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**RCC Meeting
November 9, 2000
Agenda Item 7.2**

**Northeast Power Coordinating Council
Reliability Assessment Program**

STATUS REPORT

November 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
Chairmen, NPCC Working Groups
and
Mr. Charles J. Durkin, Jr.
Mr. Robert A. Hiney
Mr. Edward A. Schwerdt
Ms. Jennifer Budd

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NPCC RELIABILITY ASSESSMENT PROGRAM

STATUS REPORT

Highlights

ITEM NUMBER

Compliance Monitoring and Assessment Subcommittee (CMAS)

CMAS now has its own section in the NPCC Reliability Assessment Program (NRAP) Status Report.

117) A-8 Reliability Compliance and Enforcement Program

At the November 9, 2000 meeting, the RCC will consider the *Reliability Compliance and Enforcement Program* (Document A-8), a new Criteria Document.

Task Force on Coordination of Operation (TFCO)

30) CO-1 Control Performance Working Group

The Control Performance Working Group (CO-1) is currently pursuing the following tasks for the TFCO: 1) documentation of the historical basis for a ten minutes Disturbance Recovery Period For Reportable Events; 2) reassessing NPCC document A-6, "Operating Reserve Criteria", to address reliability concerns related to the treatment of recallable energy purchases in determining reserve requirements; 3) investigating the feasibility of full reserve sharing within NPCC; 4) reassessing NPCC document A-3, "Emergency Operation Criteria", to ensure consistency with NERC Appendix 9B, "Energy Emergency Alerts," and 5) a combined Regional control of Area Control Error (ACE).

Task Force on Coordination of Planning (TFCP)

At the November 9, 2000 meeting, the RCC will consider the New York Area Comprehensive Transmission Review as approved by the TFSS and the TFCP.

Task Force on System Protection (TFSP)

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

At the March 21, 2000 meeting, the RCC approved for balloting the *Maintenance Criteria for Bulk Power System Protection* (Document A-4) and the document was sent to the NPCC Membership for final approval. The document has been approved by the Transmission Providers, but as of this writing, affirmative votes by three Transmission Customers are still required.

NPCC RELIABILITY ASSESSMENT PROGRAM

STATUS REPORT

Task Force on System Studies (TFSS)

79) The Québec Area Interim Transmission Review

The Québec Area Interim Transmission Review has been approved by the TFSS and TFCP and is available on the NPCC Web Site.

NPCC Recommendation Tracking Database

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

There are no items currently outstanding that are not tracked in NRAP itself. Hence, all remaining items in the summary are marked “Complete”, and, according to our present practice, they will not be presented at the next RCC meeting.

**NPCC RELIABILITY ASSESSMENT PROGRAM
STATUS REPORT**

COMPLIANCE MONITORING AND ASSESSMENT SUBCOMMITTEE

PROGRAM ITEM NUMBER

Documents

117)A-8	Reliability Compliance and Enforcement Program	Description: The process and requirements are defined for compliance assessment and enforcement of selected reliability criteria and standards.	Latest Version: September 2000 Frequency of Reviews: 1 year Next Review Date: November 2001
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Status/ Comments: This document was posted for a second open process review on September 22, 2000 with comments received through November 2, 2000. Also reference items 118 and 119.

118)B-22	Guidelines for the Implementation of the Reliability Compliance and Enforcement Program (RCEP)	Description: This document establishes the requirements and guidelines for the implementation of the Reliability Compliance and Enforcement Program (Document A-8) and the arbitration process utilizing the NPCC Policy for Alternate Dispute Resolution.	Latest Version: September 2000 Frequency of Reviews: 1 Year Next Review Date: November 2001
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Status/ Comments: This document was posted for open process review on September 22, 2000 with comments received through November 2, 2000. Also reference items 117 and 119.

119)C-32	Review Process for NPCC Reliability Compliance Program	This Procedure establishes the process CMAS uses to verify Area compliance to the standards that comprise the NPCC Reliability Compliance Program (RCP) or its successor program.	Latest Version: June 23, 2000 Frequency of Reviews: 3 years Next Review Date: June 2003
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Status/ Comments: CMAS will review the result of a pilot review at its December 6, 2000 meeting. Also reference items 117 and 118.

