



1515 BROADWAY, NEW YORK, NY 10036-8901 TELEPHONE: (212) 840-1070 FAX: (212) 302-2782

**RCC Meeting
September 7, 2005
Agenda Item 3.13**

**Northeast Power Coordinating Council
NPCC Reliability Assessment Program
(NRAP)
STATUS REPORT**

*Prepared for the
Reliability Coordinating Committee
September 6, 2005*

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 Infrastructure Security and Technology
Chairmen, NPCC Working Groups
and
NPCC Staff

Contents

| | |
|---|-----------|
| Blackout 2003 Follow-Up | 1 |
| Working Groups/Ad Hoc Assignments | 1 |
| Compliance Monitoring and Assessment Subcommittee | 4 |
| Documents | 4 |
| Task Force on Coordination of Operation | 6 |
| Working Groups/Ad Hoc Assignments | 6 |
| Documents | 12 |
| Surveys/Reviews | 18 |
| Task Force on Coordination of Planning | 19 |
| Working Groups/Ad Hoc Assignments | 19 |
| Documents | 24 |
| Surveys/Reviews | 26 |
| Task Force on Infrastructure Security and Technology | 28 |
| Working Groups/Ad Hoc Assignments | 28 |
| Documents | 29 |
| Surveys/Reviews | 30 |
| Task Force on System Protection | 31 |
| Working Groups/Ad Hoc Assignments | 31 |
| Documents | 32 |
| Surveys/Reviews | 36 |
| Task Force on System Studies | 37 |
| Working Groups/Ad Hoc Assignments | 37 |
| Documents | 38 |
| Surveys/Reviews | 40 |
| MAAC - ECAR - NPCC (MEN) | 43 |
| Study Committees | 43 |
| Working Groups/Ad Hoc Assignments | 44 |
| North American Electric Reliability Council (NERC) | 45 |
| Working Groups/Ad Hoc Assignments | 45 |
| Other | 47 |
| Working Groups/Ad Hoc Assignments | 47 |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

BLACKOUT 2003 FOLLOW-UP

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | Completion Date: |
|------|--------------------------|---|--|
| ARR | Area Restoration Reviews | Document and evaluate Area restoration performance following the August 14 th Blackout, assess extent and effectiveness of regional and interregional coordination and recommend potential Area Restoration Plan and/or NPCC Criteria revisions. | December 2005 |
| | Status/ Comments: | The Final Report of the IRCWG (CO-11), assessing the Areas' restoration experiences following the August 14 th Blackout, was approved at the July 14, 2005 RCC meeting. Requirements based on recommendations from the report, "Restoration of the NPCC Areas Following the Power System Collapse of August 14, 2003," are included in the current draft of NPCC Document A-03, "Emergency Operation Criteria," which is to be discussed by the RCC at its meeting of September 7, 2005. Further recommendations will be incorporated in the ongoing draft of NPCC Document C-35, "NPCC Inter-Control Area Power System Restoration Reference Document," currently being developed by the Inter-Control Area Restoration Coordination Working Group (CO-11). | |
| | NPCC Contact: | Jerry Mosier | |
| Item | Name | Assignment | Completion Date(s): |
| BSP | Blackout Study Plan | Building on the Event Replication Study, perform additional analysis to evaluate possible risks for other rerating conditions, planned system changes, and possible system design changes. | Task 1 Completed Task 2 Completed Task 3 Completed Task 4 In Progress Task 5 In Progress Task 6 November 2005 |
| | Status/ Comments: | Tasks 1 and 2 completed. Extensive work was done through sensitivity testing to establish proper pre-islanding conditions (load power factor, load dynamic and proper reactive control action) that match the actual conditions. Sequence of events Times have been corrected based on simulations. The Phase 1-3 (all events leading up to an including the separation of the system into islands) draft has been assembled and is going through the review and revision process. This will be presented at the September 7, 2005 RCC meeting. Study work on Phase 4 9analysis of islanding behavior) is continuing. | |
| | NPCC Contact: | Donal Kidney | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

BLACKOUT 2003 FOLLOW-UP

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | Completion Date: |
|--------------------------|-------------------------------------|---|------------------|
| MSDTF | Major System Disturbance Task Force | NPCC formed the MSDTF following the August 14th Blackout, supplementing NPCC's SS-38 Working Group with representatives from ECAR, the MISO, PJM and SERC to conduct dynamic simulation analyses of the events. | December 2005 |
| Status/ Comments: | | The MSDTF portion of the disturbance analysis work completed. Work has continued as the TFSS Study progresses. | |
| NPCC Contact: | | Paul Roman | |

| Item | Name | Assignment | Completion Date: |
|-------------------------|--|---|------------------|
| NERC-BOT | NERC Board Of Trustees Recommendations | Evaluate recommendations included in the report "August 14, 2003 Blackout: NERC Actions to Prevent and Mitigate the Impacts of Future Cascading Blackouts" for applicability within NPCC. | December 2005 |
| Status/Comments: | | Recommendation matrix updated and status report reviewed by Task Force Chairs every month. Monthly summary status reports posted on NPCC public web site; detailed status reports posted on the NPCC members' web site. | |
| NPCC Contact: | | Phil Fedora | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

BLACKOUT 2003 FOLLOW-UP

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | | |
|---------------|--|--|-------------------------|-----------------------|
| RSPPWG | Regional Security Process Plan Working Group | Update the Regional Security Process Plan for complying with NERC established objectives for “coordinating interconnected power system operational security”. | Latest Version: | June 2004 |
| | | | Completion Date: | September 2005 |
| | Status/ Comments: | The revised Regional Reliability Plan was approved by the NPCC CO-8, NPCC TFCO, and the NERC ORS and NERC OC in August 2005; it has been updated for consistency with NERC Version “0” Standards and recognition of the NBSO assuming the role of the RC for the Maritimes Area. | | |
| | NPCC Contact: | James Hartwell | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

COMPLIANCE MONITORING AND ASSESSMENT SUBCOMMITTEE

Documents

| Item | Name | Assignment | Latest Version: | |
|------|--|--|------------------------------|----------------------|
| A-8 | Reliability Compliance and Enforcement Program | The process and requirements are defined for compliance assessment and enforcement of selected reliability criteria and standards. | Latest Version: | April 1, 2004 |
| | | | Frequency of Reviews: | 1 year |
| | | | Next Review Date: | November 2005 |
| | Status/ Comments: | CMAS will present draft revisions to Document A-8 at the September 7, 2005 RCC meeting. The NPCC Open Process Review is scheduled after the meeting. | | |
| | NPCC Contact: | Quoc Le | | |

| Item | Name | Assignment | Latest Version: | |
|------|--|---|------------------------------|----------------------|
| B-22 | Guidelines for Implementation of the Reliability Compliance and Enforcement Program (RCEP) | This document establishes the requirements and guidelines for the implementation of the Reliability Compliance and Enforcement Program (Document A-8) and the arbitration process utilizing the NPCC Policy for Alternate Dispute Resolution. | Latest Version: | June 1, 2005 |
| | | | Frequency of Reviews: | 1 year |
| | | | Next Review Date: | November 2006 |
| | Status/ Comments: | Revised B-22 was posted following its approval at the June 1, 2005 RCC meeting | | |
| | NPCC Contact: | Quoc Le | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

COMPLIANCE MONITORING AND ASSESSMENT SUBCOMMITTEE

Documents

| Item | Name | Assignment | | |
|-------------|--|---|------------------------------|--------------------------|
| C-32 | Review Process for NPCC Reliability Compliance Program | This Procedure establishes the process CMAS uses to verify Area compliance to the standards that comprise the NPCC Reliability Compliance Program (RCP) or its successor program. | Latest Version: | November 19, 2004 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | November 2007 |
| | Status/ Comments: | The next review of C-32 will be initiated in December 2006. | | |
| | NPCC Contact: | Quoc Le | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF OPERATION

