November 4, 2002

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, November 2002

The NPCC Reliability Assessment Program (NRAP) Status Report will be updated in time for consideration at the November 14, 2002 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 available at the November 14, 2002 RCC meeting.

Yours truly,
Guy V. Zito
Manager, Planning
NPCC

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
Northeast Power Coordinating Council
NPCC Reliability Assessment Program
(NRAP)
STATUS REPORT
Prepared for the
November 14, 2002
Reliability Coordinating Committee

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. Kenneth Haase
Mr. Edward A. Schwerdt
Ms. Jennifer Budd
Contents

Highlights ................................................................................................... ii

Compliance Monitoring and Assessment Subcommittee
Documents .............................................................................................. 1
Surveys/Reviews ..................................................................................... 1

Task Force on Coordination of Operation
Documents .............................................................................................. 2
Surveys/Reviews ..................................................................................... 7
Working Groups/Ad Hoc Assignments ..................................................... 7

Task Force on Coordination of Planning
Documents .............................................................................................. 12
Surveys/Reviews ..................................................................................... 13
Working Groups/Ad Hoc Assignments ..................................................... 17

Task Force on Energy Management Technology
Documents .............................................................................................. 20
Surveys/Reviews ..................................................................................... 20
Working Groups/Ad Hoc Assignments ..................................................... 21

Task Force on System Protection
Documents .............................................................................................. 24
Surveys/Reviews ..................................................................................... 27
Working Groups/Ad Hoc Assignments ..................................................... 28

Task Force on System Studies
Documents .............................................................................................. 29
Surveys/Reviews ..................................................................................... 31
Working Groups/Ad Hoc Assignments ..................................................... 34

MAAC - ECAR - NPCC (MEN)
Study Committee ..................................................................................... 35
Working Groups/Ad Hoc Assignments ..................................................... 35

North American Electric Reliability Council (NERC)
Working Groups/Ad Hoc Assignments ..................................................... 37

APPENDICES
A) Budget Summary
Compliance Monitoring and Assessment Subcommittee (CMAS)

The NPCC Reliability Compliance and Enforcement Program (Document A-8) and the Guidelines for the Implementation of the Reliability Compliance and Enforcement Program (RCEP) (Document B-22) were posted in the NPCC Open Process review for comments. The comments received will be addressed by CMAS at its next meeting in December 2002. A-8 and B-22 may be re-posted for a second round of Open Process review.

CMAS has completed the compliance assessments for the remaining RCEP requirements through August 2002 and additional compliance requirements by the 2002 NERC Compliance Program and the Membership Agreement through September 2002. A status report will be presented at the RCC November 2002 Meeting.

CMAS has completed the Maritimes Area Compliance Review utilizing the Review Process for the NPCC Reliability Compliance Program (Document C-32). A report on this review will be presented at the RCC November 2002 meeting.

Task Force on Coordination of Operation (TFCO)

The revised NPCC Document A-03, “Emergency Operation Criteria,” has been approved by each NPCC voting segment as an NPCC criterion.

A revised version of NPCC Document A-06, “Operating Reserve Criteria,” is being submitted to the NPCC Reliability Coordinating Committee at its meeting of November 14, 2002, for approval to submit the draft to a vote by the NPCC membership.

A revised scope of activities for the NPCC Task Force on Coordination of Operation is being submitted to the NPCC Reliability Coordinating Committee for approval at its meeting of November 14, 2002.
Task Force on Coordination of Planning (TFCP)

The Task Force has formed a working group CP-11 to review the Basic Design Criteria document A-2 and has begun the review process in the first quarter of 2002. The CP11 group will have the document revised and approved by the first quarter of 2003.

The Task Force has formed a working group CP-9 to coordinate the NPCC response and participation in the NERC Organization (Reliability) Standards process.

NPCC Document C-16, “Procedure for Review of Bulk Power System SPS” is currently being reviewed and the document A-7 “Glossary of Terms” will be considered/reviewed during the review of the A-2 Criteria by CP11 as well.

The CP-10 Collaborative Planning Initiative Phase II work has begun. A work plan and schedule for the group have been finalized and a final report will be produced in the first quarter of 2003.

Task Force on System Protection (TFSP)

The TFSP has completed the triennial review of the NPCC Bulk Power System Protection Criteria (Document A-5) and the NPCC Special Protection System Criteria (Document A-11, formerly Document B-11). Both documents have been through two rounds of NPCC Open Process review and all comments received have been addressed. The revised A-5 and the A-11 will be submitted for endorsement by the RCC at the November 2002 meeting and for approval by the membership.

The TFSP has completed the triennial review its Scope. The revised Scope will be presented for approval at the RCC November 2002 meeting.

The TFSP has completed the triennial review of the following documents: Guide for the Application of Autoreclosing to the Bulk Power System (Document B-1), Automatic Underfrequency Load Shedding Program Relaying Guideline (Document B-7), Procedure for Reporting and Reviewing Proposed Protection Systems for the Bulk Power System (Document C-22), and Procedure for Task Force on System Protection Review of Disturbances (Document C-30). These documents have been through the NPCC Open Process review and no comments were received. B-1 and B-7 will be presented for approval at the RCC November 2002 meeting. Revised C-22 and C-30 will be distributed to the membership and posted as official documents.

Task Force on System Studies (TFSS)
TFSS is currently reviewing Document C-18, Procedure for Analysis of Extreme Contingencies is currently undergoing an initial draft and will subsequently be posted. Document C-33, “DCS Procedure”, was developed and approved by the Task Force.

