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**RCC Meeting  
March 21, 2001  
Agenda Item 9.4**

March 19, 2001

Members, Reliability Coordinating Committee  
and

Mr. Charles A. Durkin, Jr.  
Mr. Robert A. Hiney  
Mr. Edward A. Schwerdt

**Re: NPCC Reliability Assessment Program Status Report, March 2001**

The March 2001 NPCC Reliability Assessment Program (NRAP) Status Report will be updated in time for consideration at the March 21, 2001 Reliability Coordinating Committee meeting.

The report will be posted in Adobe format in the Current Year NRAP folder on the NPCC Home Page. The URL to the folder is:

<http://www.npcc.org/NRAP.asp?Folder=CurrentYear>

Please note that the report is only “distributed” with this reference.

The NRAP Status Report update will be provided at the March 21 2001, RCC meeting.

Yours truly,

*Guy V. Zito*

Guy V. Zito  
NPCC Staff

Cc: 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  
Ms. Jennifer Budd



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**RCC Meeting  
March 21, 2001  
Agenda Item 9.4**

**Northeast Power Coordinating Council  
Reliability Assessment Program**

**STATUS REPORT**

**March 2001**

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

**NPCC RELIABILITY ASSESSMENT PROGRAM**

**STATUS REPORT**

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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.

#### Task Force on Coordination of Operation (TFCO)

NPCC will secure the services of Mr. Peter Czech as a consultant to be charged with establishing a framework to reorder NPCC operational policy to ensure that requirements, and policy language which may be inferred as a requirement, are directed only through NPCC criteria documents. The goal of the effort will be to develop three groupings of NPCC Operational Policy: criteria, compliance templates and procedures (or reference documents). Ultimately, all operational Guidelines (B documents) would be eliminated, with the language to be relocated to a procedural document or a criterion.

#### 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***

This document has been approved by letter ballot with a two thirds majority of both the Transmission Customers and the Transmission Providers.

##### **XX) B-21 *Guide for Analysis and Reporting of Protection Misoperations***

At the March 21, 2001 meeting, the RCC will consider the Guide for Analysis and Reporting of Protection Misoperations (Document B-21), a new Guide Document.

**NPCC RELIABILITY ASSESSMENT PROGRAM**

**STATUS REPORT**

**Task Force on System Studies (TFSS)**

**79) The New England Area Interim Transmission Review**

The New England Area Interim Transmission Review is under review by the TFSS. Document B-4 is being redrafted. The TFSS is also reviewing the SS-38, 2000 Overall Transmission Assessment Report.

**NPCC RELIABILITY ASSESSMENT PROGRAM  
STATUS REPORT**

**COMPLIANCE MONITORING AND ASSESSMENT SUBCOMMITTEE**

**PROGRAM ITEM NUMBER**

**Documents**

117)A-8	Reliability Compliance and Enforcement Program	<b>Description:</b> The process and requirements are defined for compliance assessment and enforcement of selected reliability criteria and standards.	<b>Latest Version:</b> September 2000 <b>Frequency of Reviews:</b> 1 year <b>Next Review Date:</b> November 2001
		<b>Status/ Comments:</b> 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)	<b>Description:</b> 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.	<b>Latest Version:</b> September 2000 <b>Frequency of Reviews:</b> 1 Year <b>Next Review Date:</b> November 2001
		<b>Status/ Comments:</b> 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.	<b>Latest Version:</b> June 23, 2000 <b>Frequency of Reviews:</b> 3 years <b>Next Review Date:</b> June 2003
		<b>Status/ Comments:</b> CMAS will review the result of a pilot review at its December 6, 2000 meeting. Also reference items 117 and 118.	