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | | |
|-------|---|---|-------------------------|----------------------|
| CO-13 | Available Transfer Capability Working Group | Review the procedures developed by the Regions (or sub-regions) for determining ATC to ensure that the procedures are in concert with the ATC Principles in NERC's June 1996 Available Transfer Capability Definitions and Determination report. | 2005 Budget: | \$8,000 |
| | | | Expense to Date: | \$2,600 |
| | | | Completion Date: | December 2005 |
| | Status/ Comments: | A revised CO-13 Scope was completed and approved by the TFCO. The CO-13 Working Group has coordinated with the Mid-West System Operator to pull in TCC-ATC information to the NPCC web-site, and also track and participate in the NERC Long-Term ATC/AFC Task Force proceedings. The Working Group is also finalizing the Regional ATC/TTC Methodology, a document required for compliance with NERC "Version 0" Reliability Standards. A letter from the TFCO to the CO-13 Working Group was issued specifying ATC-TCC web changes to meet OASIS and NERC "Version 0" compliance. TFCO approved the new Scope for the group. The Working Group has also completed enhancements to the NPCC ATC/TTC webpage to conform with the new NERC Reliability Standards, FERC Orders, and also to meet member needs. CO-13 is also reviewing and commenting on developing NERC ATC/TTC/TRM/CBM Standards. | | |
| | NPCC Staff Reference: | Guy Zito TFCO Workplan | | |

| Item | Name | Assignment | | |
|------|-----------------------------------|--|-------------------------|----------------------|
| CO-1 | Control Performance Working Group | 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. | 2005 Budget: | \$25,000 |
| | | | Expense to Date: | \$4,400 |
| | | | Completion Date: | December 2005 |
| | Status/ Comments: | The Working Group CO-01 is actively engaged in the following efforts: 1) the ongoing assessment of the increasing number of frequency excursions being observed on the Eastern Interconnection; 2) a technical review of the benefits of the synchronized component of ten-minute operating reserve; and, 3) the monitoring of the current field test of the NERC Balancing Standard. | | |
| | NPCC Contact Reference: | Jerry Mosier TFCO Workplan | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF OPERATION

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | | |
|------|-----------------------------------|--|-------------------------|------------------|
| CO-2 | Dispatcher Training Working Group | 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. | 2005 Budget: | \$15,000 |
| | | | Expense to Date: | \$10,600 |
| | | | Next Seminar: | Fall 2005 |
| | Status/ Comments: | The CO-2 Working Group will have a joint conference call with the CO-8 Working Group in early September to coordinate training efforts for operators in NPCC so they meet the newest NERC requirements. CO-2 is finalizing the program for the Autumn training seminar to be held in November. | | |
| | NPCC Contact: | Paul Roman | | |
| | Reference: | TFCO Workplan | | |

| Item | Name | Assignment | | |
|------|---------------------------------------|---|-------------------------|----------------------|
| CO-7 | Operational Review Team Working Group | 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. | 2005 Budget: | \$5,000 |
| | | | Expense to Date: | \$3,850 |
| | | | Completion Date: | December 2005 |
| | Status/ Comments: | The CO-07 Working Group has completed its charge from the Task Force on Coordination of Operation to assess the initial registration process in NPCC for the Reliability Coordinator, Balancing Authority and the Transmission Operator to ensure the continuity of compliance with the NERC "Version 0" Reliability Standards. It is completing now a final revised NPCC Reliability Plan which recognizes the Reliability Coordinator for the Maritimes Area. | | |
| | NPCC Contact: | Jim Hartwell | | |
| | Reference: | TFCO Workplan | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF OPERATION

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | | |
|------|---|---|-------------------------|----------------------|
| CO-8 | System Operations Managers Working Group | 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 TFCO in their work on issues related to system security and the operation of the ISOs, and provide advice to the TFCO, as requested. | 2005 Budget: | \$25,000 |
| | | | Expense to Date: | \$7,600 |
| | | | Completion Date: | December 2005 |
| | Status/ Comments: | The CO-8 Working Group has formally instituted an inter-Area NPCC morning call. The call is conducted on a daily basis among the Area control rooms to quickly assess potential operating conditions for the day, linked through a conference bridge. The Working Group is undertaking the review of all operational documentation to ensure compatibility with the NERC Version "0" Reliability Standards. | | |
| | NPCC Staff: | Jerry Mosier | | |
| | Reference: | TFCO Workplan | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF OPERATION Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | | |
|-------|---------------------------------|--|-------------------------|----------------------|
| CO-10 | Operational Tools Working Group | The Operational Tools Working Group is responsible for taking a lead role in the development of NPCC and NERC operational tools (e.g. electronic tagging, the NERC Interchange Distribution Calculator and electronic scheduling), including hardware, software and integrated systems. The Operational Tools Working Group will define the need for operational tools, evaluate the cost benefits of operational tools, coordinate their implementation within NPCC and coordinate common training in the use of operational tools. | 2005 Budget: | \$15,000 |
| | | | Expense to Date: | \$6,700 |
| | | | Completion Date: | December 2005 |

Status/ Comments: CO-10/Facilitated Transaction Checkout (FTC) meetings were held on June 8 and August 16-17. Present status of activities: 1) FTC is fully implemented in the ISO-NE control room, available for checkout with the NYISO; 2) FTC deployment at NYISO was completed in mid-July with additional features (e.g. automatically manage digital certificates) expected to be added by the end of the year; 3) in Quebec, FTC is fully deployed in the control room for transactions with ISO-NE and NY with some items still being resolved for application with IESO; 4) in Ontario, FTC is available for Quebec and NY checkout with some issues being resolved with TE; 5) there is a November 1 target date for implementation as it had been delayed because of previous OASIS work; and, 6) the PJM effort for FTC deployment has been re-invigorated with deployment expected by year end. CO-10 has: determined a list of EMS failure modes that are reportable events and has estimated recovery times for each and is also; 1) participating in the NERC Real time Best Practices Task Force with the survey of operating tools throughout NERC ready for issue; 2) Re-working the B-12 and C-12 Documents and coordinating this work with TFIST; and 3) addressing E-Tag security certification and protocol issues.

NPCC Staff: Paul Roman
Reference: TFCO Workplan

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF OPERATION Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | 2005 Budget: | |
|-------|---|--|-------------------------|----------------------|
| CO-12 | Operations Planning Working Group | Review the overall reliability of the generation and transmission system in the NPCC Region for 2004 Summer. | | \$15,000 |
| | | | Expense to Date: | \$7,300 |
| | | | Completion Date: | December 2005 |

Status/ Comments: The 2005/06 Winter Assessment has been initiated. CO-12 is also actively addressing other charges from TFCO involving:
1) development of a document for operational review of new transmission facilities; 2) examining enhanced transfer capability reporting in the seasonal assessments; 3) confirming there is consistency of demand and resources reporting for the NPCC Areas and with NERC RAS; and, 4) document methodology for conducting seasonal assessments.

NPCC Staff: Paul Roman
Reference: TFCO Workplan

| Item | Name | Assignment | 2005 Budget: | |
|------------------|---|---|-------------------------|----------------------|
| IRCWG (CO-11) | Inter-Control Area Restoration Coordination Working Group | IRCWG addresses the issue of ensuring appropriate operation of key system restoration facilities and their critical components. | | \$10,000 |
| | | | Expense to Date: | \$8,000 |
| | | | Completion Date: | December 2005 |

Status/ Comments: The CO-11 Working Group is currently reviewing and updating the “NPCC Inter-Area Power System Restoration” reference document into a new procedure (C-35), and a new Criterion addressing restoration requirements.