TFSS recently reviewed the Quebec Comprehensive Transmission Review and is currently developing a list of Bulk Power System Elements by Area.
<table>
<thead>
<tr>
<th>Document Number</th>
<th>Description</th>
<th>Latest Version</th>
<th>Frequency of Reviews</th>
<th>Next Review Date</th>
<th>Status/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>117)A-8</td>
<td>Reliability Compliance and Enforcement Program</td>
<td>The process and requirements are defined for compliance assessment and enforcement of selected reliability criteria and standards.</td>
<td>November 2001</td>
<td>1 year</td>
<td>November 2002</td>
</tr>
<tr>
<td></td>
<td>Status/ Comments: This document has been submitted to the NPCC Open Process review through October 24, 2002. The CMAS will address the comments received at its next meeting in December 2002. Also reference items 118 and 119.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>118)B-22</td>
<td>Guidelines for the Implementation of the Reliability Compliance and Enforcement Program (RCEP)</td>
<td>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.</td>
<td>November 9, 2000</td>
<td>1 Year</td>
<td>November 2002</td>
</tr>
<tr>
<td></td>
<td>Status/ Comments: This document has been submitted to the NPCC Open Process review through October 24, 2002. The CMAS will address the comments received at its next meeting in December 2002. Reference items 117 and 119.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>119)C-32</td>
<td>Review Process for NPCC Reliability Compliance Program</td>
<td>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.</td>
<td>June 23, 2000</td>
<td>3 years</td>
<td>June 2003</td>
</tr>
<tr>
<td></td>
<td>Status/ Comments: Also reference items 117 and 118.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Working Groups/Ad Hoc Assignments

CO-10 Operational Tools Working Group

The system Operational Tools Working Group (CO-10) is responsible for taking a lead role in the development of NPCC and NERC operational tools (e.g. electronic tagging, the NERC Interchange Distribution Calculator and electronic scheduling), including hardware, software and integrated systems. The System Operational Tools Working Group will define the need for operational tools, evaluate the cost benefits of operational tools, coordinate their implementation within NPCC and coordinate common training in the use of operational tools.

**Status/ Comments:** CO-10 has been charged to review the NERC 2003 Project list to examine the operation applicability of the projects and rank their usefulness for NPCC applications.

**Documents**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Latest Version</th>
<th>Frequency of Reviews</th>
<th>Next Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)A-3 Emergency Operation Criteria</td>
<td>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.</td>
<td>November 1, 2002</td>
<td>3 Years</td>
<td>November, 2005</td>
</tr>
</tbody>
</table>

**Status/ Comments:** The revised NPCC Document A-03, "Emergency Operation Criteria," incorporating the identification and periodic testing of restoration facilities, and periodic testing, has been approved by the NPCC membership. Accompanying the revision to NPCC Document A-03 are three definitions approved for addition to NPCC Document A-07, "NPCC Glossary of Terms."
### Documents

#### 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:** November 7, 2001

**Frequency of Reviews:** 3 Years

**Next Review Date:** November 2004

**Status/ Comments:** A revised version of A-06 was posted for a first round of comment through the NPCC Open Review Process. Due to the extent of the comments received, the TFCO has returned the draft to the CO-1 Working Group to resolve still outstanding issues identified in its first posting. A second draft was posted for comment, and CO-1 addressed the additional comments. The revised A-06 document was approved by TFCO at their September 2002 meeting. The approved document and associated supporting material is being submitted to RCC for approval at the November 2002 RCC meeting.

#### 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:** March 2002

**Status/ Comments:** The requirements of NPCC Document B-03 are being transferred to NPCC Document A-02 by NPCC Working Group CP-11, "Working Group on Review of the NPCC Basic Criteria." The remaining language is being 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:** March 2002

**Status/ Comments:** The requirements of NPCC Document B-09 are being transferred to NPCC Document A-02 by NPCC Working Group CP-11, "Working Group on Review of the NPCC Basic Criteria." The remaining language are being established in a new Reference Document.


**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:** March, 2003

**Status/ Comments:** All requirements of NPCC Document B-13 are in the process of being transferred to NPCC Document A-03.

8)RD-03 ( Procedures for Communications During Emergencies

**Description:** These Procedures direct NPCC’s implementation of the NERC Interregional Emergency Telephone Network. The NERC Interregional Emergency Telephone Network is utilized to convey to other reliability authorities in North America system conditions that could threaten the reliability of the interconnected bulk power supply system or the imminent shedding of firm load.

**Latest Version:** September 18, 2001

**Frequency of Reviews:** 1 Year

**Next Review Date:** January, 2003

**Status/ Comments:**
### Documents

<table>
<thead>
<tr>
<th>Program Item Number</th>
<th>Description</th>
<th>Latest Version</th>
<th>Frequency of Reviews</th>
<th>Next Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Procedures are established for the Task Force on Coordination of Operation’s monitoring and reporting of conformance of NPCC control performance during normal conditions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Status/ Comments:</strong> NPCC Document C-08 is being revised to incorporate the implementation of ACE Diversity Interchange.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Procedures are established for monitoring and reporting the frequency responses to large generation losses.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Status/ Comments:</strong> A revised Reference Document to assess large frequency excursions on the system is now being drafted.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15)C-12</td>
<td>Procedure for Shared Activation of Ten Minute Reserve (SAR)</td>
<td>September 17, 2002</td>
<td>3 Years</td>
<td>September, 2005</td>
</tr>
<tr>
<td></td>
<td>Procedures are established to provide for the shared activation of ten minute reserve on an Area basis.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Status/ Comments:</strong> In association with the revision of the A-06 Operating Reserve Criteria Document the C-12 Document was placed in Open Review. TFCO approved the updated C-12 Document.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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, 2003  

**Status/ Comments:** Reference also item 28. The requirements of C-13 are being redirected to NPCC Document A-03, and the details of reporting are being redrafted as a Reference Document.

**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:** November 7, 2000  
**Frequency of Reviews:** 3 Years  
**Next Review Date:** November, 2003

**Status/ Comments:**

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:** January 18, 2000  
**Frequency of Reviews:** 3 Years  
**Next Review Date:** January, 2003

**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 are being transformed into a Reference Document.
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:** January, 2003

**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 are being transformed into a Reference Document.

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:** September, 2002

**Status/ Comments:** The Terms of Reference of the NPCC Task Force on Coordination of Operation were developed and finalized by TFCO at its Sept. 2002 meeting. They are being submitted to the RCC for approval at the Nov. 2002 RCC meeting. The revised documents outline meeting voting and quorum requirements for TFCO.