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: A revised NPCC Document A - 3, Emergency Operation Criteria, addressing restoration facility identification and periodic testing, is now being balloted by the NPCC Membership. Also reference items 10, 18, 19 , 23 and 29. | | | |
| 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: 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: 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: January 2001
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Status/ Comments: The TFCO will initiate its triennial review at its January 2001, meeting . 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: Also reference items 11 and 25.

6)B-13	Guide 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: November 2000
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Status/ Comments: The TFCO will reissue the document following its meeting of November 7-8, 2000 to ensure conformance with new DOE and NERC reporting requirements.

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 2000
Frequency of Reviews: 1 Year
Next Review Date: March 2001 |
| Status/ Comments: 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: November 2000 |
| Status/ Comments: The TFCO revised the document to address frequent utilization of emergency procedures and will consider additional revisions at its November 7-8, 2000 meeting. 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 (SAR)	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: January 2001
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Status/ Comments: The TFCO is revising the SAR procedures to address market concerns.

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. The document also defines 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: January 2001
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Status/ Comments: The TFCO will review the document at its meeting of January 2001. 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: November 2000
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Status/ Comments: This document has been revised to address Space Environment Center (SEC) changes in the levels at which geomagnetically induced currents (GIC) event warning notifications are issued. It has gone through the forty-five day posting for comments under the NPCC Open Process Review. The TFCO will review the posted comment at its meeting of November 7-8, 2000.

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: January 2001
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Status/ Comments: The TFCO will review the document at its meeting of January 2001. 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: January 2001
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Status/ Comments: The TFCO will review the document at its meeting of January 2001. 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: November 2000
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Status/ Comments: TFCO and CMAS are discussing the responsibility for all compliance monitoring and assessments. 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: TFCO and CMAS are discussing the responsibility for all compliance monitoring and assessments. 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: TFCO and CMAS are discussing the responsibility for all compliance monitoring and assessments. 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:** November 2000

Status/ Comments: TFCO and CMAS are discussing the responsibility for all compliance monitoring and assessments. 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:** June 2000
- Frequency of Reviews:** See Status / Comments
- Next Review Date:** November 2000
- Status/ Comments:** TFCO and CMAS are discussing the responsibility for all compliance monitoring and assessments; however, the TFCO will continue to monitor compliance with CPS-1 and CPS-2 on an on-going monthly basis due to the criticality of this criterion. 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 1999
- Frequency of Reviews:** 1 Year
- Next Review Date:** November 2000
- Status/ Comments:** TFCO and CMAS are discussing the responsibility for all compliance monitoring and assessments. 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:** January 1999
- Frequency of Reviews:** 1 Year
- Next Review Date:** January 2001
- Status/ Comments:** The TFCO will review the document at its meeting of January 2001. Also reference item 16.

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

29) IRCWG Inter-Control AREA Restoration Coordination Working Group	Description: IRCWG addresses the issue of ensuring appropriate operation of key system restoration facilities and their critical components.	Latest Version: December 1999 Frequency of Reviews: Per new document Next Review Date: November 2000
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Status/ Comments: At its meeting of March 21, 2000, the NPCC Reliability Coordinating Committee approved the report and recommendations of the IRCWG, including procedures developed by the Working Group for compliance monitoring and reporting. To accomplish this goal, the Working Group developed a new NPCC Procedure, NPCC Document C-31, "Testing and Reporting Procedure for Key Facilities and Their Critical Components Required for System Restoration," a new NPCC Guide, NPCC Document B-20, "Guidelines for Identifying Key Facilities and Their Critical Components for System Restoration," and an addition to the existing NPCC document A-3, "Emergency Operation Criteria." At its meeting of June 29, 2000, the Reliability Coordinating Committee approved document B-20 and recommended that document A-3 be submitted to the NPCC Membership for ballot. The IRCWG will submit a restoration reference document to the TFCO at its meeting of November 7-8, 2000.

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: \$4,450
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Status/ Comments: The Control Performance Working Group (CO-1) is currently pursuing the following tasks: 1) documentation of the historical basis for a ten minutes Disturbance Recovery Period For Reportable Events; 2) reassessing NPCC document A-6, "Operating Reserve Criteria", to address reliability concerns related to the treatment of recallable energy purchases in determining reserve requirements; 3) investigating the feasibility of full reserve sharing within NPCC; 4) reassessing NPCC document A-3, "Emergency Operation Criteria", to ensure consistency with NERC Appendix 9B, "Energy Emergency Alerts," and 5) a combined Regional control of Area Control Error (ACE).