**NPCC RELIABILITY ASSESSMENT PROGRAM  
STATUS REPORT**

**COMPLIANCE MONITORING AND ASSESSMENT SUBCOMMITTEE**

**PROGRAM ITEM NUMBER**

**Surveys/Reviews**

120)	Minimum Maintenance Compliance Survey	This report summarizes member system compliance with the Maintenance Criteria for Bulk Power System Protection (Document A-4).	<b>Latest Version:</b> June 29, 2000 <b>Frequency of Reviews:</b> 1 Year <b>Next Review Date:</b> June 2001
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**Status/ Comments:** Assessment of compliance with Document A-4 has been transferred to CMAS from the TFSP. The TFSP will continue in a consulting role. Also reference item 65

121)	Survey of Compliance with the NPCC Underfrequency Load Shedding Program	These reports summarize Area compliance with sections 4.6 and 4.9 of the "Emergency Operation Criteria" (Document A-3)	<b>Latest Version:</b> June 29, 2000 <b>Frequency of Reviews:</b> 1 Year <b>Next Review Date:</b> June 2001
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**Status/ Comments:** Assessment of compliance with Sections 4.6 and 4.9 of Document A-3 has been transferred to CMAS from the TFSP. The TFSP will continue in a consulting role. Also reference item 66.



**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:**  
**Frequency of Reviews:**  
**Next Review Date:**
- Status/ Comments:** Also reference items 12 and 26. The standards in NPCC Document B-2 have been embodied in NPCC Document A-8, approved by the NPCC membership on November 9, 2000.

**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 2001

**Status/ Comments:** Also reference items 9 and 22. All requirements of NPCC Document B-3 will be transferred to the appropriate criterion document; remaining language will be established in a new Reference Document.

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

**Status/ Comments:** Also reference items 11 and 25. All requirements of NPCC Document B-9 will be transferred to the appropriate criterion document; remaining language will be established in a new Reference Document.

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 2001

**Status/ Comments:** All requirements of NPCC Document B-13 will be transferred to the appropriate criterion document; remaining language will be established in a new Reference Document.

**TASK FORCE ON COORDINATION OF OPERATION**

**PROGRAM ITEM NUMBER**

**Documents**

- |   |   |  |   |
|---|---|--|---|
| 8)C-3   | Procedures for Communications During Emergencies                    | <b>Description:</b> 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. | <b>Latest Version:</b> March 2000<br><b>Frequency of Reviews:</b> 1 Year<br><b>Next Review Date:</b> May 2001         |
| <b>Status/ Comments:</b> Reference also item 16. NPCC Document C-3 will be redrafted to coordinate with the proposed restructuring of the NERC Hotline currently in progress.                             |   |  |   |
| 9)C-4   | Monitoring Procedures for Guidelines for Inter-AREA Voltage Control | <b>Description:</b> 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.  | <b>Latest Version:</b><br><b>Frequency of Reviews:</b><br><b>Next Review Date:</b>                                    |
| <b>Status/ Comments:</b> Also reference items 4 and 22. The monitoring procedures and methodology of NPCC Document C-4 are being transferred to NPCC Document C-26 under the supervision of the CMAS.     |   |  |   |
| 10)C-5  | Monitoring Procedures for Emergency Operation Criteria              | <b>Description:</b> Procedures are established for the Task Force on Coordination of Operation's monitoring and reporting of conformance with NPCC's Emergency Operation Criteria.   | <b>Latest Version:</b> May 15, 1997<br><b>Frequency of Reviews:</b> 3 Years<br><b>Next Review Date:</b> November 2000 |
| <b>Status/ Comments:</b> Also reference items 1, 23 and 29. The monitoring procedures and methodology of NPCC Document C-5 are being transferred to NPCC Document C-26 under the supervision of the CMAS. |   |  |   |