28) Survey of NPCC Facilities Notification 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 2002  
**Frequency of Reviews:** 1 Year  
**Next Review Date:** January 2003

**Status/ Comments:** The TFCO finalized the 2002 document at its meeting of January 2002. Also reference item 16.
NPCC RELIABILITY ASSESSMENT PROGRAM
STATUS REPORT

TASK FORCE ON COORDINATION OF OPERATION

PROGRAM ITEM NUMBER

<table>
<thead>
<tr>
<th>Working Groups/Ad Hoc Assignments</th>
<th>Description: IRCWG addresses the issue of ensuring appropriate operation of key system restoration facilities and their critical components.</th>
<th>2002 Budget: $5,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>29) IRCWG Inter-Control AREA Restoration Coordination Working Group</td>
<td><strong>Expense to Date:</strong> $6,100</td>
<td></td>
</tr>
</tbody>
</table>

**Status/ Comments:** The IRCWG had completed revisions to A-03 which adds the specificity of requirements for testing those facilities critical to system restoration. The revisions were incorporated into the revised A-03 document that has been approved by the NPCC Membership.

<table>
<thead>
<tr>
<th>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.</th>
<th>2002 Budget: $20,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>30) CO-1 Control Performance</td>
<td><strong>Expense to Date:</strong> $23,950</td>
</tr>
</tbody>
</table>

**Status/ Comments:** The Control Performance Working Group (CO-1) completed revisions to a second draft of NPCC document A-06, “Operating Reserve Criteria”. Comments received during an Open Review Posting were addressed. The document and supporting material are being provided to RCC for approval in November 2002. In addition, CO-1 has continued work on the implementation and expansion of the Area Control Error (ACE) Diversity Interchange program.
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.

Status/ Comments: The Dispatcher Training Working Group (CO-2) conducted its autumn training seminar on November 6-7, 2002, hosted by TransEnergie.

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.

Status/ Comments: The Working Group is assembled to assist CMAS in the technical aspects of its compliance audits.
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.

**Status/Comments:** The CO-8 Working Group has revised the procedures for the NPCC Emergency Preparedness Conference Call and has established a conference call mechanism to ensure immediate Area participation on a 24 x 7 basis.

**2002 Budget:** $15,000

**Expense to Date:** $19,275

35) Lake Erie Security Process Working Group (LESPWG)

**Assignment:** 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.

**Status/Comments:** The Lake Erie Emergency Re-dispatch was re-filed with FERC on August 12, 2002. Changes mainly involved clearer settlements and billing language and treatment of unwinding from a redispatch. FERC accepted the re-filing on Sept. 30. LESPWG is actively pursuing the completion of a system redispatch agreement and procedure. A final draft is near completion but examples are still being developed.

**2002 Budget:** $10,000

**Expense to Date:** $8,400
### 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.

**2002 Budget:** $5,000  
**Expense to Date:** $11,250  

**Status/ Comments:** The Working Group met on October 8. Comments from the Working Group to the NERC ATC Working Group on the treatment of TTC, ATC, TRM and CBM in Standard Market Design were finalized and were issued. The Working Group has picked up on past work on the NPCC ATC Methodology and will be revising the draft to finalize the document.

#### 115) NPCC Ad Hoc Operations Planning Working Group

**Assignment:** Review the overall reliability of the generation and transmission system in the NPCC Region for the 2001 Summer.

**2002 Budget:** $25,000  
**Expense to Date:** $10,100  
**Completion Date:** May 2002

**Status/ Comments:** The 2002 Summer Assessment report was completed and issued in May. The Working Group was requested to complete a post-assessment of 2002 Summer conditions and to review actual versus projected system performance.
Working Groups/Ad Hoc Assignments

RPF  Regional Planning Forum

A Working Group charged with studying increasing the largest single loss of source contingency in NPCC and identifying opportunities that may exist.

2002 Budget: $50,000
Expense to Date: $13,654
Completion Date: Ongoing

Status/ Comments: RPF will be conducting their analysis in conjunction with the Collaborative Planning Initiative, CPI, CP10 Phase II efforts and utilizing transmission limits identified in the CPI Study to identify opportunities for system upgrades.

CP-10  Collaborative Planning Initiative

The CP10 Working Group is tasked with determination of the effects of proposed new generation and transmission in the year 2006. The group will initially be studying the effects the additions have on existing bottlenecks as well as any new ones. The study will then focus on various scenarios as defined by working group members to determine the impacts on those bottlenecks identified. Possible future study this group will undertake could involve proposing solutions to the problem bottlenecks.

Budget 2002: $20,000
Expense to Date: $10,670

Status/ Comments: Phase 1 of the study was approved by the RCC in March identifying approximately 50 transmission bottlenecks for a 2006 study year. Phase 2 of the study is currently underway which will prioritize those bottlenecks found in Phase 1 and is scheduled to be completed by March 2003.
Working Groups/Ad Hoc Assignments

CP-11  Review of A-2 Criteria Working Group

This Working Group is charged with the revision of the NPCC Basic Design Criteria Document A-02 and the NPCC Glossary of Terms Document A-07. The review is currently underway and scheduled for submittal to the RCC for approval at their March 2003 meeting.

2002 Budget: $30,000
Expense to Date: $7,400
Completion Date: March 2003

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 is currently reviewing this document.