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:	\$7,000
			Next Seminar:	May 2001

Status/ Comments: The Dispatcher Training Working Group (CO-2) will conduct its autumn training seminar on November 2-3, 2000, at the New York ISO. The spring seminar is planned for in May 2001.

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: The Working group has been populated and will begin its audits in the year 2001.

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

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:	\$11,275

Status/ Comments: The CO-8 Working Group completed and posted the "Memorandum of Understanding for Area Exchange of Emergency Assistance." The WG is reviewing the report by the PJM Interconnection of its Root Cause Analysis of the July 1999 Low Voltage Condition, the 1999 Summer Postseasonal Assessment conducted by the US Department of Energy, and the March 18, 2000 disturbance in New Mexico for lessons learned.

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:	\$6,500

Status/ Comments: The LECWG has developed a coordinated Phase Angle Regulator (PAR) Operation agreement between the Lake Erie members, and the revised Lake Erie Agreement was approved by the FERC in September of 2000.

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

- | | | | | |
|------|---|--|-------------------------|----------------|
| 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: | \$6,100 |
| | Status/ Comments: The ATC Working Group has developed an NPCC implementation plan for the NERC field test program for compliance with NERC Total Transfer Capability, Available transfer Capability, Capacity Benefit Margin and Transmission Reliability Margin standards and requirements. This plan was provided to NERC. | | | |
| | | | | |
| 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 |
| | Status/ Comments: The report of the Joint Working Group on the Identification of Critical Facilities for Restoration was approved and accepted by the RCC at its meeting of March 21, 2000. Reference also items 10 and 23. | | | |
| | | | | |
| 115) | NPCC Ad Hoc Operations Planning Working Group | Review the overall reliability of the generation and transmission system in the NPCC Region for the 2001 Summer. | 2000 Budget: | \$0 |
| | | | Expense to Date: | \$7,500 |
| | | | Completion Date: | May 2001 |
| | Status/ Comments: The scope for the "NPCC Reliability Assessment for Summer 2001" will be submitted to the Task Force on Coordination of Operation on November 7-8, 2000 for approval. | | | |

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

116) CO-9 Review of NERC Operating Standards

The CO-9 Working Group was charged to coordinate the reformatting of the Northeast Power Coordinating Council (NPCC) operating criteria, guides and procedures and to incorporate them into the NERC Operating Policies as Regionally specific provisions.

2000 Budget: \$7,500
Expenses to Date \$12,975

Status/ Comments: The final draft composite NPCC-NERC Operating Manual was posted for comments through the NPCC Open Process in August 2000.

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: March 2001
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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: June 2001
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Status/ Comments: TFCP will review the A-2 document to assure that it is consistent with the changing utility environment. It hopes to complete this review by mid-year 2001.

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: December 2000
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Status/ Comments: Revised Document to be placed in NPCC Open Process for review and comment in November 2000

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: December 2000
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Status/ Comments: To be submitted 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: February 2001
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Status/ Comments: TFCP three year plan was approved by the RCC at the June 29, 2000 meeting. Scope to be revised to reflect three year plan.

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
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Status/ Comments:

TASK FORCE ON COORDINATION OF PLANNING

PROGRAM ITEM NUMBER

Surveys/Reviews

43) Resource Adequacy — **Description:** Review of the New England Area resource adequacy study. **Latest Version:** March 2000
Coordination and Review of Area **Frequency of Reviews:** 3 Years
Studies **Next Review Date:** March 2003

Status/ Comments:

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:** December 2000

Status/ Comments: Analysis underway. Report to be revised as per discussions at October 30, 2000 CP-8 meeting. Report to be sent TFCP in December for approval.

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:

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: The New York Area comprehensive Transmission Review was approved by the TFCP at their September 2000 meeting. To be presented to RCC for approval at their November 9, 2000 meeting.