**TASK FORCE ON COORDINATION OF OPERATION**

**PROGRAM ITEM NUMBER**

**Documents**

- |  |  |  |  |
|--|--|--|--|
| 11)C-7   | Monitoring Procedures for Guide for Rating Generating Capability             | <b>Description:</b> 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.             | <b>Latest Version:</b><br><b>Frequency of Reviews:</b><br><b>Next Review Date:</b> |
| <b>Status/ Comments:</b> Also reference items 5 and 25. The monitoring procedures and methodology of NPCC Document C-7 are being transferred to NPCC Document C-26 under the supervision of the CMAS.                |  |  |  |
| 12)C-8   | Monitoring Procedures for Control Performance Guide During Normal Conditions | <b>Description:</b> 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. | <b>Latest Version:</b><br><b>Frequency of Reviews:</b><br><b>Next Review Date:</b> |
| <b>Status/ Comments:</b> Also reference items 3 and 26. The monitoring procedures and methodology of NPCC Document C-8 have been embodied in NPCC Document A-8, approved by the NPCC membership on November 9, 2000. |  |  |  |
| 13)C-9   | Monitoring Procedures for Operating Reserve Criteria                         | <b>Description:</b> Procedures are established for the Task Force on Coordination of Operation's monitoring and reporting of conformance with NPCC's Operating Reserve Criteria                          | <b>Latest Version:</b><br><b>Frequency of Reviews:</b><br><b>Next Review Date:</b> |
| <b>Status/ Comments:</b> Also reference items 2 and 27. The monitoring established in NPCC Document C-9 have been embodied in NPCC Document A-8, approved by the NPCC membership on November 9, 2000.                |  |  |  |

**TASK FORCE ON COORDINATION OF OPERATION**

**PROGRAM ITEM NUMBER**

**Documents**

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

15)C-12	Procedure for Shared Activation of Ten Minute Reserve (SAR)	<b>Description:</b> Procedures are established to provide for the shared activation of ten minute reserve on an Area basis.	<b>Latest Version:</b> August 1, 2000 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> March 2001
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**Status/ Comments:** A revised draft of NPCC Document C-12 has been posted for comments through the NPCC Process for Open Review.

16)C-13	Operational Planning Coordination	<b>Description:</b> 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.	<b>Latest Version:</b> March 15, 1997 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> January 2001
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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	<b>Description:</b> 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.	<b>Latest Version:</b> November 7, 2000 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> November 2003
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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.

18)C-19	Procedures During Shortages of Operating Reserve	<b>Description:</b> 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.	<b>Latest Version:</b> <b>Frequency of Reviews:</b> <b>Next Review Date:</b> November 2001
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**Status/ Comments:** Also reference items 1 and 2. Those elements of NPCC Document C-19 which establish requirements or are compliance related are being transferred to NPCC Document A-06; the remaining portions of the document will be transformed into a Reference Document.

19)C-20	Procedures During Abnormal Operating Conditions	<b>Description:</b> This Procedure complements the Emergency Operation Criteria by establishing specific instructions for the System Operator during emergency conditions in an NPCC Area or Areas.	<b>Latest Version:</b> March 1999 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> March 2002
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**Status/ Comments:** Also reference item 1. The elements of NPCC Document C-20 which establish requirements or are compliance related are being transferred to NPCC Document A-3; the remaining portions of the document will be transformed into a Reference Document.

**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:**  
**Frequency of Reviews:**  
**Next Review Date:**

**Status/ Comments:** Also reference items 24 and 38. The monitoring procedures and methodology of NPCC Document C-21 are being transferred to NPCC Document C-26 under the supervision of the CMAS.

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

**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:**  
**Frequency of Reviews:**  
**Next Review Date:**

**Status/ Comments:** Also reference items 4 and 9. These compliance monitoring responsibilities have been assumed by the CMAS as directed through NPCC Document C-26.

**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:**  
**Frequency of Reviews:**  
**Next Review Date:**
- Status/ Comments:** Also reference items 1, 10 and 19. These compliance monitoring responsibilities have been assumed by the CMAS as directed through NPCC Document C-26.
- 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:**  
**Frequency of Reviews:**  
**Next Review Date:**
- Status/ Comments:** Also reference items 20 and 38. These compliance monitoring responsibilities have been assumed by the CMAS as directed through NPCC Document C-26.
- 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:**  
**Frequency of Reviews:**  
**Next Review Date:**
- Status/ Comments:** Also reference items 5 and 11. These compliance monitoring responsibilities have been assumed by the CMAS as directed through NPCC Document C-26.