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 formed the CP-11 Working group to conduct the review of the Basic Criteria for Design and Operation of Interconnected Power Systems (A-2). Expected completion and approval of revised document to be in the first quarter of 2003.
<table>
<thead>
<tr>
<th>Program Item Number</th>
<th>Description</th>
<th>Latest Version</th>
<th>Frequency of Reviews</th>
<th>Next Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>39) B-8</td>
<td>Guidelines to help TFCP ascertain that each Area's resource plan is in accordance with the NPCC &quot;Basic Criteria for Design and Operation of Interconnected Power Systems&quot;.</td>
<td>June 28, 2001</td>
<td>3 Years</td>
<td>June 2004</td>
</tr>
<tr>
<td>40) C-16</td>
<td>This document outlines procedures for reporting new or modified Bulk Power System Special Protection Systems.</td>
<td>September 28, 1995</td>
<td>3 Years</td>
<td>December 2001</td>
</tr>
<tr>
<td>41)</td>
<td>The Task Force on Coordination of Planning scope of activities.</td>
<td>February 26, 1997</td>
<td>3 Years</td>
<td>December 2001</td>
</tr>
</tbody>
</table>
42) Resource Adequacy — Coordination and Review of Area Studies

**Description:** Review of the New York Area resource adequacy study. **Latest Version:** July 2002

**Frequency of Reviews:** 3 Years  
**Next Review Date:** June 2005

**Status/ Comments:** NY Triennial Review of Resource Adequacy has been completed and is to be presented to the RCC for approval at their July 2002 meeting.

43) Resource Adequacy — Coordination and Review of Area Studies

**Description:** Review of the New England Area resource adequacy study. **Latest Version:** March 2000

**Frequency of Reviews:** 3 Years  
**Next Review Date:** March 2003

**Status/ Comments:** The New England Triennial Review of Resource Adequacy will be presented to the RCC for approval at their November 2002 meeting.

44) Resource Adequacy — Coordination and Review of Area Studies

**Description:** Review of the Ontario Area resource adequacy study. **Latest Version:** March 2001

**Frequency of Reviews:** 3 Years  
**Next Review Date:** March 2004
Surveys/Reviews

45) Resource Adequacy — Coordination and Review of Area Studies  
Description: Review of the Québec Area resource adequacy study.  
Latest Version: June 29, 1999  
Frequency of Reviews: 3 Years  
Next Review Date: June 2002  
Status/ Comments: Quebec is currently conducting their Resource Adequacy Review.

46) Resource Adequacy — Coordination and Review of Area Studies  
Description: Review of the Maritime Area resource adequacy study.  
Latest Version: March 2002  
Frequency of Reviews: 3 Years  
Next Review Date: March 2005  
Status/ Comments:

47) NPCC Area Transmission Review  
Description: Review of the New York Area future transmission plans (5-7 years out)  
Latest Version: March 2002  
Frequency of Reviews: 1 Year  
Next Review Date: March 2003  
Status/ Comments:
Surveys/Reviews

48) NPCC Area Transmission Review  **Description:** Review of the New England Area future transmission plans (5-7 years out)  
**Latest Version:** June 2002  
**Frequency of Reviews:** 1 Year  
**Next Review Date:** June 2003  
**Status/ Comments:** TFSS and TFCP approved an Interim Review for New England

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:** February 2002  
**Status/ Comments:** Ontario is currently conducting a Comprehensive Area Review and will be presented to the RCC for Approval at their March 2003 meeting.

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:** January 2002  
**Status/ Comments:** Quebec is currently conducting their Comprehensive Area Review.
PROGRAM ITEM NUMBER

Surveys/Reviews

51) NPCC Area Transmission Review  
**Description:** Review of the Maritime Area future transmission plans (5-7 years out)  
**Latest Version:** March 2002  
**Frequency of Reviews:** 1 Year  
**Next Review Date:** March 2003

**Status/ Comments:**

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.  
**2002 Budget:** $60,000  
**Expense to Date:** $47,225  
**Completion Date:** Ongoing

**Status/ Comments:** Summer 2002 Multi-Area Probabilistic Reliability Assessment completed May 2002

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. Review the Standards Authorization Requests and Reliability Standards as well as participate in the NERC process. Educate and inform the membership of developments.  
**2002 Budget:** $20,000  
**Expense to Date:** $1,600  
**Completion Date:** Ongoing

**Status/ Comments:** CP-9 will focus on the review of NERC Planning Standards and new NERC Reliability Standards (as they are developed).
<table>
<thead>
<tr>
<th>Working Groups/Ad Hoc Assignments</th>
<th>Task Force on Coordination of Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>54) EMWG Environmental Matters Working Group</strong></td>
<td><strong>Assignment</strong> 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.</td>
</tr>
<tr>
<td><strong>2002 Budget:</strong></td>
<td>$0</td>
</tr>
<tr>
<td><strong>Expense to Date:</strong></td>
<td>$0</td>
</tr>
<tr>
<td><strong>Completion Date:</strong></td>
<td>Ongoing</td>
</tr>
<tr>
<td><strong>Status/ Comments:</strong></td>
<td></td>
</tr>
</tbody>
</table>

**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.  

**2002 Budget:** $0  
**Expense to Date:** $0  
**Completion Date:** 1) EIA-411 data: April 2002  
2) NPCC Report: June 2001  
**Status/ Comments:** Data submission completed to NERC.

**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.  

**2002 Budget:** $5,000  
**Expense to Date:** $0  
**Next Review Date:** Ongoing  
**Status/ Comments:**
### Documents

<table>
<thead>
<tr>
<th>Item</th>
<th>Document</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>112)A-7</td>
<td>NPCC Glossary of Terms</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Latest Version: September 1998</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frequency of Reviews: 1 Year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Next Review Date: September 2002</td>
</tr>
</tbody>
</table>

**Status/ Comments:** This document is currently being reviewed concurrently with the A-2 Basic Design Criteria Document by the CP11 Working Group

### Surveys/Reviews

<table>
<thead>
<tr>
<th>Item</th>
<th>Document</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>122</td>
<td>Special Protection System List</td>
<td>This document lists Special Protection Systems on the NPCC Bulk Power System.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Latest Version: June 2001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frequency of Reviews: 1 Year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Next Review Date: June 2002</td>
</tr>
</tbody>
</table>

**Status/ Comments:** Maintenance of the SPS List has been transferred to the TFCP from the TFSP. The TFSP will continue in a consulting role. Also reference item 67. The 2002 SPS List was presented to the RCC as an informational item at their July 2002 meeting.
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 2001

**Frequency of Reviews:** 3 Years

**Next Review Date:** November 2004

**Status/ Comments:** Reference also item number 88.

This Document is being reviewed by the TFEMT.