NPCC Staff: Jerry Mosier
Reference: TFCO Workplan

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF OPERATION

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | | |
|------------------------------|--|---|--------------------------|----------------------|
| LESPWG | Lake Erie Security Process Working Group | 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. | 2005 Budget: | \$15,000 |
| | | | Expense to Date: | \$0 |
| | | | Completion Date: | December 2005 |
| | | | Status/ Comments: | No recent activity. |
| NPCC Staff Reference: | Paul Roman | TFCO Workplan | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF OPERATION

Documents

| Item | Name | Assignment | | |
|------|------------------------------|---|--|--------------------------------------|
| A-3 | Emergency Operation Criteria | 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: | November 14, 2002 |
| | | | Frequency of Reviews: Next Review Date: | 3 years August 2007 |
| | Status/ Comments: | The version of the NPCC Document A - 03, "Emergency Operation Criteria," has gone through several iterations with great difficulty experienced in obtaining consensus. There has been great opposition to the proposed restrictions on nuclear plant upgrade level that would remove grandfathering from the A-03 Figure 'generator underfrequency trip levels'. The TFCO will present to the RCC several solution options on how to get consensus on the document revisions. | | |
| | NPCC Contact: | Paul Roman | | |

| Item | Name | Assignment | | |
|------|----------------------------|--|--|--|
| A-6 | Operating Reserve Criteria | Objectives, principles and requirements are presented that governs the amount, availability and distribution of operation reserve. | Latest Version: | November 14, 2002 |
| | | | Frequency of Reviews: Next Review Date: | 3 years November 2005 |
| | Status/ Comments: | The document was revised at the August TFCO meeting and will go to NPCC Open Process Review. | | |
| | NPCC Contact: | Paul Roman | | |

| Item | Name | Assignment | | |
|------|---|---|--|------------------------------------|
| B-3 | Guidelines for Inter-Area Voltage Control | 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: Next Review Date: | 3 years June 2005 |
| | Status/ Comments: | The requirements of NPCC Document B-03 had been transferred to NPCC Document A-02 by NPCC Working Group CP-11. CO-8 charged by TFCO to revise and convert this to a "C" Document. | | |
| | NPCC Contact: | Paul Roman | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF OPERATION

Documents

| Item | Name | Assignment | Latest Version: | |
|------------|--|---|------------------------------|------------------|
| B-9 | Guide for Rating Generating Capability | Standards for rating and verifying net generating capability are established. | November 1998 | |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | June 2005 |
| | Status/ Comments: | The requirements of NPCC Document B-09 to be transferred to an "A" document. CO-8 charged by TFCO to revise and convert this to a "C" Document. | | |
| | NPCC Contact: | Paul Roman | | |

| Item | Name | Assignment | Latest Version: | |
|-------------|--|--|------------------------------|------------------|
| B-13 | Guide for Reporting System Disturbances. | 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. | June 25, 1997 | |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | June 2005 |
| | Status/ Comments: | The requirements of NPCC Document B-13 to be transferred to an "A" document. CO-8 charged by TFCO to revise and convert this to a "C" Document. | | |
| | NPCC Contact: | Paul Roman | | |

| Item | Name | Assignment | Latest Version: | |
|------------|--|--|------------------------------|---------------------|
| C-8 | Monitoring Procedures for Control Performance Guide During Normal Conditions | Procedures are established for the Task Force on Coordination of Operation's monitoring and reporting of conformance of NPCC control performance during normal conditions. | March 3, 1999 | |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | January 2005 |
| | Status/ Comments: | No need for any revisions at this time. | | |
| | NPCC Contact: | Paul Roman | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF OPERATION

Documents

| Item | Name | Assignment | Latest Version: | January 29, 2004 |
|--------------------------|--|---|--|---------------------------------------|
| C-9 | Monitoring Procedures for Operating Reserve Criteria | Procedures are established for the Control Performance Working Group's monitoring and reporting of compliance with the NPCC <i>Operating Reserve Criteria</i> . | Frequency of Reviews: Next Review Date: | 3 years January 2007 |
| Status/ Comments: | | A revised Document was posted as final in late 2003. No need for any revisions at this time. | | |
| NPCC Contact: | | Paul Roman | | |

| Item | Name | Assignment | Latest Version: | March 25, 1998 |
|--------------------------|--|---|--|---|
| C-11 | Monitoring Procedures for Interconnected System Frequency Response | Procedures are established for monitoring and reporting the frequency responses to large generation losses. | Frequency of Reviews: Next Review Date: | 3 years September 2005 |
| Status/ Comments: | | No need for any revisions at this time. | | |
| NPCC Contact: | | Paul Roman | | |

| Item | Name | Assignment | Latest Version: | January 15, 2002 |
|--------------------------|---|--|--|-------------------------------------|
| C-12 | Procedure for Shared Activation of Ten-Minute Reserve (SAR) | Procedures are established to provide for the shared activation of ten-minute reserve on an Area basis. | Frequency of Reviews: Next Review Date: | 3 years March 2007 |
| Status/ Comments: | | The revised Document was posted as final in February and implemented at the end of March 2004. No need for any revisions at this time. | | |
| NPCC Contact: | | Paul Roman | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF OPERATION

Documents

| Item | Name | Assignment | | |
|------|--|--|------------------------------|-----------------------|
| C-13 | Operational Planning Coordination | 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: | June 2005 |
| | Status/ Comments: CO-8 and CO-12 have been charged by TFCO to review this document. Review initiated. | | | |
| | NPCC Contact: Paul Roman | | | |

| Item | Name | Assignment | | |
|------|--|---|------------------------------|-------------------|
| C-15 | Procedures for Solar Magnetic Disturbances on Electrical Power Systems | Procedures are established providing for the reporting channels and information available to the operator during solar alerts and suggesting measures that may be taken to mitigate the impact of a solar magnetic disturbance. | Latest Version: | March 2003 |
| | | | 2005 Budget: | \$15,000 |
| | | | Expense to Date: | \$0 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | March 2006 |
| | Status/ Comments: Conversion of the RD-09 document to C-15 approved at the August TFCO meeting. | | | |
| | NPCC Staff: Jerry Mosier | | | |
| | Reference: TFCO Workplan | | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF OPERATION

Documents

| Item | Name | Assignment | | |
|-------------|--|--|--|---|
| C-19 | Procedures During Shortages of Operating Reserve | 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: Next Review Date: | 3 years September 2005 |
| | Status/ Comments: | The merging of the C-19 and C-20 Documents has been completed; the combined document is now C-20. | | |
| | NPCC Contact: | Paul Roman | | |

| Item | Name | Assignment | | |
|-------------|---|---|--|---|
| C-20 | Procedures During Abnormal Operating Conditions | 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: Next Review Date: | 3 years September 2005 |
| | Status/ Comments: | The merging of the C-19 and C-20 Documents has been completed; the combined document is now C-20. | | |
| | NPCC Contact: | Paul Roman | | |

| Item | Name | Assignment | | |
|---------------------|--|---|--|--------------------------------------|
| RD-03 (C-36) | Procedures for Communications During Emergencies | 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: | January 28, 2004 |
| | | | Frequency of Reviews: Next Review Date: | 1 year January 2005 |
| | Status/ Comments: | Document converted to C-36 and has been approved by the TFCO. | | |
| | NPCC Contact: | Paul Roman | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF OPERATION

