

NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL (NERC)

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

110)CRWG Compliance Review Working Group

Assignment Develop NERC compliance procedures for those Planning Standards/Measurements that are in the NERC 2000 Compliance Program. Review/ develop Compliance Reports for the NERC 2000 Program as required. Apply Sanctions Matrix and calculate penalties , for the program, to those Planning Standards/Measurements that NERC has compliance monitoring and assessment responsibility. No penalties will be assessed until enforcement authority is established.

Completion Date: Ongoing

Status/ Comments: CRWG is meeting on March 23, 2000. Among the items to be discussed are : Comments to the Phase I Planning Standards that are in NERC Final Due Process, Discussion of Phase III Planning Standards, Discussion of sanctions/penalties matrix, Clarification of Phase II Standards, Status of CBM, TRM, TTC and ATC Standards and Templates, and Formation of Compliance Enforcement and Policy Committee.

111)CS Compliance Subcommittee

Assignment Develop templates for measurements contained in NERC Operating Policies; Monitor compliance to those operating measurements in the 2000 NERC Compliance Program and prepare necessary documentation of Regional compliance/non-compliance as required.

Completion Date: Ongoing

Status/ Comments: the NERC CS is scheduled to met on April 12 - 13, 2000. Among the items to be discussed are: Further clarification of Phase II Templates, Development of Phase III Templates, Status of Regional Compliance Programs and Formation of Compliance Enforcement and Policy Committee.

**NPCC RELIABILITY ASSESSMENT PROGRAM
STATUS REPORT**

Pages 42 and 43 are intentionally omitted.

NPCC RELIABILITY ASSESSMENT PROGRAM

STATUS REPORT

BUDGET SUMMARY

ITEM NUMBER	PROJECT DESCRIPTION	2000 BUDGET	2000 EXPENSE
30	CO-1 Control Performance Working Group	\$20,300	
31	CO-2 Dispatcher Training Working Group	\$22,350	\$650
32	CO-7 Operation Review Working Group	\$25,000	
33	CO-8 System Operating Managers Working Group	\$25,000	
	CO-9 Review of NERC Operating Standards	\$7,500	\$1,100
36	ATC NPCC Ad Hoc ATC Working Group	\$10,000	\$1,950
108	Y2K Year 2000 Coordination Working Group	\$7,500	\$4,800
35	LECWG Lake Erie Circulation Working Group	\$30,000	
	DAWG TFCO Disturbance Analysis Working Group	\$25,000	
	IRCWG TFCO Inter-Control Area Restoration Coordination Working Group	\$25,000	
	ETIWG Electronic Tagging Implementation Working Group	\$23,200	
	CP-8 Resource and Transmission Adequacy Working Group	\$30,000	
	CP-9 Review of NERC Planning Standards	\$7,500	
56	JGWG Joint Glossary Working Group	\$5,000	
55	LCFWG Load, Capacity & Fuels Working Group	\$5,000	
85	SS-37 Base Case Development	\$20,000	(\$1,500)
86	SS-38 Reliability Review of Inter-Area Operation	\$20,000	\$2,500
92	EMT-1 Energy Management Technology Workshop Working Group	\$5,000	
97	MEN MAAC-ECAR-NPCC Activities	\$12,000	
101	MMWG Multiregional Modeling Working Group	\$12,000	\$2,610.03
105	SDDWG Dynamic Database Working Group	\$15,000	
	CMAS Compliance Monitoring Assessment Subcommittee	\$0	\$650
	NERCWG NERC Subcommittees, Working Groups and Task Forces	\$40,000	\$4,350
	NERC-ISN Interregional Security Network (ISN)	\$50,000	\$8,216.11
	STAFF	\$15,000	
	TOTAL	\$457,350*	\$25,326.14

* At its September 1, 1999 meeting, the Executive Committee considered a recommendation that NPCC's 2000 Budget include \$300,000 in Account #800 "Project Expense" to cover the projects noted above.

Appendix A

March 16, 2000

**NPCC Reliability Assessment Program
Recommendation Tracking Database - Summary
Status Report**

<u>ID #</u>	<u>Recommendation Summary</u>	<u>STATUS</u>	<u>Lead Group</u>	<u>Next Tracking</u>
DOE-96-05	Define and enforce reliability standards to ensure that a continuous supply/demand balance is maintained and that transmission systems are operated within security limits.	NPCC will continue to monitor compliance to its Reliability Criteria through the NPCC Reliability Assessment Program (NRAP). The updated NRAP Status report will be presented at the March 21, 2000 RCC meeting.	RCC	2000/03/21
NERC-95-01	ATC determination, IDC and TIS.	The NERC ATCWG has provided their comments on the revised "NPCC Methodologies" report which was presented at their December 1, 1999 meeting. The comments were discussed by NPCC ATCWG at their March 2000 meeting.	RCC	2000/06/29
NERC-95-02	Implement line loading relief procedure and Implement ISN primary node.	The LEER, which was signed by all parties as of December 22, 1998, was filed with the FERC on March 1, 1999. On May 12, 1999 FERC issued an Order on Interim Procedures granting conditional approval to the LEER process. On July 2, 1999 FERC accepted the LEER compliance filing thereby granting final approval of LEER. A revised filing is planned before the summer of 2000. Please see NPCC-98-05 for ICCP/ISN implementation.	RCC	2000/04/18
NERC-96-07	Form a group to define enforcement measures in lieu of mandatory compliance and review the Regional Reliability Councils ability to impose sanctions for noncompliance.	NPCC has developed its Reliability Compliance Program (RCP). This program has been utilized in implementing the NERC Pilot Compliance Program. It has been revised and adapted to meet the needs of NPCC. CMAS is responsible for administering the program and has also assumed the responsibility of developing enforcement recommendations to be presented to the RCC. CMAS is also looking into the development of an "audit" or review process for the RCP. NPCC is considering the implementation of an enforceable RCP program with awards/sanctions.	RCC	2000/03/21
NERC-97-01	Review of NERC Planning Standards and revised Operating Policies to assess and evaluate them against the existing NPCC Reliability Assessment Program.	NPCC will form two groups to address the review of the NERC Planning and Operating Standards. CP-9, under the Task Force on Coordination of Planning, will review the NERC Planning Standards and CO-9, under the Task Force on Coordination of Operation, will review the NERC Operating Standards.	TFCP	2000/06/29