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 2001

**Frequency of Reviews:** 3 Years

**Next Review Date:** November 2004

**Status/ Comments:** Reference also item number 87.

This Document is being reviewed by the TFEMT.

Surveys/Reviews


**Description:** Review of on-line computer performance during system events or disturbances including all NERC regions.

**Latest Review:** February 2002

**Frequency of Reviews:** 1 Year

**Next Review Date:** February 2003

**Status/ Comments:** The Task force has been awaiting the completion of the 1996, 1997, 1998, 1999 and 2000 NERC Disturbance Reports by the NERC/DAWG. The 1998 and 1999 reports were recently published.
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: July 2002

Frequency of Reviews: As Required

Status/ Comments: The TFEMT reviewed the NPCC disturbances at the September 17-18, 2002 meeting.

91) Review On-Line Computer System Status Reports

Description: Review of member on-line computer system statuses and plans.

Latest Review: September 2002

Frequency of Reviews: As Required

Status/ Comments: Member system status reports were reviewed at the May 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: Periodic 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.

2002Budget: $5000

Expense to Date: $0 ?

Last Workshop: May 16, 2002

Next Workshop: To be announced

Status/ Comments: The TFEMT had a successful workshop on May 16, 2002 in Montreal, Canada.
 TASK FORCE ON ENERGY MANAGEMENT TECHNOLOGY

**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:** September 2002

**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.

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.
<table>
<thead>
<tr>
<th>Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>109) Task Force Scope</td>
</tr>
</tbody>
</table>

**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.
<table>
<thead>
<tr>
<th>Document Number</th>
<th>Title</th>
<th>Description</th>
<th>Latest Version</th>
<th>Frequency of Reviews</th>
<th>Next Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>57)A-4</td>
<td>Maintenance Criteria for Bulk Power System Protection</td>
<td>This document establishes the maintenance intervals and practices which should result in dependable and secure protection system operation.</td>
<td>December 2000</td>
<td>3 years</td>
<td>December 2003</td>
</tr>
<tr>
<td>58)A-5</td>
<td>Bulk Power System Protection Criteria</td>
<td>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.</td>
<td>September 1998</td>
<td>3 Years</td>
<td>September 2004</td>
</tr>
<tr>
<td>59)B-1</td>
<td>Guide for the Application of Autoreclosing to the Bulk Power System</td>
<td>This document establishes guidelines for automatic reclosing to facilitate restoration of the system to normal following automatic tripping of transmission facilities.</td>
<td>March 2, 1999</td>
<td>3 Years</td>
<td>March 2002</td>
</tr>
</tbody>
</table>

**Status/Comments:**

- 57)A-4: All comments received have been addressed. A-4 has been submitted for endorsement by the RCC and the November 2002 meeting and for approval by the membership.
- 58)A-5: This document has been through two rounds of NPCC Open Process review, and all comments received have been addressed. A-5 has been submitted for endorsement by the RCC and the November 2002 meeting.
- 59)B-1: B-1 has been through the NPCC Open Process review and no comments were received. This document has been submitted for review and approval by the RCC at the November 2002 meeting.
## Documents

<table>
<thead>
<tr>
<th>Program Item Number</th>
<th>Description</th>
<th>Latest Version</th>
<th>Frequency of Reviews</th>
<th>Next Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>61)B-7 Automatic Underfrequency Load Shedding Program Relaying Guideline</td>
<td>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).</td>
<td>March 2, 1999</td>
<td>3 Years</td>
<td>March 2002</td>
</tr>
</tbody>
</table>

**Status/ Comments:** B-7 has been through the NPCC Open Process review and no comments were received. This document has been submitted for review and approval by the RCC at the November 2002 meeting.

<table>
<thead>
<tr>
<th>Program Item Number</th>
<th>Description</th>
<th>Latest Version</th>
<th>Frequency of Reviews</th>
<th>Next Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>62)B-11 Special Protection System Guideline</td>
<td>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.</td>
<td>March 2, 1999</td>
<td>3 Years</td>
<td>March 2002</td>
</tr>
</tbody>
</table>

**Status/ Comments:** This document is being recommended for conversion to an "A-11" criteria document. A-11 has been through two rounds of NPCC Open Process review, and all comments received have been addressed. A-11 has been submitted for endorsement by the RCC at the November 2002 meeting and for approval by the membership.

<table>
<thead>
<tr>
<th>Program Item Number</th>
<th>Description</th>
<th>Latest Version</th>
<th>Frequency of Reviews</th>
<th>Next Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>63)B-21 Guide for Analysis and Reporting of Protection System Misoperations</td>
<td>This document defines the analysis and reporting requirements for misoperations of protection systems and special protection systems on the bulk power systems within each of the NPCC Areas.</td>
<td>March 2001</td>
<td>3 years</td>
<td>March 2004</td>
</tr>
</tbody>
</table>

**Status/ Comments:**
### Task Force on System Protection

**Documents**

<table>
<thead>
<tr>
<th>Document Number</th>
<th>Description</th>
<th>Latest Version</th>
<th>Frequency of Reviews</th>
<th>Next Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>64) C-22</td>
<td>Procedure for Reporting and Reviewing Proposed Protection Systems for the Bulk Power System</td>
<td>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.</td>
<td>April 14, 1999</td>
<td>3 Years</td>
</tr>
<tr>
<td>68) C-30</td>
<td>Procedure for Task Force on System Protection Review of Disturbances</td>
<td>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.</td>
<td>December 6, 1999</td>
<td>3 Years</td>
</tr>
<tr>
<td>69)</td>
<td>Task Force Scope</td>
<td>This document outlines the Task Force on System Protection scope of activities.</td>
<td>June 29, 1999</td>
<td>3 Years</td>
</tr>
</tbody>
</table>

**Status/Comments:**

- **C-22** has been through the NPCC Open Process review and no comments were received. This document has been submitted for endorsement by the RCC at the November 2002 meeting.