Documents

| Item | Name | Assignment | | |
|-------------|--------------------------|--|------------------------------|--------------------------|
| TFCO | Task Force Scope | The overall charge to the TFCO, together with the scope of activities, is given to the Task Force through its scope. | Latest Version: | November 14, 2002 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | November 2005 |
| | Status/ Comments: | The TFCO Scope was revised at the August meeting. | | |
| | NPCC Contact: | Jerry Mosier | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF OPERATION

Surveys/Reviews

| <u>Item</u> | <u>Name</u> | <u>Assignment</u> | | |
|-------------|---|---|------------------------------|---------------------|
| FNL | Survey of NPCC Facilities Notification List | 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: | June 2004 |
| | | | Frequency of Reviews: | 1 year |
| | | | Next Review Date: | January 2005 |
| | Status/ Comments: | The 2005 review completed. | | |
| | NPCC Contact: | Paul Roman | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF PLANNING

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | 2005 Budget: | |
|------|---|---|-------------------------|----------------------|
| CP-8 | Working Group on Review of Resource and Transmission Adequacy | Review the overall reliability of the NPCC Areas and perform pre-seasonal resource adequacy assessments. | 2005 Budget: | \$60,000 |
| | | | Expense to Date: | \$5,190 |
| | | | Completion Date: | December 2005 |
| | Status/ Comments: | <p>The New England 2004 Interim Review of Resource Adequacy, the New York 2004 Interim Review of Resource Adequacy, the Quebec 2004 Interim Review of Resource Adequacy, and the New Brunswick 2004 Review of Resource Adequacy were approved by the RCC on March 9, 2005, and were posted on the NPCC web site. The NPCC Multi-Area Probabilistic Reliability Assessment for Summer 2005 was completed and released April 28th. The report was posted on the NPCC web site. Comments were provided to the TFCP for their review and update of Document B-8. The Scope and Schedule for the proposed Winter 2005/06 NPCC Multi-Area Probabilistic Reliability Assessment was approved by the TFCP at their August meeting, and is scheduled for approval at the September RCC meeting.</p> | | |
| | NPCC Staff: | Phil Fedora | | |
| | Reference: | TFCP Workplan | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF PLANNING

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | | |
|-------------|---|--|-------------------------|----------------------|
| CP-9 | Review of NERC Planning Standards Working Group | 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 NPCC membership of developments. | 2005 Budget: | \$25,000 |
| | | | Expense to Date: | \$17,479 |
| | | | Completion Date: | December 2005 |
| | Status/ Comments: | The CP-9 Working Group is focusing on the review of the “Version 1” NERC Reliability Standards (as they are developed) and also the emerging translation of the Planning Standards Phase III and IV. The CP-9 WG is developing recommendations for the membership on ballots as they transpire. CP-9 has also commented on increased reporting requirements proposed by the DOE/Energy Information Administration 411 and 860 Forms. CP-9 also developed a process to coordinate commenting and participating in adjacent Regions’ criteria development, as well as promoting NPCC criteria in adjacent regions. | | |
| | NPCC Staff Reference: | Guy Zito TFCP Workplan | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF PLANNING

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | | |
|---|--------------------------------------|---|-------------------------|----------------------|
| 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. | 2005 Budget | \$10,000 |
| | | | Expense to Date: | \$6,150 |
| | | | Completion Date: | December 2005 |
| Status/ Comments: Review and approval of the Evaluation Study Plan for the proposed NPCC Document A-10, "Criteria for the Determination of Bulk Power System Elements" is scheduled for the September 7, 2005 RCC meeting. | | | | |
| NPCC Staff: | | Stan Kopman | | |
| Reference: | | TFCP Workplan | | |

| Item | Name | Assignment | | |
|---|---|---|--------------------------|-------------------|
| CP- 2005 | Summer 2005 Multi-Area Probabilistic Reliability Assessment | Assess NPCC Area reliability for the year 2005 by estimating the annual Loss of Load Expectation (LOLE) and projected use of Area Operating Procedures designed to mitigate resource shortages for the summer (May through September) period. | 2005 Budget: | \$50,000 |
| | | | Expense to Date:: | \$35,301 |
| | | | Completion Date: | April 2005 |
| Status/ Comments: The NPCC Multi-Area Probabilistic Reliability Assessment for Summer 2005 was completed and released April 28 th . The report was posted on the NPCC web site. | | | | |
| NPCC Staff: | | Phil Fedora | | |
| Reference: | | TFCP Workplan | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF PLANNING

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | | |
|--------------------------|---|---|-------------------------|----------------------|
| CP- TIE | Review of Interconnection Assistance Reliability Benefits | On a consistent basis, estimate the amount of interconnection assistance available to the NPCC Areas for today's system and for the near term (2006). | 2005 Budget: | \$25,000 |
| | | | Expense to Date: | \$12,575 |
| | | | Completion Date: | December 2005 |
| Status/ Comments: | | At the request of New Brunswick, the TFCP asked the CP-8 Working Group to study the impact of the proposed second New England – New Brunswick Tie Line; results were approved by the RCC at their March 9, 2005 meeting. The report and NB Tie Line addendum was posted on the NPCC web site. | | |
| NPCC Staff: | | Phil Fedora | | |
| Reference: | | TFCP Workplan | | |

| Item | Name | Assignment | | |
|-------------------------|----------------------|---|--------------------------|----------------------|
| CP-GLOS | Update NPCC Glossary | Maintain the NPCC Glossary of Terms (Document A-7) and to expand the Glossary to include new terms as necessary. | 2005 Budget: | \$5,000 |
| | | | Expense to Date: | \$0 |
| | | | Next Review Date: | December 2005 |
| Status/Comments: | | This activity has been taken over the by CP-11 Working Group. CP-11 will continue to discuss and revise Document A-7, the NPCC Glossary of Terms, with the intention of having it ready for posting to the NPCC Open Process during the second quarter of 2005. | | |
| NPCC Staff: | | Stan Kopman | | |
| Reference: | | TFCP Workplan | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF PLANNING

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | 2005 Budget | Expense to Date: |
|---------------------|---|---|--------------------|-------------------------|
| RPF (PW) | Regional Planning Forum (PowerWorld) | The objective of the RPF is to explore innovative approaches to enhancing the capabilities of the transmission grid from a Wide-Area, trans-regional outlook. | \$25,000 | \$0 |
| | Status/ Comments: | No recent activity. | | |
| | NPCC Staff: Reference: | Phil Fedora TFCP Workplan | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF PLANNING

Documents

| Item | Name | Assignment | | |
|------|---|--|------------------------------|----------------------|
| A-1 | Criteria for Review and Approval of Documents | Criteria outlines the review and approval procedures for all NPCC documents. | Latest Version: | March 2005 |
| | | | Frequency of Reviews: | 4 years |
| | | | Next Review Date: | March 2009 |
| | | | Completion Date: | December 2009 |
| | Status/ Comments: | The TFCP prepared revisions to this document in 2004, and It has received final member approval. | | |
| | NPCC Contact: | Guy Zito | | |

| Item | Name | Assignment | | |
|------|---|--|------------------------------|----------------------|
| A-2 | Basic Criteria for Design and Operation of Interconnected Power Systems | Criteria are established for proper design and operation concerning Resource Adequacy and Transmission Capability. | Latest Version: | May 6, 2004 |
| | | | Frequency of Reviews: | 4 years |
| | | | Next Review Date: | November 2007 |
| | | | Completion Date: | May 2008 |
| | Status/ Comments: | The NPCC Membership approved the A-2 document May 6, 2004. However, there is a need to make a revision to the document to address a blackout recommendation. NPCC will begin on early review of this document which is scheduled to start in 2006. | | |
| | NPCC Contact: | Stan Kopman | | |

| Item | Name | Assignment | | |
|------|--------------------------|---|------------------------------|-----------------------|
| A-7 | NPCC Glossary of Terms | The NPCC Glossary of Terms (the Glossary) includes terms from NPCC Criteria (A), Guideline (B) and Procedure (C) Documents, as well as the North American Electric Reliability Council (NERC) Glossary of Terms, August 1996. | Latest Version: | September 1998 |
| | | | Frequency of Reviews: | 1 year |
| | | | Next Review Date: | December 2005 |
| | Status/ Comments: | This document is currently being reviewed by the CP-11 Working Group. | | |
| | NPCC Contact: | Stan Kopman | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF PLANNING