**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:** March 2001
- Frequency of Reviews:** See Status / Comments
- Next Review Date:** June 2001
- Status/ Comments:** TFCO and CMAS are discussing the responsibility for all compliance monitoring and assessments; however, the TFCO will continue to jointly monitor compliance with CPS-1, CPS-2 and DCS 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:** March 2001
- Frequency of Reviews:** See Status/Comments
- Next Review Date:** June 2001
- Status/ Comments:** Also reference items 2 and 13. The responsibilities for monitoring and assessing operational surveys has been assumed by the CMAS. However due to the criticality of the NERC Standards CPS-1, CPS-2 and DCS, the TFCO and the CMAS will continue to monitor compliance with these standards on a monthly basis.
- 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:** March 2001
- Frequency of Reviews:** 1 Year
- Next Review Date:** March 2002
- Status/ Comments:** The TFCO will finalize the 2001 document at its meeting of March 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.

**2001 Budget:**

**Expense to Date:**

**Status/ Comments:** The IRCWG published, in January of 2001, an inter-Area restoration document. For the May 2001 training seminar, it will develop and coordinate a tabletop restoration exercise.

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

**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	<b>Assignment:</b> 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.	<b>2000 Budget:</b> \$22,350 <b>Expense to Date:</b> \$7,000 <b>Next Seminar:</b> May 2001
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**Status/ Comments:** The Dispatcher Training Working Group (CO-2) will conduct its spring training seminar on May 3-4, 2001, at the Control Center of New Brunswick Power. A Energy focal point of the seminar will be a tabletop system restoration exercise.

32)CO-7	Operation Review Team	<b>Assignment:</b> 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.	<b>2000 Budget:</b> \$25,000 <b>Expense to Date:</b> \$0
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**Status/ Comments:** The Working group has been populated and will begin its audits in the year 2001, providing technical support in coordination with the CMAS..

**TASK FORCE ON COORDINATION OF OPERATION**

**PROGRAM ITEM NUMBER**

**Working Groups/Ad Hoc Assignments**

33)CO-8	System Operations Managers Working Group	<b>Assignment:</b> 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.	<b>2000 Budget:</b>	\$25,000
			<b>Expense to Date:</b>	\$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 Security Process Working Group (LESPWG)	<b>Assignment:</b> The Lake Erie Security Process 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.	<b>2000 Budget:</b>	\$30,000
			<b>Expense to Date:</b>	\$6,500

**Status/ Comments:** The LESPWG is beginning an effort to extend the emergency redispatch procedure to system normal conditions.

**TASK FORCE ON COORDINATION OF OPERATION**

**PROGRAM ITEM NUMBER**

**Working Groups/Ad Hoc Assignments**

36)	NPCC Ad Hoc Working Group on ATC	<b>Assignment:</b> 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	<b>2000 Budget:</b> \$10,000 <b>Expense to Date:</b> \$6,100
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**Status/ Comments:** Following approval by the TFCO and the TFCP, the ATC Working Group's report defining NPCC methodology for calculating TTC and ATC has been posted for comment through the NPCC Process for Open Review.

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.	<b>2000 Budget:</b> \$0 <b>Expense to Date:</b> \$7,500 <b>Completion Date:</b> May 2001
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**Status/ Comments:** The report for the "NPCC Reliability Assessment for Summer 2001" will be submitted to the RCC on March 21, 2001.

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.	<b>2000 Budget:</b> \$7,500 <b>Expenses to Date:</b> \$12,975
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**Status/ Comments:** The final draft composite NPCC-NERC Operating Manual has been held in abeyance pending the NERC effort to restructure its standards as directed by the NERC Standards Task Force..

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:** November 2001

**Status/ Comments:** NPCC will begin review of this document in the second half of 2001.

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:** November 2001

**Status/ Comments:** TFCP has begun formulating the CP-9 Working Group to review the Basic Criteria.

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:** June 2001

**Status/ Comments:** Document in Open Process Review. Commenting period ends March 26, 2001.

**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	<b>Description:</b> This document outlines procedures for reporting new or modified Bulk Power System Special Protection Systems.	<b>Latest Version:</b> September 28, 1995 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> June 2001
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**Status/ Comments:** To be reviewed at June 7, 2001 TFCP meeting