- **C-30** has been through the NPCC Open Process review and no comments were received. This document has been submitted for endorsement by the RCC at the November 2002 meeting.

- The TFSP has completed the triennial review of its Scope document. In response to a request by the RCC at its March 21, 2000 meeting, the TFSP has included a new item in the proposed revised scope to address the areas of complementary or overlapping interests between the TFSP and the TFEMT. The proposed revised scope has been submitted for review and approval by the RCC at the November 2002 meeting.
### Surveys/Reviews

<table>
<thead>
<tr>
<th>Program Item Number</th>
<th>Description</th>
<th>Latest Version</th>
<th>Frequency of Reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>Review protection systems for proposed installations or existing installations undergoing substantial modifications</td>
<td>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).</td>
<td>Ongoing</td>
</tr>
<tr>
<td><strong>Status/ Comments:</strong></td>
<td>At each meeting, the TFSP discusses protection system changes, including SPS installations and modifications, as proposed by entities within NPCC.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Item Number</th>
<th>Description</th>
<th>Latest Version</th>
<th>Frequency of Reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>114</td>
<td>Review protection system performance following major system events or disturbances</td>
<td>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.</td>
<td>Ongoing</td>
</tr>
<tr>
<td><strong>Status/ Comments:</strong></td>
<td>At each meeting, TFSP discusses system disturbances that have been reported to NPCC and/or NERC, and disturbances reported directly by the member systems to determine if any changes are necessary in the NPCC protection criteria.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Working Groups/Ad Hoc Assignments

<table>
<thead>
<tr>
<th>Program Item Number</th>
<th>Assignment</th>
<th>Completion Date</th>
<th>Frequency of Reviews</th>
<th>Next Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>123) Protection System Maintenance Practices</td>
<td>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.</td>
<td>Deferred</td>
<td>3 years</td>
<td>December 2001</td>
</tr>
</tbody>
</table>

**Status/ Comments:** At its March 27-28, 2001 meeting, the TFSP agreed that there might not be sufficient new data to justify a review of maintenance intervals. TFSP members are reviewing available data to make an assessment. Also reference item 57.
<table>
<thead>
<tr>
<th>Documents</th>
<th>Description</th>
<th>Latest Version</th>
<th>Frequency of Reviews</th>
<th>Next Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>71)B-4 Guidelines for NPCC Area Transmission Reviews</td>
<td>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 &quot;Basic Criteria for Design and Operation of Interconnected Power Systems.&quot;</td>
<td>November 7, 2001</td>
<td>3 Years</td>
<td>November 2004</td>
</tr>
<tr>
<td><strong>Status/ Comments:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>72)B-10 Guidelines for Requesting Exclusions to Section 5.1 (B) and 6.1 (B) of the NPCC &quot;Basic Criteria for Design and Operation of Interconnected Power Systems&quot;</td>
<td>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.</td>
<td>June 26, 1998</td>
<td>3 years</td>
<td>January 2002</td>
</tr>
<tr>
<td><strong>Status/ Comments:</strong></td>
<td>The document has completed open process review and will be brought before the RCC for approval at the November 2002 meeting.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>73)C-18 Procedure for Testing and Analysis of Extreme Contingencies</td>
<td>This document establishes a procedure for the testing and analysis of Extreme Contingencies.</td>
<td>January 1999</td>
<td>3 years</td>
<td>January 2002</td>
</tr>
<tr>
<td><strong>Status/ Comments:</strong></td>
<td>This document is currently under review and will soon be posted in Open Process.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Documents

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Latest Version</th>
<th>Frequency of Reviews</th>
<th>Next Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>74 C-25</td>
<td>Procedure to Collect Real Time Data for Inter-Area Dynamic Analysis</td>
<td>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.</td>
<td>May 5, 2001</td>
<td>June 2004</td>
</tr>
<tr>
<td>75</td>
<td>Task Force Scope</td>
<td>The Task Force on System Studies scope of activities.</td>
<td>February 1997</td>
<td>January 2002</td>
</tr>
</tbody>
</table>

**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 November 14-15, 2002 TFSS meeting.

### Surveys/Reviews

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Latest Version</th>
<th>Frequency of Reviews</th>
<th>Next Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>76</td>
<td>NPCC Area Transmission Review</td>
<td>Review of New York Area future transmission plans (4-6 years out)</td>
<td>March 2002</td>
<td>March 2003</td>
</tr>
</tbody>
</table>

**Status/ Comments:** A comprehensive Area review is currently underway.
77) NPCC Area Transmission Review **Description:** Review of New England Area future transmission plans (4-6 years out)  
**Latest Version:** Sept 2002  
**Frequency of Reviews:** 1 Year  
**Next Review Date:** Sept 2003  
**Status/ Comments:** An interim review was conducted in 2002

78) NPCC Area Transmission Review **Description:** Review of Ontario Area future transmission plans (4-6 years out)  
**Latest Version:** December 2001  
**Frequency of Reviews:** 1 Year  
**Next Review Date:** December 2002  
**Status/ Comments:** Ontario is currently conducting Comprehensive Area Review in 2002 and will be submitted to the RCC for approval at their March 2002 meeting.