Documents

| Item | Name | Assignment | | |
|-------------|---|--|------------------------------|----------------------|
| B-8 | Guidelines for Area Review of Resource Adequacy | 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: | June 28, 2001 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | June 2005 |
| | | | Completion Date: | December 2005 |
| | Status/ Comments: | The TFCP has developed a new draft B-8 Document and will posting the revision in NPCC Open Process review. | | |
| | NPCC Contact: | Guy Zito | | |

| Item | Name | Assignment | | |
|-------------|---|---|------------------------------|----------------------|
| C-16 | Procedure for NPCC Review of New or Modified Bulk Power System Special Protection Systems | This document outlines procedures for reporting new or modified Bulk Power System Special Protection Systems. | Latest Version: | August 2005 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | August 2008 |
| | | | Completion Date: | December 2008 |
| | Status/ Comments: | The TFCP has recently reviewed and approved a revision to the document. The document will be posted. | | |
| | NPCC Contact: | Guy Zito | | |

| Item | Name | Assignment | | |
|-------------|--------------------------|---|------------------------------|--------------------------|
| TFCP | Task Force Scope | The Task Force on Coordination of Planning scope of activities. | Latest Version: | February 26, 1997 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | December 2005 |
| | Status/ Comments: | The TFCP has revised the document and will be presenting it to the RCC in September 2005. | | |
| | NPCC Contact: | Guy Zito | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF PLANNING

Surveys/Reviews

| Item | Name | Assignment | | |
|-------------|---|--|--|-------------------------|
| MARA | Resource Adequacy — Coordination and Review of Area Studies | Review of the Maritime Area resource adequacy study. | Latest Version: | December 2004 |
| | | | Frequency of Next Review Date: | 3 years 2007 |
| | Status/ Comments: | The Maritimes Area Triennial Review of Resource Adequacy was approved at the March, 2005 RCC meeting. | | |
| | NPCC Contact: | Phil Fedora | | |
| Item | Name | Assignment | | |
| NERA | Resource Adequacy — Coordination and Review of Area Studies | Review of the New England Area resource adequacy study. | Latest Version: | October 2002 |
| | | | Frequency of Reviews: Next Review Date: | 3 years 2005 |
| | Status/ Comments: | New England's Interim Resource Adequacy Review was approved at the March, 2005 RCC meeting. New England's Draft Triennial Resource Adequacy is currently under review by the CP-8 Working Group. | | |
| | NPCC Contact: | Phil Fedora | | |
| Item | Name | Assignment | | |
| NYRA | Resource Adequacy — Coordination and Review of Area Studies | Review of the New York Area resource adequacy study. | Latest Version: | July 2002 |
| | | | Frequency of Reviews: Next Review Date: | 3 years 2005 |
| | Status/ Comments: | New York's Interim Resource Adequacy Review was approved at the March, 2005 RCC meeting. | | |
| | NPCC Contact: | Phil Fedora | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON COORDINATION OF PLANNING

Surveys/Reviews

| Item | Name | Assignment | | |
|-------------|---|--|--|--|
| QARA | Resource Adequacy — Coordination and Review of Area Studies | Review of the Québec Area resource adequacy study. | Latest Version: Frequency of reviews: Next Review Date: | October 2002 3 years 2005 |
| | Status/ Comments: | Québec's Interim Resource Adequacy Review was approved at the March, 2005 RCC meeting. | | |
| | NPCC Contact: | Phil Fedora | | |

| Item | Name | Assignment | | |
|-------------|---|---|---|---|
| ONRA | Resource Adequacy — Coordination and Review of Area Studies | Review of the Ontario Area resource adequacy study. | Latest Version: Frequency of Next Review Date: | July 2003 3 years 2006 |
| | Status/ Comments: | Ontario's Interim Resource Adequacy Review was approved at the July 2004 RCC meeting. Ontario's Draft Interim Resource Adequacy Review is currently under review by the CP-8 Working Group. | | |
| | NPCC Contact: | Phil Fedora | | |

| Item | Name | Assignment | | |
|-------------|-----------------------------------|--|---|---|
| SPS | Special Protection System List | This document lists Special Protection Systems on the System. | Latest Version: Frequency of Next Review Date: | June 2004 1 year June 2005 |
| | Status/ Comments: | The SPS list will be presented to the RCC at its November 2005 meeting. On target. | | |
| | NPCC Contact: | Donal Kidney | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON INFRASTRUCTURE SECURITY AND TECHNOLOGY

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | | |
|-------|--|--|-------------------------|---------------|
| TFIST | Task Force on Infrastructure Security and Technology | The mission of the NPCC Task Force on Infrastructure Security and Technology (TFIST) is to advance the Physical and Cyber Security of the electricity infrastructure of Northeastern North America. | 2005 Budget: | \$20,000 |
| | | | Expense to Date: | \$0 |
| | | | Completion Date: | December 2005 |
| | Status/ Comments: | The TFIST “NPCC Security Considerations for the Bulk Power System Whitepaper” has been sent to the RCC for review. This document is on the RCC September, 2005 agenda. TFIST sent extensive comments to the CP-9 Working Group on the third draft of NERC’s Cyber Security Standard (CIP-002 – CIP-009). TFIST accepted a report from the Telecommunication Working Group (IST-02) in response to the TFCO’s August, 2004 request regarding improved voice communications during emergencies. The CO-8 Working Group accepted IST-02’s solution for daily morning inter-Area operations conference call. | | |
| | NPCC Staff Reference: | Brian Hogue TFIST Workplan | | |

| Item | Name | Assignment | | |
|-------|--|--|-------------------------|---------------------|
| IST-1 | Infrastructure Security and Technology Working Group | Periodic workshop to address timely issues and update member personnel associated with infrastructure security and technology. | 2005 Budget: | \$5,000 |
| | | | Expense to Date: | (\$100) |
| | | | Last Workshop: | October 2004 |
| | Status/ Comments: | A well-received and attended Workshop was held on October 26-27, 2004 in Boston, MA. TFIST has not held detailed discussions for this year’s Workshop. | | |
| | NPCC Staff Reference: | Brian Hogue TFIST Workplan | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON INFRASTRUCTURE SECURITY AND TECHNOLOGY