48) NPCC Area Transmission Review **Description:** Review of the New England Area future transmission plans (5-7 years out) **Latest Version:** March 2000
Frequency of Reviews: 1 Year
Next Review Date: March 2001

Status/ Comments:

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: March 2001

Status/ Comments:

50) NPCC Area Transmission Review **Description:** Review of the Québec Area future transmission plans (5-7 years out) **Latest Version:** September 2000
Frequency of Reviews: 1 Year
Next Review Date: November 2001

Status/ Comments: Interim review approved by TFCP at their September 2000 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: March 2001

Status/ Comments:

**NPCC RELIABILITY ASSESSMENT PROGRAM
STATUS REPORT**

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; perform pre-seasonal resource adequacy assessment of the NPCC Region.	2000 Budget: \$30,000 Expense to Date: \$76,578 Completion Date: March 2001
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Status/ Comments: CP-8 issued NPCC Summer 2000 Multi-Area Probabilistic Reliability Assessment in May 2000. Work on the NPCC Summer 2001 Multi-Area Probabilistic Reliability Assessment has been initiated.

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: \$7,500 Expense to Date: \$650 Completion Date: Ongoing
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Status/ Comments: CP-9 provided additional comments on Phase I Planning Standards. Will review and provide comments on Phase II Planning Standards once they are posted on the NERC Web Site for final 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
STATUS REPORT**

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, Fuels and Transmission report.	2000 Budget: \$5,000 Expense to Date: \$0 Completion Date: 1) EIA-411 data: April 2001 2) NPCC Report: June 2001
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Status/ Comments: The NERC/EIA-411 year 2001 data collection effort was initiated at a joint NERC DCWG - EIA meeting on October 4 and 5, 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:

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: September 2001
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Status/ Comments:

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.

**NPCC RELIABILITY ASSESSMENT PROGRAM
STATUS REPORT**

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 September 2000 Frequency of Reviews: As Required
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Status/ Comments: At its September 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: September 2000 Frequency of Reviews: As Required
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Status/ Comments: Member system status reports were reviewed at the September 2000 Task Force meeting. Such reviews include highlights of each system's Energy Management System status and planned system enhancements.

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: To be scheduled
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Status/ Comments: A workshop is being scheduled for the year 2001.

TASK FORCE ON ENERGY MANAGEMENT TECHNOLOGY

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

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|-----|---|---|--|
| 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: September 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, Telecommunications Working Group and Critical Infrastructure Protection Working Group efforts.

The TFEMT has recruited a member of the NERC Telecommunication Working Group who attended the September 2000 TFEMT meeting together with a member of the NERC Data Exchange Working Group.

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

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/.

This Ad Hoc Working Group has completed its task.

TASK FORCE ON ENERGY MANAGEMENT TECHNOLOGY

PROGRAM ITEM NUMBER

Documents

109)	Task Force Scope	Description: This document outlines the Task Force on Energy Management Technology scope of activities.	Latest Review September 28, 2000 Frequency of Reviews: 3 Years Next Review Date: March 2003
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Status/ Comments: As directed by the RCC at the March 21, 2000 meeting, the TFEMT and the TFSP are discussing potential changes in their scopes necessary to clearly define their respective roles regarding areas of complementary or overlapping interests.

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: The document was submitted to the NPCC Full Membership for final approval on May 2 of this year. Additional affirmative votes from three Transmission Customers are still required.

As part of the triennial review, the TFSP is considering whether revisions related to maintenance of batteries and chargers for black-start key facilities are warranted.

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: As part of the triennial review, the TFSP is considering whether revisions related to maintenance of batteries and chargers for black-start key facilities are warranted. 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:

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: As directed by the RCC at the March 21, 2000 meeting, the TFSP and TFEMT are discussing potential changes in their scopes necessary to clearly define their respective roles regarding areas of complementary or overlapping interests.

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, 2000 Frequency of Reviews: 1 Year Next Review Date: June 2001
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Status/ Comments: It is anticipated that compliance with Document A-4 in the future will become a CMAS responsibility with the TFSP in a consulting role.

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, 2000 Frequency of Reviews: 1 Year Next Review Date: June 2001
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Status/ Comments: It is anticipated that compliance with Sections 4.6 and 4.9 of Document A-3 in the future will become a CMAS responsibility with the TFSP in a consulting role.

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 2000 Frequency of Reviews: 1 Year Next Review Date: June 2001
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Status/ Comments: It is anticipated that maintenance of the SPS List will become a TFCP function in the future with the TFSP in a consulting role.