41)	Task Force Scope	<b>Description:</b> The Task Force on Coordination of Planning scope of activities.	<b>Latest Version:</b> February 26, 1997 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> June, 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	<b>Description:</b> Review of the New York Area resource adequacy study.	<b>Latest Version:</b> June 29, 1999 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> June 2002
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**Status/ Comments:**

**TASK FORCE ON COORDINATION OF PLANNING**

**PROGRAM ITEM NUMBER**

**Surveys/Reviews**

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

44)	Resource Adequacy — Coordination and Review of Area Studies	<b>Description:</b> Review of the Ontario Area resource adequacy study.	<b>Latest Version:</b> June 1997 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> March 2001
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**Status/ Comments:** TFCP approved report at December, 2000 meeting. Being presented to RCC for approval at March 21, 2001 meeting.

45)	Resource Adequacy — Coordination and Review of Area Studies	<b>Description:</b> Review of the Québec Area resource adequacy study.	<b>Latest Version:</b> June 29, 1999 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> June 2002
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**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 **Latest Version:** November 2000  
plans (5-7 years out) **Frequency of Reviews:** 1 Year  
**Next Review Date:** November 2001

**Status/ Comments:**

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

**Status/ Comments:** Final report to be reviewed for approval at March 29-30, 2001 TFSS meeting. To be presented for approval at June 7, 2001 TFCP 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 2000  
**Frequency of Reviews:** 1 Year  
**Next Review Date:** December 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:**

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:** November, 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	<b>Assignment</b>	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.	<b>2000 Budget:</b>	\$30,000
				<b>Expense to Date:</b>	\$76,578
				<b>Completion Date:</b>	April 2001

**Status/ Comments:** Summer 2001 reliability assessment being reviewed by TFCP for approval mid-April with release anticipated May 1, 2001.

53)CP-9	Working Group on the Review of NERC Planning Standards	<b>Assignment</b>	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.	<b>2000 Budget:</b>	\$7,500
				<b>Expense to Date:</b>	\$650
				<b>Completion Date:</b>	Ongoing

**Status/ Comments:** CP-9 will be charged with conducting the review of the NPCC Basic Criteria. To be completed by June, 2002.

54)EMWG	Environmental Matters Working Group	<b>Assignment</b>	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.	<b>2000 Budget:</b>	\$0
				<b>Expense to Date:</b>	\$0
				<b>Completion Date:</b>	Ongoing

**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	<b>Assignment</b> 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.	<b>2000 Budget:</b> \$5,000 <b>Expense to Date:</b> \$0 <b>Completion Date:</b> 1) EIA-411 data: April 2001 2) NPCC Report: June 2001
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**Status/ Comments:**

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

**Documents**

112)A-7 NPCC Glossary of Terms	<b>Description:</b> 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.	<b>Latest Version:</b> September 1998 <b>Frequency of Reviews:</b> 1 Year <b>Next Review Date:</b> September 2001
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**Status/ Comments:**

**TASK FORCE ON COORDINATION OF PLANNING**

**PROGRAM ITEM NUMBER**

**Surveys/Reviews**

122)	Special Protection System List	This document lists Special Protection Systems on the NPCC Bulk Power System.	<b>Latest Version:</b> June 2000 <b>Frequency of Reviews:</b> 1 Year <b>Next Review Date:</b> June 2001
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**Status/ Comments:** Maintenance of the SPS List has has been transferred to the TFCP from the TFSP. The TFSP will continue in a consulting role. Also reference item 67.