79) NPCC Area Transmission Review **Description:** Review of Québec Area future transmission plans (4-6 years out)  
**Latest Version:** September 2000  
**Frequency of Reviews:** 1 Year  
**Next Review Date:** December 2001  
**Status/ Comments:** Transenergie has conducted a Comprehensive Area Review for 2002 which will be presented to the RCC for approval in November 2002.
<table>
<thead>
<tr>
<th>Program Item Number</th>
<th>Task Force on System Studies</th>
<th>Surveys/Reviews</th>
</tr>
</thead>
</table>
| 80) NPCC Area Transmission Review | **Description:** Review of Maritime Area (New Brunswick and Nova Scotia) future transmission plans (4-6 years out) | **Latest Version:** March 2002  
**Frequency of Reviews:** 1 Year  
**Next Review Date:** March 2003 |
| **Status/Comments:** | |
| 81) SS-38 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 is currently underway 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:** November 2002  
**Frequency of Reviews:** 1 Year  
**Completion Date:** November 2003 |
| **Status/Comments:** | All load flow cases required as part of the 2002 Base Case Development effort were completed and submitted to the NERC MMWG. See item # 85. |
# Task Force on System Studies

## Surveys/Reviews

<table>
<thead>
<tr>
<th>Program Item Number</th>
<th>Description</th>
<th>Latest Version</th>
<th>Frequency of Reviews</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>83) SS-38</td>
<td>Overall Transmission Reliability Study</td>
<td><strong>Description:</strong> 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.</td>
<td>May 2001</td>
<td>3 Years</td>
</tr>
<tr>
<td></td>
<td><strong>Status/ Comments:</strong> The SS-38 Working Group has conducted the 2001 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. The report will be sent to the RCC for approval at their July 2002 Meeting.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>84) SS-38</td>
<td>Review of Dynamic Analysis Recording Devices</td>
<td><strong>Description:</strong> This review summarizes the characteristics of recording devices used to capture power system dynamic phenomena.</td>
<td>June 4, 1999</td>
<td>3 Years</td>
</tr>
<tr>
<td></td>
<td><strong>Status/ Comments:</strong> SS-38 will conduct the Survey in the first quarter of 2003 after completion of the UFLS Study.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Working Groups/Ad Hoc Assignments

<table>
<thead>
<tr>
<th>Program Item Number</th>
<th>Assignment</th>
<th>2002 Budget</th>
<th>Expense to Date</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>85) SS-37</td>
<td>Base Case Development</td>
<td><strong>Assignment:</strong> On an annual basis, develop a library of solved load flow cases and associated dynamic data.</td>
<td>$10,000</td>
<td>$9,800</td>
</tr>
<tr>
<td></td>
<td><strong>Status/ Comments:</strong> All load flow cases required for the NPCC year 2002 Base Case Development effort have been completed and submitted, with the associated dynamics data, to NERC MMWG.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.

**2002 Budget:** $20,000

**Expense to Date:** $21,791

**Completion Date:** Ongoing

**Status/ Comments:** The SS38 has completed studies of the UFLS program in NPCC to determine its effectiveness and verify it is coordinated both from an inter-Area and inter-Regional perspective. A draft report documenting these studies has been prepared and was provided to TFSS for review during the Sept TFSS meeting. It is anticipated that a final report will be completed by the end of November and provided to the RCC for approval in March 2003.
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:** On-going

**Status/ Comments:** The 2002 Winter MEN Interregional Transmission System Reliability Assessment was completed and awaits approval by the Joint Interregional Review Committee at its November 6, 2002 meeting.

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.

**Completion Date:** On-Going

**Status/ Comments:** The Working Group is working on finalizing the MEN 2002/03 Winter Study Report.

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.

**Status/ Comments:** The MEN Future Systems Working Group is not staffed. At its May 8 meeting the Joint Interregional Review Coordination Group discussed possible future study work for the MEN and VEM groups. Because of migration from traditional region-to-region to a market-to-market study methodology, because of uncertainties regarding generation additions in the MEN/VEM region and because of expected difficulty in obtaining staff to conduct a future study the JIRC determined to defer a future study for the time being.
### Working Groups/Ad Hoc Assignments

<table>
<thead>
<tr>
<th>Program Item Number</th>
<th>Working Group/Ad Hoc Assignment</th>
<th>Assignment</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>99) RAS</td>
<td>Reliability Assessment Subcommittee (RAS)</td>
<td>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.</td>
<td>On-Going</td>
</tr>
</tbody>
</table>

**Status/Comments:** The RAS has completed the 2002/03 Winter Report, scheduled for release on November 15, 2002.

| 100) PSS | Planning Standards Subcommittee | Assignment: The PSS, as charged by the NERC Engineering Committee, assesses and evaluates the NERC Planning Standards | Ongoing |

**Status/Comments:** The PSS is reviewing the comments submitted to the Phase IIB Planning Standards and also reviewing the Phases II, III and IV Planning Standards. PSS is working jointly with the NERC Compliance Review Subcommittee (CRS) in developing revised templates for the remaining Phases of the NERC Compliance Program as well as efforts that are underway to reduce reporting by combining measures. The PSS is also involved with commenting on the NERC Organizational Standards efforts that are underway.
### Working Groups/Ad Hoc Assignments

<table>
<thead>
<tr>
<th>Program Item Number</th>
<th>Working Group</th>
<th>Assignment</th>
<th>2002 Budget</th>
<th>Expense to Date</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>101 MMWG</td>
<td>Multiregional Modeling Working Group</td>
<td>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.</td>
<td>$5,000</td>
<td>$0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>102 LFWG</td>
<td>Load Forecasting Working Group</td>
<td>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.</td>
<td></td>
<td></td>
<td>Ongoing</td>
</tr>
<tr>
<td>104 DCWG</td>
<td>Data Coordination Working Group</td>
<td>Serve as the electric utility industry’s coordinator with the Department of Energy (DOE) and the Energy Information Administration (EIA) in summitting yearly data and in negotiating the requirements for data submission to the EIA.</td>
<td></td>
<td></td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

**Status/ Comments:**

- **101 MMWG:** The MMWG was directed to review and update the existing data release policies for power flow and dynamic data and models. In 2002, MMWG has assembled eleven load flow models that constitute the 2002 base case library and is currently finalizing the five dynamics library cases. The NPCC SS-37 Working Group on Base Case Development provides the NPCC data for the base case library development.