Documents

| Item | Name | Assignment | | |
|-------------|--|---|------------------------------|-----------------------|
| B-12 | Guidelines for On-Line Computer System Performance During Disturbances | 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: | September 2005 |
| | Status/ Comments: | This document is currently being reviewed by CO-10. | | |
| | NPCC Contact: | Paul Roman | | |

| Item | Name | Assignment | | |
|-------------|--|--|------------------------------|-----------------------|
| C-17 | Monitoring Procedures for Guidelines for On-Line Computer System performance during disturbances | 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: | September 2005 |
| | Status/ Comments: | This document is currently being reviewed by CO-10. | | |
| | NPCC Contact: | Paul Roman | | |

| Item | Name | Assignment | | |
|--------------|--------------------------|--|------------------------------|-------------------|
| TFIST | Task Force Scope | This document outlines the Task Force on Infrastructure Security and Technology scope of activities. | Latest Review | March 2003 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | June 2005 |
| | Status/ Comments: | Scope of Work for the Task Force on Infrastructure Security and Technology was last reviewed and approved at the March 2003 RCC meeting. An updated TFIST Scope is on the September 2005 RCC agenda. | | |
| | NPCC Contact: | Brian Hogue | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON INFRASTRUCTURE SECURITY AND TECHNOLOGY

Surveys/Reviews

| Item | Name | Assignment | | |
|-------------|----------------------------------|--|------------------------------|-------------------|
| RAD | Review of NPCC Area disturbances | Review of on-line computer system performance during disturbances, as required by Document B-12. | Latest Review | March 2004 |
| | | | Frequency of Reviews: | 1 year |
| | Status/ Comments: | The C-17 guidelines were used to gather information following the August 14 th Blackout, a report was presented to the RCC at their November meeting. No need to review unless it affects security/reliability. | | |
| | NPCC Contact: | Brian Hogue | | |

| Item | Name | Assignment | | |
|-------------|---|---|------------------------------|-------------------|
| ROC | Review On-Line Computer System Status Reports | Review of member on-line computer system statuses and plans. | Latest Review: | March 2004 |
| | | | Frequency of Reviews: | As needed |
| | Status/ Comments: | The TFIST will be determining the need to review these reports. No need to review unless it affects security/reliability. | | |
| | NPCC Contact: | Brian Hogue | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON SYSTEM PROTECTION

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | | |
|----------------------|---|---|------------------------------|------------------|
| PSMP | Protection System Maintenance Practices | As required to support analysis, collect Bulk Power system protection system maintenance data to evaluate protection system maintenance costs and the impact on Bulk Power System performance due to alternative methods and intervals for protection system maintenance. | Latest Version: | June 2005 |
| | | | Frequency of Reviews: | 3 months |
| | Status/ Comments: | The TFSP will initiate when conditions warrant. | | |
| | NPCC Contact: | Quoc Le | | |
| Item | Name | Assignment | | |
| SEDRWG (SP-6) | Synchronized Event Data Reporting Working Group | Investigate the area of synchronized event reporting and make recommendations for improvements to NPCC criteria and other NPCC documents so that NPCC might be able to quickly establish the sequence of events after any future wide-Area disturbance. | 2005 Budget: | \$12,000 |
| | | | Expense to Date: | \$1,300 |
| | Status/ Comments: | The SEDRWG has completed the major objective of this work. A report and implementation plan will be submitted for approval at the June 1, 2005 RCC meeting. | | |
| | NPCC Staff: | Quoc Le | | |
| | Reference: | TFSP Workplan | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON SYSTEM PROTECTION

Documents

| <u>Item</u> | <u>Name</u> | <u>Assignment</u> | | |
|-------------|---|--|------------------------------|----------------------|
| A-4 | Maintenance Criteria for Bulk Power System Protection | This document establishes the maintenance interval and practices which should result in dependable and secure protection system operation. | Latest Version: | August 2004 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | December 2007 |
| | Status/ Comments: | The next review of A-4 will be initiated in the fourth quarter of 2006. | | |
| | NPCC Contact: | Quoc Le | | |

| <u>Item</u> | <u>Name</u> | <u>Assignment</u> | | |
|-------------|---------------------------------------|---|------------------------------|--------------------------|
| A-5 | Bulk Power System Protection Criteria | This document establishes the minimum design objectives and recommends design practices to minimize the severity and extent of system disturbances and to minimize possible damage to system equipment. | Latest Version: | November 14, 2002 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | November 2005 |
| | Status/ Comments: | This document is under review. Draft revisions posted in NPCC Open Process Review on August 12, 2005. Comments will be received through September 26, 2005. | | |
| | NPCC Contact: | Quoc Le | | |

| <u>Item</u> | <u>Name</u> | <u>Assignment</u> | | |
|-------------|------------------------------------|--|------------------------------|--------------------------|
| A-11 | Special Protection System Criteria | This document establishes the protection criteria, and recommends minimum design objectives and practices for Special Protection Systems (SPSs). The SPS is categorized according to the Criteria fault for which it is designed and the impact its failure would have on the network. | Latest Version: | November 14, 2002 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | November 2005 |
| | Status/ Comments: | TFSP plans revisions to Document A-11 similar to Document A-5, following the NPCC Open Process Review of Document A-5. | | |
| | NPCC Contact: | Quoc Le | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON SYSTEM PROTECTION

Documents

| Item | Name | Assignment | | |
|------------|---|---|------------------------------|----------------------|
| B-1 | Guide for the Application of Autoreclosing to the Bulk Power System | This document establishes guidelines for automatic reclosing to facilitate restoration of the system to normal following automatic tripping of transmission facilities. | Latest Version: | March 9, 2005 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | November 2008 |
| | Status/ Comments: | Revised B-1 was approved at March 9, 2005 RCC meeting. Approved document is posted on the web. | | |
| | NPCC Contact: | Quoc Le | | |

| Item | Name | Assignment | | |
|------------|---|---|------------------------------|----------------------|
| B-7 | Automatic Underfrequency Load Shedding Program Relaying Guideline | This guideline establishes requirements for application and testing of underfrequency threshold relays that are necessary to accomplish the objectives of the NPCC automatic underfrequency load shedding program established in the Emergency Operation Criteria (Document A-3). | Latest Version: | March 9, 2005 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | November 2008 |
| | Status/ Comments: | Revised B-7 was approved at March 9, 2005 RCC meeting. Approved document is posted on the web. | | |
| | NPCC Contact: | Quoc Le | | |

| Item | Name | Assignment | | |
|-------------|---|---|------------------------------|----------------------|
| B-21 | Guide for Analysis and Reporting of Protection System Misoperations | 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. | Latest Version: | July 14, 2004 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | July 2007 |
| | Status/ Comments: | The next B-21 review will be initiated in September 2006. | | |
| | NPCC Contact: | Quoc Le | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON SYSTEM PROTECTION

Documents

| Item | Name | Assignment | Latest Version: | |
|-------------|---|---|------------------------------|----------------------|
| B-23 | Guide for Maintenance of Microprocessor-based Protection Relays | This document provides guidance for the maintenance of microprocessor-based relays. | Latest Version: | July 14, 2002 |
| | | | Frequency of Reviews: | 3 Years |
| | | | Next Review Date: | July 2007 |
| | Status/ Comments: | The next B-23 Review will be initiated in September 2006. | | |
| | NPCC Contact: | Quoc Le | | |

| Item | Name | Assignment | Latest Version: | |
|-------------|---|---|------------------------------|----------------------|
| B-24 | Security Guidelines for Protection Systems IEDS | This document provides guidance for member systems in designing and applying remote access for protective relays And associated equipment that have remote access capability. | Latest Version: | July 14, 2002 |
| | | | Frequency of Reviews: | 3 Years |
| | | | Next Review Date: | July 2007 |
| | Status/ Comments: | The next B-24 Review will be initiated in September 2006. | | |
| | NPCC Contact: | Quoc Le | | |

| Item | Name | Assignment | Latest Version: | |
|-------------|---|--|------------------------------|--------------------------|
| C-22 | Procedure for Reporting and Reviewing Proposed Protection Systems for the Bulk Power System | This procedure indicates how new facilities or modifications to existing facilities are to be presented to the TFSP in order to ascertain compliance with the principles of the Protection Criteria. | Latest Version: | November 14, 2002 |
| | | | Frequency of Reviews: | 3 Years |
| | | | Next Review Date: | June 2008 |
| | Status/ Comments: | Revised Document C-22 posted as approved by the TFSP. | | |
| | NPCC Contact: | Quoc Le | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON SYSTEM PROTECTION