**TASK FORCE ON ENERGY MANAGEMENT TECHNOLOGY**

**PROGRAM ITEM NUMBER**

**Documents**

87)B-12	Guidelines for On-Line Computer System Performance During Disturbances	<b>Description:</b> This document establishes guidelines for the performance of NPCC Area on-line computer systems during a power system disturbance.	<b>Latest Version:</b> November 1998 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> 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	<b>Description:</b> This document establishes monitoring and reporting procedures for the B-12 Guideline, and specifically details on-line computer response objectives.	<b>Latest Version:</b> September 1998 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> 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."	<b>Description:</b> Review of on-line computer performance during system events or disturbances including all NERC regions.	<b>Latest Review:</b> February 2001 <b>Frequency of Reviews:</b> 1 Year <b>Next Review Date:</b> February 2002
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**Status/ Comments:** The Task force is currently awaiting the completion of the 1996, 1997, 1998, 1999 and 2000 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:** February 2001  
**Frequency of Reviews:** As Required

**Status/ Comments:** At its February 2001 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 2001  
**Frequency of Reviews:** As Required

**Status/ Comments:** Member system status reports were reviewed at the February 2001 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:** October 2001

**Status/ Comments:** A workshop is scheduled for October 2001.

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 2001
- 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 exchanged agendas with the PJM Emerging Technologies User Group (ETUG). These groups will be sharing information in the future, via email or by having members attending the meetings.

- 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/](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

**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	<b>Description:</b> This document establishes the maintenance intervals and practices which should result in dependable and secure protection system operation.	<b>Latest Version:</b> December 2000 <b>Frequency of Reviews:</b> 3 years <b>Next Review Date:</b> December 2003
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**Status/ Comments:** The document has been approved by letter ballot with a two thirds majority of both the Transmission Customers and the Transmissions Providers. The approved document, dated December 2000, was placed in the Criteria folder on the NPCC Web Site (<http://www.npcc.org/>) on December 28, 2000.

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 and has asked NPCC management for guidance on how to proceed.

58)A-5	Bulk Power System Protection Criteria	<b>Description:</b> 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.	<b>Latest Version:</b> September 1998 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> 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 and has asked NPCC management for guidance on how to proceed. Also reference item 69.

**TASK FORCE ON SYSTEM PROTECTION**

**PROGRAM ITEM NUMBER**

**Documents**

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

61)B-7	Automatic Underfrequency Load Shedding Program Relaying Guideline	<b>Description:</b> 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).	<b>Latest Version:</b> March 2, 1999 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> March 2002
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**Status/ Comments:**

62)B-11	Special Protection System Guideline	<b>Description:</b> 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.	<b>Latest Version:</b> March 2, 1999 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> March 2002
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**Status/ Comments:**

**TASK FORCE ON SYSTEM PROTECTION**

**PROGRAM ITEM NUMBER**

**Documents**

63)C-22	Procedure for Reporting and Reviewing Proposed Protection Systems for the Bulk Power System	<b>Description:</b> 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.	<b>Latest Version:</b> April 14, 1999 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> April 2002
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Formerly Document B-5

**Status/ Comments:**

64)	Task Force Scope	<b>Description:</b> This document outlines the Task Force on System Protection scope of activities.	<b>Latest Version:</b> June 29, 1999 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> 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	<b>Description:</b> This report summarizes member system compliance with the Maintenance Criteria for Bulk Power System Protection (Document A-4).	<b>Latest Version:</b> June 29, 2000 <b>Frequency of Reviews:</b> 1 Year <b>Next Review Date:</b> June 2001
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**Status/ Comments:** Assessment of compliance with Document A-4 has become a CMAS responsibility with the TFSP in a consulting role. Also reference item 120.

**NPCC RELIABILITY ASSESSMENT PROGRAM  
STATUS REPORT**

**TASK FORCE ON SYSTEM PROTECTION**

**PROGRAM ITEM NUMBER**

**Surveys/Reviews**

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

**Status/ Comments:** Assessment of compliance with Sections 4.6 and 4.9 of Document A-3 has become a CMAS responsibility with the TFSP in a consulting role. Also reference item 121.

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

**Status/ Comments:** Maintenance of the SPS List has become a TFCP responsibility with the TFSP in a consulting role. Also reference item 122.

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.