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

TASK FORCE ON SYSTEM PROTECTION

PROGRAM ITEM NUMBER

Surveys/Reviews

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|-----|--|---|--|
| 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 June and September 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. | | |

Working Groups/Ad Hoc Assignments

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|-----|--|---|---|
| 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 |
| | Status/ Comments: At its September 27-28, 2000 meeting, the TFSP agreed that more experience is needed with the present maintenance intervals before an extension of the intervals can be considered. Also reference item 57. | | |

Documents

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|----------|---|---|---|
| 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 |
| | Status/ Comments: Since it is anticipated that most TFSP compliance surveys in the future will become CMAS responsibilities, it is expected that CMAS will re-issue a revised version of Document C-26 under its name. | | |

TASK FORCE ON SYSTEM PROTECTION

PROGRAM ITEM NUMBER

Documents

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

Status/ Comments:

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 proposed 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 2001
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Status/ Comments: TFSS discussed possible revisions to the B-4 Document (and the Interim Document iB-4) at the July 20-21 and Sept. 27-28 meetings. The revisions would provide for a level of review less extensive than the Comprehensive Review during interim years. A draft revised Document is under review by TFSS.

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: November 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. The need for revisions based on this experience will be discussed by SS-38 during the November 9-10 meeting.

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 2001

Status/ Comments: No necessary revisions to the scope have yet been identified.

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 was approved by the TFSS at the July 20-21, 2000 meeting. The Area Review was also approved by TFCP and it has been provided to the RCC for approval during the November 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 2000
Frequency of Reviews: 1 Year
Next Review Date: March 2001

Status/ Comments: New England's comprehensive review was approved by the RCC at the March 21, 2000 meeting.

78) NPCC Area Transmission Review **Description:** Review of Ontario Area future transmission plans (5-7 years out) **Latest Version:** December 1999
Frequency of Reviews: 1 Year
Next Review Date: March 2001

Status/ Comments: The Ontario Area Interim Transmission Review was discussed at the September 27-28, 2000 meeting of the TFSS. Approval is expected at the November 16-17 TFSS meeting.

79) NPCC Area Transmission Review **Description:** Review of Québec Area future transmission plans (5-7 years out) **Latest Version:** September 2000
Frequency of Reviews: 1 Year
Next Review Date: November 2001

Status/ Comments: The Quebec Area Interim Review was approved by the TFSS following the July 20-21, 2000 meeting. It was then provided to the TFCP for approval at the September 28 meeting. It was approved by TFCP and 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: March 2001

Status/ Comments: The Maritime Area Interim Review reports are being prepared by Nova Scotia and New Brunswick for TFSS review during the November 16-17, 2000 meeting.

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: June 2001

Status/ Comments: An assessment study will be conducted by the SS-38 Working Group. This study will be initiated once SS-38 completes the Overall NPCC Review. See item #86.

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:** October 2000
Frequency of Reviews: 1 Year
Completion Date: November 2001

Status/ Comments: All load flow cases required as part of the 2000 Base Case Development effort were completed and submitted to the NERC MMWG. See item # 85.

Several load flow base case models and associated dynamic data were developed for and are being used in the Overall Transmission study being conducted by SS-38.

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: March 2001
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Status/ Comments: The SS-38 Working Group is conducting the Overall Transmission Reliability Study. Several load flow base case models and associated dynamic data modeling 2006 peak and light load conditions have been developed and were fine-tuned. The Study is well underway with SS-38 simulating contingencies in each of the NPCC Areas plus PJM to determine the overall robustness of the system. A draft report is being prepared. Completion of all studies and the report is expected in December 2000, with submission to the RCC planned for March 2001.

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.

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: \$1,250 Completion Date: Ongoing
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Status/ Comments: All load flow cases required for the NPCC year 2000 Base Case Development effort have been completed and submitted to NERC MMWG.

TASK FORCE ON SYSTEM STUDIES

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

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: \$10,250
			Completion Date: Ongoing

Status/ Comments: As assigned by TFSS, SS-38 is presently conducting the Overall NPCC Transmission Study to determine the overall robustness of the system from inter-area and inter-regional perspectives. It is anticipated that the study will be completed in December 2000.