Documents

| Item | Name | Assignment | Latest Version: | |
|------|--|---|------------------------------|--------------------------|
| 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. | | November 14, 2002 |
| | Status/ Comments: | Revised Document posted as approved by the TFSP at its June meeting. | Frequency of Reviews: | 3 Years |
| | NPCC Contact: | Quoc Le | Next Review Date: | June 2008 |

| Item | Name | Assignment | Latest Version: | |
|------|--------------------------|--|------------------------------|----------------------|
| TFSP | Task Force Scope | This document outlines the Task Force on System Protection scope of activities. | | March 9, 2005 |
| | Status/ Comments: | Revised TFSP scope was approved at the March 9, 2005 RCC meeting. Approved scope is posted on the web. | Frequency of Reviews: | 3 Years |
| | NPCC Contact: | Quoc Le | Next Review Date: | November 2008 |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON SYSTEM PROTECTION

Surveys/Reviews

| Item | Name | Assignment | Latest Version: | Frequency of Reviews: |
|--------------------------|---|---|------------------------|------------------------------|
| RPS | Review protection systems for proposed installations or existing installations undergoing substantial modifications | 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) and Special Protection System Criteria (Document A-11). | June 2005 | 3 months |
| Status/ Comments: | | At each meeting, the TFSP discusses protection system changes, including SPS installations and modifications, as proposed by entities within NPCC. | | |
| NPCC Contact: | | Quoc Le | | |

| Item | Name | Assignment | Latest Version: | Frequency of Reviews: |
|--------------------------|--|---|------------------------|------------------------------|
| RPSP | Review protection system performance following major system events or disturbances | 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. | June 2005 | 3 months |
| Status/ Comments: | | 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. | | |
| NPCC Contact: | | Quoc Le | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON SYSTEM STUDIES

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | | |
|--------------------------|-------------------------------------|--|--|---|
| SS-37 | Base Case Development Working Group | On an annual basis, develop a library of solved load flow cases and associated dynamic data. | 2005 Budget: | \$10,000 |
| | | | Expense to Date: Completion Date: | \$15,450 December 2005 |
| Status/ Comments: | | Year 2005 development effort is currently underway and on schedule to coordinate with MMWG. | | |
| NPCC Staff: | | Donal Kidney | | |
| Reference: | | TFSS Workplan | | |

| Item | Name | Assignment | | |
|--------------------------|--|---|--|--|
| SS-38 | Inter- Area Dynamic Analysis Working Group | Assigned to analyze dynamic phenomena, which may affect interconnected system reliability, especially in the area of low frequency oscillations. | 2005 Budget: | \$20,000 |
| | | | Expense to Date: Completion Date: | \$9,675 December 2005 |
| Status/ Comments: | | The implementation of the UFLS Report recommendations are being coordinated by the TFCP. Work on the TFSS Blackout 2003 Study is on-going. SS-38 is conducting a governor response survey. SS-38 has conducted an assessment of the need for and value of synchronized reserve to satisfy a request made to TFSS by the TFCO. The response was forwarded to TFCO by TFSS. | | |
| NPCC Staff: | | Donal Kidney | | |
| Reference: | | TFSS Workplan | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON SYSTEM STUDIES

Documents

| <u>Item</u> | <u>Name</u> | <u>Assignment</u> | | |
|-------------|---|---|------------------------------|-------------------------|
| B-4 | Guidelines for NPCC Area Transmission Reviews | Guidelines to help TFSS ascertain that each Area's transmission expansion plan, based on its proposed generation additions, has been developed in accordance with the NPCC "Basic Criteria for Design and Operation of Interconnected Power Systems." | Latest Version: | November 7, 2001 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | November 2004 |
| | Status/ Comments: | Updated document will be presented to the RCC at its September 2005 meeting for approval. | | |
| | NPCC Contact: | Donal Kidney | | |

| <u>Item</u> | <u>Name</u> | <u>Assignment</u> | | |
|-------------|--|---|------------------------------|----------------------|
| B-10 | Guidelines for Requesting Exclusions to Section 5.1 (B) and 6.1 (B) of the NPCC "Basic Criteria for Design and Operations of Interconnected Power Systems" | Establishes procedures for requesting exclusion from certain contingencies in the Basic Criteria. Note: Member Representatives shall be advised of approvals by the Reliability Coordinating Committee of applications for exclusions. | Latest Version: | November 2002 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | November 2005 |
| | Status/ Comments: | Currently under review by TFSS. | | |
| | NPCC Contact: | Donal Kidney | | |

| <u>Item</u> | <u>Name</u> | <u>Assignment</u> | | |
|-------------|---|--|------------------------------|---------------------|
| C-18 | Procedure for Testing and Analysis of Extreme Contingencies | This document establishes a procedure for the testing and analysis of Extreme Contingencies. | Latest Version: | January 1999 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | January 2004 |
| | Status/ Comments: | This document is currently under review. | | |
| | NPCC Contact: | Donal Kidney | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON SYSTEM STUDIES

Documents

| Item | Name | Assignment | | |
|-------------|---|---|------------------------------|--------------------|
| C-25 | Procedure to Collect Real Time Data for Inter-Area Dynamic Analysis | 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: | May 5, 2001 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | June 2004 |
| | Status/ Comments: | TFSS is currently reviewing the document. | | |
| | NPCC Contact: | Donal Kidney | | |

| Item | Name | Assignment | | |
|-------------|--------------------------|--|--------------------------|----------------------|
| TFSS | Task Force Scope | The Task Force on System Studies scope of activities. | Latest Version: | February 2003 |
| | | | Frequency of | 3 years |
| | | | Next Review Date: | January 2006 |
| | Status/ Comments: | The TFSS is on schedule with all elements of the TFSS scope. | | |
| | NPCC Contact: | Donal Kidney | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON SYSTEM STUDIES

Surveys/Reviews

| Item | Name | Assignment | | |
|------|--|---|------------------------------|------------------------|
| ALSP | Adequacy of Automatic Load Shedding Programs | Assessment of the adequacy and suitability of existing underfrequency load shedding settings. | Latest Version: | August 31, 2004 |
| | | | Frequency of Reviews: | 3 years |
| | | | Completion Date: | March 2007 |
| | Status/ Comments: | A final UFLS report was completed and was approved at the RCC in March 2003. The implementation of the recommendations from the report will be coordinated by the TFCP and have been incorporated into a revised Document A-3 that was approved by the RCC in July and the Membership in August. A UVLS report is being developed and will be presented to TFSS in June. This will be presented to the RCC at their September 2005 meeting. | | |