**TASK FORCE ON SYSTEM PROTECTION**

**PROGRAM ITEM NUMBER**

**Surveys/Reviews**

69)	Review protection system performance following major system events or disturbances	<b>Description:</b> 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.	<b>Latest Version:</b> Ongoing <b>Frequency of Reviews:</b> As Required
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**Status/ Comments:** The NERC/DAWG Reports on 1996, 1997, 1998 and 1999 System Disturbances have not been issued yet. At its November 2000 meeting, 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**

70)	Protection System Maintenance Practices	<b>Assignment:</b> 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.	<b>Completion Date:</b> Deferred <b>Frequency of Reviews:</b> 3 years <b>Next Review Date:</b> September 2001
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**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**

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.	<b>Latest Version:</b> November 3, 1999 <b>Frequency of Reviews:</b> 3 years <b>Next Review Date:</b> November 2002
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**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	<b>Description:</b> 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."	<b>Latest Version:</b> August 7, 1996
			<b>Frequency of Reviews:</b> 3 Years
			<b>Next Review Date:</b> July 2001

**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"	<b>Description:</b> 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.	<b>Latest Version:</b> June 26, 1998
			<b>Frequency of Reviews:</b> 3 years
			<b>Next Review Date:</b> June 2001

**Status/ Comments:**

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

**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:** June 2001

**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 March 29-30 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. The Task Force Chairman is currently reviewing the document and the Scope will be discussed at the March 22-23 TFSS meeting.

Surveys/Reviews

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

**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 TFCCP 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:** June 2001
- Status/ Comments:** The Maritime Area Interim Review reports are being prepared by Nova Scotia and New Brunswick for TFSS review during the March 22-23 TFSS 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:** December 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	<b>Description:</b> 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.	<b>Latest Version:</b> September 1997 <b>Frequency of Reviews:</b> 3 Years <b>Completion Date:</b> June 2001
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**Status/ Comments:** The SS-38 Working Group has conducted 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 simulates contingencies in each of the NPCC Areas plus PJM to determine the overall robustness of the system. A draft report has been prepared and will be reviewed by TFSS at their March 22-23 meeting. Completion of all studies and the report is expected in December 2000, with submission to the RCC planned for June 2001.

84)	Review of Dynamic Analysis Recording Devices	<b>Description:</b> This review summarizes the characteristics of recording devices used to capture power system dynamic phenomena.	<b>Latest Version:</b> June 4, 1999 <b>Frequency of Reviews:</b> 3 Years <b>Next Review Date:</b> 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	<b>Assignment:</b> On an annual basis, develop a library of solved load flow cases and associated dynamic data.	<b>2000 Budget:</b> \$20,000 <b>Expense to Date:</b> \$1,250 <b>Completion Date:</b> 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	<b>Assignment:</b> Assigned to analyze dynamic phenomena, which may affect interconnected system reliability, especially in the area of low frequency oscillations.	<b>2000 Budget:</b> \$20,000
			<b>Expense to Date:</b> \$10,250
			<b>Completion Date:</b> Ongoing

**Status/ Comments:** As assigned by TFSS, SS-38 has conducted 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 receive TFSS approval and be presented to the RCC in June 2001.

**NPCC RELIABILITY ASSESSMENT PROGRAM  
STATUS REPORT**

**MACC - 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 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:**      May 2001

**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 will finalize its assessment of summer 2001 operating conditions at its April, 2001, meeting, for posting on May 1, 2001.

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.



**NPCC RELIABILITY ASSESSMENT PROGRAM  
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**NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL (NERC)**

**PROGRAM ITEM NUMBER**

**Working Groups/Ad Hoc Assignments**

101)MMWG	Multiregional Modeling Working Group	<b>Assignment:</b> Develop a library of solved load flow and dynamic simulation models for use by the Regions and their member systems in planning and evaluating future systems and current operating conditions.	<b>2000 Budget:</b>	\$12,000
			<b>Expense to Date:</b>	\$3,126
			<b>Completion Date:</b>	Ongoing

**Status/ Comments:** At its November 2000 meeting, NERC Planning Committee approved, the merger of SDDWG (reference item 105) and MMWG. This took effect immediately. The name MMWG was retained for the combined MMWG/SDDWG group. The new MMWG was directed to review and update the existing data release policies for power flow and dynamic data and models. In 2001, MMWG will assemble five dynamic models and eleven load flow models that will constitute the 2001 base case library. The NPCC SS-37 Working Group on Base Case Development provides the NPCC data for the base case library development. The dynamic models will be released by May 31, 2001.