- **102 LFWG:**

- **104 DCWG:** The NERC DCWG met in May 2002 and discussed data submitted as part of the 2002 EIA data collection effort. A fourth quarter 2002 meeting will be held on November 21, 2003 in Baltimore MD to finalize the 2002 data submission for 2001 and discuss the 2003 data collection efforts.
### Working Groups/Ad Hoc Assignments

<table>
<thead>
<tr>
<th>Program Item Number</th>
<th>Working Group</th>
<th>Assignment:</th>
<th>2002 Budget</th>
<th>Expense to Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>105 SDDWG</td>
<td>System Dynamics Database Working Group</td>
<td>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.</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

**Status/Comments:** The SDDWG has now merged with the MMWG and the name MMWG has been retained for both groups.

<table>
<thead>
<tr>
<th>Program Item Number</th>
<th>Working Group</th>
<th>Assignment:</th>
<th>Completion Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>106</td>
<td>ATC Implementation Working Group</td>
<td>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.</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

**Status/Comments:** The group has submitted a remediation plan to NERC in response to a level 1 non-compliance assessment in the pilot Phase II B Compliance Program and has developed the NPCC Regional Data Posting System which is a web page initially containing TTC-ATC Area information. The group has also drafted a set of comments to Phase IIB of the NERC Compliance Program.
110) CRS Compliance Review Subcommittee

**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:** CRS and PSS are discussing the future of their roles in light of the NERC BOT approval of the NERC Organizational Standards Process (NOSP). CRS is continuing development of sanctions/penalties matrices, and discussing means to streamline the implementation 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:** Discussions are taking place to merge this group with CRS. Expected to be finalized in the fourth quarter of 2002.
## BUDGET SUMMARY

<table>
<thead>
<tr>
<th>ITEM NUMBER</th>
<th>PROJECT DESCRIPTION</th>
<th>2002 BUDGET</th>
<th>2002 EXPENSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>CO-1 Working Group on Control Performance</td>
<td>$20,000</td>
<td>$23,950</td>
</tr>
<tr>
<td>31</td>
<td>CO-2 Working Group on Dispatcher Training</td>
<td>$15,000</td>
<td>$8,225</td>
</tr>
<tr>
<td>32</td>
<td>CO-7 Operational Review Working Group</td>
<td>$5,000</td>
<td>$0</td>
</tr>
<tr>
<td>33</td>
<td>CO-8 System Operating Managers Working Group</td>
<td>$15,000</td>
<td>$19,275</td>
</tr>
<tr>
<td>116</td>
<td>CO-9 Operational Policies Working Group</td>
<td>$10,000</td>
<td>$0</td>
</tr>
<tr>
<td></td>
<td>CO-10 Operational Tools Working Group</td>
<td>$15,000</td>
<td>$7,450</td>
</tr>
<tr>
<td></td>
<td>CMAS</td>
<td></td>
<td>$2,600</td>
</tr>
<tr>
<td>35</td>
<td>LESPWG Lake Erie Security Process Working Group</td>
<td>$10,000</td>
<td>$8,400</td>
</tr>
<tr>
<td>36</td>
<td>ATCWG Available Transfer Capability Working Group</td>
<td>$5,000</td>
<td>$11,250</td>
</tr>
<tr>
<td>29</td>
<td>IRCWG Inter-Control Area Restoration Coordination Working Group</td>
<td>$5,000</td>
<td>$6,100</td>
</tr>
<tr>
<td>52</td>
<td>CP-8 Resource and Transmission Adequacy Working Group</td>
<td>$60,000</td>
<td>$47,225</td>
</tr>
<tr>
<td></td>
<td>TFCO Summer 2002 Assessment Ad Hoc Working Group</td>
<td>$25,000</td>
<td>$10,100</td>
</tr>
<tr>
<td>53</td>
<td>CP-9 Review of NERC Planning Standards</td>
<td>$20,000</td>
<td>$1,600</td>
</tr>
<tr>
<td></td>
<td>CP-10 Collaborative Planning Initiative Working Group</td>
<td>$20,000</td>
<td>$10,670</td>
</tr>
<tr>
<td></td>
<td>RPF Regional Planning Forum</td>
<td>$50,000</td>
<td>$13,654</td>
</tr>
<tr>
<td></td>
<td>CP-11 Working Group to Review NPCC Basic Criteria for Design and Operation of Interconnected Power Systems</td>
<td>$30,000</td>
<td>$7,400</td>
</tr>
<tr>
<td>56</td>
<td>JGWG Joint Glossary Working Group</td>
<td>$5,000</td>
<td>$0</td>
</tr>
<tr>
<td>85</td>
<td>SS-37 Working Group on NPCC Base Case Development</td>
<td>$10,000</td>
<td>$9,800</td>
</tr>
<tr>
<td>86</td>
<td>SS-38 Working Group on Reliability Review of Inter-Area Operation</td>
<td>$20,000</td>
<td>$21,791</td>
</tr>
</tbody>
</table>

---

**Appendix A**

November 4, 2002
## BUDGET SUMMARY

<table>
<thead>
<tr>
<th>ITEM NUMBER</th>
<th>PROJECT DESCRIPTION</th>
<th>2002 BUDGET</th>
<th>2002 EXPENSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>92</td>
<td>EMT-1 Energy Management Technology Workshop</td>
<td>$5,000</td>
<td>$0</td>
</tr>
<tr>
<td>97</td>
<td>MEN MAAC-ECAR-NPCC Activities</td>
<td>$10,000</td>
<td>$2,450</td>
</tr>
<tr>
<td>101</td>
<td>MMWG Multiregional Modeling Working Group</td>
<td>$5,000</td>
<td>$0</td>
</tr>
<tr>
<td>101</td>
<td>NERC-ISN Interregional Security Network(ISN)</td>
<td>$116,000</td>
<td>$101,756</td>
</tr>
<tr>
<td>STAFF</td>
<td></td>
<td>$</td>
<td>$0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>$476,000 *</td>
<td>$313,696</td>
</tr>
</tbody>
</table>

* At its October 10, 2001 Meeting, the Executive Committee approved a recommendation that NPCC’s 2002 Budget include $360,000 in Account #800 “Project Expense.”

Appendix A

November 4, 2002