**NPCC Reliability Assessment Program
Recommendation Tracking Database - Summary
Status Report**

<u>ID #</u>	<u>Recommendation Summary</u>	<u>STATUS</u>	<u>Lead Group</u>	<u>Next Tracking</u>
NPCC-97-15	Review and testing of restoration plans and procedures needs to be strengthened.	Testing procedure for restoration facilities has been completed by the System Restoration Testing Requirements Working Group. The final report will be considered at the March 21, 2000 RCC meeting.	TFCO	2000/03/21
NPCC-97-16	Address challenges presented by year 2000 computer problems and how they relate to system security.	At their February 9-10, 2000 meeting the TFEMT reviewed the benefits of the non-event Y2K. The Y2K Working Group has now been disbanded.	TFEMT	Completed
NPCC-98-05	TFEMT will investigate NPCC ICCP/ISN implementation.	ISN is being implemented and the TFEMT is working at determining whether or not the lack of redundancy is an issue.	TFEMT	2000/04/10
NPCC-98-08	Streamline disturbance reporting procedures under future similar circumstances to the January 1998 Ice Storms.	TFCO reviewed and made the following modifications to B-13 at its September 1999 meeting: 1) removed ad hoc from DAWG or "to the appropriate Working Group"; 2) when Policy 5 comes up-make sure the latest Appendix 5F form is attached; and 3) conduct BOTH NERC and NPCC reporting at the SAME TIME. The document will be reposted for Open Process comment once these modifications have been added to the document.	TFCO	2000/05

NPCC RELIABILITY ASSESSMENT PROGRAM
STATUS REPORT

GOALS AND RESPONSIBILITIES

The Northeast Power Coordinating Council (NPCC) Membership Agreement, as amended to November 9, 1999, specifies:

"The purpose of the Council is to promote the reliable and efficient operation of the interconnected bulk power systems in Northeastern North America through the establishment of criteria, coordination of system planning, design and operations, and assessment of compliance with such criteria."

Consistent with the purpose, NPCC has established a Reliability Assessment Program. This program will bring together work done by the Council, its member systems and Areas (pools) relevant to the assessment of bulk power system reliability. Reviews and studies completed by member systems and Areas (pools) will not be duplicated by the Council, but will be referenced in appropriate NPCC reports.

The overall program includes two categories of assessment:

1. Standing Assessments
2. Ad Hoc Assessments

Standing Assessment

The Reliability Coordinating Committee has the responsibility for assessing the reliability of the present and proposed bulk power systems of the NPCC members. To this end, the Reliability Coordinating Committee (RCC) has assigned duties on an ongoing basis to NPCC Staff, the NPCC Compliance Monitoring and Assessment Subcommittee (CMAS) and to the Task Forces as generally covered by their respective scopes and specifically assigned in the attached program. Included in the assignment are: system studies applicable to intra-regional reviews; the formation and review of NPCC criteria, procedures, guides, diagrams, glossaries; and coordination of generation and transmission plans among the various investigations. In addition, all NPCC documents will be regularly reviewed, and updated where required. Finally, compliance by NPCC members with the NPCC Criteria and Guides and the NERC Operating and Planning Standards will be assessed on a regular basis by CMAS.

Ad Hoc Assessments

Flexibility to deal with non-routine issues will be retained. To this end, the RCC will make assignments on an ad hoc basis to Staff, Task Forces or ad hoc committees as appropriate. These assignments might include, for example, assessments of major system disturbances, whether they occur within the NPCC region or elsewhere. NPCC's participation in similar activities by NERC or governmental agencies would also be considered part of the Program.

General

The Reliability Coordinating Committee is responsible for assignment, final review and approval of all reports. Final approval of criteria documents, following approval by the RCC, rests with the NPCC member systems.

The various Task Forces, Staff and ad hoc committees, acting individually or in concert, will be responsible for the conduct of both the standing assessment and the ad hoc assessments.

The NPCC Staff will be responsible for the overall coordination of the Program.

Since the Program is by nature ongoing and dynamic, it will be modified by the RCC when deemed necessary.

Appendix C