102)LFWG	Load Forecasting Working Group	<b>Assignment:</b> 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.	<b>Completion Date:</b>	July 2001
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**Status/ Comments:** The LFWG met February 15-16, 2001 to discuss aggregate projected demand bandwidth calculations including preparations for the "Peak Demand and Energy Projection Bandwidths: 2001-2010 " report. LFWG discussed how efforts of the Reliability Assessment Subcommittee (RAS) and the LFWG are converging. The LFWG also discussed providing additional information to RAS on forecasting uncertainties and the difficulties that could be experienced if regional forecast bandwidths were required in the future. The next meeting of the LFWG will be held on June 5, 2001 in Montreal.

**NPCC RELIABILITY ASSESSMENT PROGRAM  
STATUS REPORT**

**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:** At its November 2000 meeting, the NERC Planning Committee approved Powertech Labs Inc. beginning in 2001 as the contractor for the maintenance of a system dynamics database and the development of dynamics simulation models for the Eastern Interconnection. The PC also approved, the merger of SDDWG and MMWG (reference item 101). The merger was effective immediately and the name MMWG was retained for the combined MMWG/SDDWG group.

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.

**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 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

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:** Compliance Subcommittee review future Operating Compliance Templates.

**NPCC RELIABILITY ASSESSMENT PROGRAM**

**STATUS REPORT**

**BUDGET SUMMARY**

<b>ITEM NUMBER</b>	<b>PROJECT DESCRIPTION</b>	<b>2001 BUDGET</b>	<b>2001 EXPENSE</b>
30	CO-1 Control Performance Working Group	\$27,000	
31	CO-2 Dispatcher Training Working Group	\$22,350	
32	CO-7 Operational Review Team Working Group	\$25,000	
33	CO-8 System Operations Managers Working Group	\$25,000	
116	CO-9 Operational Policies Working Group	\$25,000	
	CO-10 Operational Tools Working Group	\$20,000	
36	ATC NPCC Ad Hoc ATC Working Group	\$10,000	\$ 2,550
35	LECWG Lake Erie Circulation Working Group	\$15,000	
	IRCWG Inter-Control Area Restoration Coordination Working Group	\$16,000	
	ETIWG Electronic Tagging Implementation Working Group	\$21,000	
52	CP-8 Resource and Transmission Adequacy Working Group	\$70,000	\$ 1,600
53	CP-9 Review of NERC Planning Standards	\$7,500	\$ 650
56	JGWG Joint Glossary Working Group	\$5,000	\$ 1,600
55	LCFWG Load, Capacity & Fuels Working Group	\$1,000	
85	SS-37 Base Case Development	\$30,000	\$ 1,600
86	SS-38 Reliability Review of Inter-Area Operation	\$30,000	\$ 8,750
92	EMT-1 Energy Management Technology Workshop Working Group	\$5,000	
97	MEN MAAC-ECAR-NPCC Activities	\$12,000	\$ 3,750
101	MMWG Multiregional Modeling Working Group		\$ 7,213
105	SDDWG Dynamic Database Working Group		
	CMAS Compliance Monitoring Assessment Subcommittee		
	NERCWG NERC Subcommittees, Working Groups and Task Forces		
	NERC-ISN Interregional Security Network(ISN)		\$ 23,054
	STAFF	\$20,000	
115	Ad Hoc WG Summer 2000 Capacity		
	<b>TOTAL</b>	<b>\$386,850</b>	<b>\$ 49,167</b>

\* At its September 7, 2000 meeting, the Executive Committee approved a recommendation that NPCC's 2001 Regional Budget include \$300,000 in Account #800 "Project Expense".

**Appendix A**

March 19, 2001

**NPCC RELIABILITY ASSESSMENT PROGRAM  
STATUS REPORT**

**BUDGET SUMMARY**

<b>ITEM NUMBER</b>	<b>PROJECT DESCRIPTION</b>	<b>2001 BUDGET</b>	<b>2001 EXPENSE</b>
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**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.