MACC - ECAR - NPCC (MEN)

PROGRAM ITEM NUMBER

Study Committees

96) MEN S 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 2000/01 Winter MEN Interregional Transmission System Reliability Assessment will be considered by the Joint Interregional Review Committee at its November 6, 2000 meeting. After approval, the report will be placed in the "Seasonal Assessments" folder on the NPCC Home Page. Also reference item 97 and 98.

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: \$7,000

Completion Date: November 2000

Status/ Comments: The Working Group conducted the studies for the 2000/01 Winter MEN Interregional Transmission System Reliability Assessment. The report has been provided to the JIRC for review at their November 6, 2000 meeting.

**NPCC RELIABILITY ASSESSMENT PROGRAM
STATUS REPORT**

MACC - 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

Status/ Comments: The MEN Future Systems Working Group is not staffed. At the October 5 Joint VEM/MEN Study Committee meeting the groups discussed regional studies currently underway or planned. ECAR is planning to do a study of year 2005 conditions. MAAC is planning an internal study of year 2004-2005 conditions. VACAR is conducting a year 2005 study. The NPCC Overall Review is well underway. Upon completion of the above studies the MEN Study Committee will determine whether a future study is needed.

NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL (NERC)

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

- 99) RAS Reliability Assessment Subcommittee (RAS) **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:** November 2000
- Status/ Comments:** The Reliability Assessment Subcommittee's report on "Reliability Assessment 1999-2008" was posted on the NERC Web Site on May 23, 2000. The report on "Reliability Assessment 2000-2009" was presented to the NERC Board of Trustees at its September 2000 meeting. RAS is planning to post the preseasonal "NERC 2000/01 Winter Assessment" on November 15, 2000.
- 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
- Status/ Comments:** The PSS is reviewing the comments submitted to the Phase I Planning Standards and also reviewing the Phases II, III and IV Planning Standards. PSS is working jointly with the NERC Compliance Review Working Group (CRWG) in developing revised templates for the remaining Phases of the NERC Compliance Program.

NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL (NERC)

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

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: \$3,126 Completion Date: Ongoing
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Status/ Comments: The NERC MMWG is about a month behind on assembling the eleven load flow models that will constitute the 2000 base case library. NPCC's input to the MMWG effort was provided by the NPCC staff from the cases developed by SS-37 Working Group on Base Case Development (Reference item 82). At the October 24 meeting, MMWG set a target date of November 30 to finalize all the cases. At the request of the NERC Planning Committee, the MMWG and SDDWG (Reference item 105) are working on a transition plan to merge the two groups including determining the resource requirements.

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: July 2001
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Status/ Comments: The LFWG report "Peak Demand and Energy Projection Bandwidth: 2000-2009 Projections" was published in July 2000 and is available on the NERC Web Site. After extensive discussions at the September 13-14, 2000 LFWG meeting, the working group agreed to provide a similar report next year.

NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL (NERC)

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

104) DCWG 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 submitting yearly data and in negotiating the requirements for data submission to the EIA. **Completion Date:** April 2001

Status/ Comments: The NERC DCWG met on October 4 and 5, 2000 with representatives from EIA to discuss results of this year's data collection effort and to plan next year's effort. In addition, EIA's major overhaul of the data requirements, planned for year 2002, was also discussed.

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

Status/ Comments: The 2000 dynamics simulation models library development, with input from the NPCC SS-37 working group on Base Case Development (reference item 85) was completed on May 29, 2000. SDDWG completed the RFP and on October 10, 2000 selected Powertech Labs as SDDWG coordinator, replacing the former Ontario Hydro Company. This selection will be presented to the NERC Planning Committee on November 15, 2000 for approval. In 2001 the new coordinator will develop three cases plus two additional cases as an option subject to approval of the NERC Planning Committee. Also, at the request of the NERC Planning Committee, the MMWG (reference item 101) and SDDWG are working on a transition plan to merge the two groups including determining the resource requirements.

NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL (NERC)

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

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

Status/ Comments: The NERC ATCWG his preparing to monitor regional activity regarding the field testing of the TTC, ATC, TRM and CBM Standards. This review is to be completed by June 2001.

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 working jointly with the PSS on revising the Phase III Planning Standards Templates; continuing development of sanctions/penalties matrices, and discussing means to streamline the implementation of future Phases of the NERC Compliance Program

NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL (NERC)

PROGRAM ITEM NUMBER

Working Groups/Ad Hoc Assignments

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
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Status/ Comments: The Compliance Subcommittee will present a final set of Phase III Operating Templates to NERC PC/OC for approval at their November 14-16, 2000 meetings.

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	\$4,450
31	CO-2 Dispatcher Training Working Group	\$22,350	\$7,000
32	CO-7 Operation Review Working Group	\$25,000	
33	CO-8 System Operating Managers Working Group	\$25,000	\$11,275
116	CO-9 Review of NERC Operating Standards	\$7,500	\$12,975
35	LECWG Lake Erie Circulation Working Group	\$30,000	\$6,500
36	ATC NPCC Ad Hoc ATC Working Group	\$10,000	\$6,100
108	Y2K Year 2000 Coordination Working Group	\$7,500	\$5,450
115	Ad Hoc WG Summer 2000 Capacity		\$7,500
	IRCWG TFCO Inter-Control Area Restoration	\$25,000	\$2,900
	Coordination Working Group		
	ETIWG Electronic Tagging Implementation Working	\$23,200	
	Group		
52	CP-8 Resource and Transmission Adequacy	\$30,000	\$76,578
	Working Group		
53	CP-9 Review of NERC Planning Standards	\$7,500	\$650
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	\$1,250
86	SS-38 Reliability Review of Inter-Area Operation	\$20,000	\$10,250
92	EMT-1 Energy Management Technology Workshop	\$5,000	
	Working Group		
97	MEN MAAC-ECAR-NPCC Activities	\$12,000	\$7,000
101	MMWG Multiregional Modeling Working Group	\$12,000	\$3,126
105	SDDWG Dynamic Database Working Group	\$15,000	
	CMAS Compliance Monitoring Assessment	\$0	\$3,300
	Subcommittee		
	NERCWG NERC Subcommittees, Working Groups and	\$40,000	\$6,700
	Task Forces		
	NERC-ISN Interregional Security Network(ISN)	\$50,000	\$50,566
	STAFF	\$15,000	
	TOTAL	\$432,350*	\$223,570

* 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

**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). Updated NRAP Status report will be presented at the November 9, 2000 and future RCC meetings.	RCC	Complete
NERC-95-01	ATC determination, IDC and TIS.	The NPCC ATCWG has developed an NPCC implementation plan for the NERC field test program for compliance with NERC Total Transfer Capability, Available Transfer Capability, Capacity Benefit Margin and Transmission Reliability Margin standards and requirements. This plan was provided to NERC. In the future this item will be tracked through the NRAP Status Report.	RCC	Complete
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 has developed and is conducting a pilot "audit" or review process for the RCP. NPCC is developing the Reliability Compliance and Enforcement Program and is scheduled to implement the first phase in March, 2001. In the future this item will be tracked through the NRAP Status Report.	RCC	Complete
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 has formed 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. In the future this item will be tracked through the NRAP Status Report.	TFCP	Complete

**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-98-08	Streamline disturbance reporting procedures under future similar circumstances to the January 1998 Ice Storms.	TFCO reviewed and made a number of modifications to B-13 at its September 1999 meeting. A final review will be performed at the November 7-8, 2000 TFCO meeting, after which the Document will be reposted for Open Process comment. In the future this item will be tracked through the NRAP Status Report.	TFCO	Complete

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 brings together work done by the Council, its member systems and Areas (Independent System Operators - ISOs) relevant to the assessment of bulk power system reliability. Reviews and studies completed by member systems and Areas (ISOs) are not duplicated by the Council, but are 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 (RCC) has the responsibility for assessing the reliability of the present and proposed bulk power systems of the NPCC members. To this end, the 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, guides, procedures & diagrams; and coordination of generation and transmission plans among the various investigations. In addition, all NPCC documents are regularly reviewed, and updated where required. Finally, compliance by NPCC members with the NPCC Criteria and Guides and the NERC Operating and Planning Standards are assessed on a regular basis by CMAS.

Ad Hoc Assessments

Flexibility to deal with non-routine issues is retained through assignments made by the RCC 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, are responsible for the conduct of both the standing assessments and the ad hoc assessments.

The NPCC Staff is 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