NPCC Contact: Donal Kidney

| Item | Name | Assignment | | |
|------|--|---|------------------------------|---------------------|
| DARD | Review of Dynamic Analysis Recording Devices | This review summarizes the characteristics of recording devices used to capture power system dynamic phenomena. | Latest Version: | June 4, 1999 |
| | | | Frequency of Reviews: | 3 years |
| | | | Next Review Date: | June 2004 |
| | Status/ Comments: | The SS-38 Working Group is currently conducting the Survey. On hold pending Blackout 2003 study. | | |
| | NPCC Contact: | Donal Kidney | | |

| Item | Name | Assignment | | |
|------|------------------------------------|---|------------------------------|----------------------|
| MATR | Maritimes Area Transmission Review | Review of Maritimes Area (New Brunswick and Nova Scotia) future transmission plans (4-6 years out). | Latest Version: | March 2004 |
| | | | Frequency of Reviews: | 1 year |
| | | | Next Review Date: | November 2005 |
| | Status/ Comments: | Interim Review is currently under way. | | |
| | NPCC Contact: | Donal Kidney | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON SYSTEM STUDIES

Surveys/Reviews

| Item | Name | Assignment | | |
|-------------|--------------------------------------|---|------------------------------|-----------------------|
| NETR | New England Area Transmission Review | Review of New England Area future transmission plans (4-6 years out). | Latest Version: | September 2004 |
| | | | Frequency of Reviews: | 1 year |
| | | | Next Review Date: | September 2005 |
| | Status/ Comments: | A Comprehensive Review will be presented at the September 2005 RCC meeting. | | |
| | NPCC Contact: | Donal Kidney | | |

| Item | Name | Assignment | | |
|-------------|-----------------------------------|--|------------------------------|-------------------|
| NYTR | New York Area Transmission Review | Review of New York Area future transmission plans (4-6 years out). | Latest Version: | March 2005 |
| | | | Frequency of Reviews: | 1 year |
| | | | Next Review Date: | March 2006 |
| | Status/ Comments: | An Comprehensive Review is currently underway. | | |
| | NPCC Contact: | Donal Kidney | | |

| Item | Name | Assignment | | |
|-------------|--------------------------|---|------------------------------|----------------------|
| ONTR | Area Transmission Review | Review of Ontario Area future transmission plans (4-6 years out). | Latest Version: | December 2004 |
| | | | Frequency of Reviews: | 1 year |
| | | | Next Review Date: | December 2005 |
| | Status/ Comments: | An Intermediate Review is currently underway. | | |
| | NPCC Contact: | Donal Kidney | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

TASK FORCE ON SYSTEM STUDIES

Surveys/Reviews

| Item | Name | Assignment | | |
|------|------------------------------------|---|------------------------------|----------------------|
| QATR | Québec Area Transmission Review | Review of Québec Area future transmission plans (4-6 years out). | Latest Version: | November 2004 |
| | | | Frequency of Reviews: | 1 year |
| | | | Next Review Date: | December 2005 |
| | Status/ Comments: | An Interim Review is currently underway. | | |
| | NPCC Contact: | Donal Kidney | | |

| Item | Name | Assignment | | |
|------|---|---|------------------------------|----------------------|
| TRS | Overall Transmission Reliability Study | Evaluate the need to perform an overall assessment to evaluate the thermal, and dynamic performance of the NPCC Region. If necessary perform this assessment including the calculation of Inter-Area transfer capabilities and Extreme contingency performance. | Latest Version: | May 2002 |
| | | | 2005 Budget: | \$10,000 |
| | | | Frequency of Reviews: | 3 years |
| | | | Completion Date: | December 2005 |
| | | | Expense to Date: | \$0 |
| | Status/ Comments: | The SS-37 Working Group has been assigned to conduct the 2004 Overall Transmission Reliability Study. The Study will simulate contingencies in each of the NPCC Areas plus PJM and ECAR to determine the overall robustness of the system. The study is progressing and is on target to be presented at the November RCC meeting. | | |
| | NPCC Staff: | Donal Kidney | | |
| | Reference: | TFSS Workplan | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

MACC - ECAR - NPCC (MEN)

Study Committees

| <u>Item</u> | <u>Name</u> | <u>Assignment</u> | | |
|---------------|--------------------------|---|-------------------------|----------------------|
| MEN SC | MEN Study Committee | 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: | December 2005 |
| | Status/ Comments: | The 2005/06 Winter MEN Assessment is underway.. The Assessment includes the addition of ComEd, AEP, Dayton Power & Light, Duquesne Light and Dominion Virginia Power to the PJM Market. The future direction of MEN efforts is being evaluated in light of the combination of MAAC, ECAR and MAIN into one reliability council. | | |
| | NPCC Contact: | Paul Roman | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

MACC - ECAR - NPCC (MEN)

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | | |
|-------------|------------------------------|--|-------------------------|----------------------|
| MEN | MAAC-ECAR-NPCC Working Group | 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. | 2005 Budget: | \$10,000 |
| | | | Expense to Date: | \$1,550 |
| | | | Completion Date: | December 2005 |
| | Status/ Comments: | The schedule for the 2005/06 winter study has been issued. MEN/VEM base case development work was completed and the study is underway. NPCC is chairing both the MEN Study Committee and Working Groups. | | |
| | NPCC Staff: | Donal Kidney/Paul Roman | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL (NERC)

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | Completion Date: | |
|--------------------------|--|---|----------------------|--|
| CCC | Compliance and Certification Committee | Develop positions related to the NERC Compliance program. | December 2005 | |
| Status/ Comments: | | Developing appeals processes for the NERC Compliance Program and Regional/NERC Readiness Review Program. Forming Joint SAC/CCC Task Force to outline compliance requirements for Version "0" Standards. | | |
| NPCC Contact: | | Stan Kopman | | |

| Item | Name | Assignment | 2005 Budget: | |
|--------------------------|--------------------------------------|--|----------------|--|
| MMWG | Multiregional Modeling Working Group | 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. | \$5,000 | |
| Status/ Comments: | | The MMWG is assembling twelve load flow models that constitute the 2005 base case library and five dynamics library cases. Development is currently on schedule. MMWG is also reviewing the proposed contractor's budgets for 2006 for base case and dynamics development with the goal of recommending them for approval to the NERC Planning Committee. MMWG is also reviewing compliance templates MOD-11 and MOD-013 as related to the MMWG Procedural Manual. | | |
| NPCC Staff: | | Donal Kidney | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL (NERC)

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | Latest Version: | September 2005 |
|-------------|---|--|------------------------------|-----------------------|
| RAS | Reliability Assessment Subcommittee (RAS) | 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. | Frequency of Reviews: | six months |
| | | | Completion Date: | December 2005 |
| | Status/ Comments: | In May, the RAS published its seasonal assessment of anticipated conditions for the summer of 2005; the RAS assessment of conditions for the period 2005-2014 was released in the summer. On June 20, 2005, the RAS successfully interviewed NPCC to assess its monitoring of resource adequacy and transmission security. On August 29, 2005, the NERC BOT approved the “2005 Long-Term Reliability Assessment,” looking at the reliability of the North American bulk power system for the next ten year period. | | |
| | NPCC Contact: | Jerry Mosier | | |

NPCC RELIABILITY ASSESSMENT PROGRAM STATUS REPORT

OTHER

Working Groups/Ad Hoc Assignments

| Item | Name | Assignment | | |
|-------------|---------------------------------|--|-------------------------|----------------------|
| DCWG | Data Coordination Working Group | Serve as the electric utility industry's coordinator with the Department of Energy (DOE) and the Energy Information Administration (EIA) in submitting yearly data and in negotiating the requirements for data submission to the EIA. | 2005 Budget: | \$5,000 |
| | | | Expense to Date: | \$775 |
| | | | Completion Date: | December 2005 |
| | Status/ Comments: | The EIA instituted its Form 411 internet based data collection system. NPCC Area's reporting requirements have been submitted. Next meeting planned for Fall 2005 to kick-off next year's effort. The NPCC LCEFT report for 2005 has been posted on the NPCC web site. | | |
| | NPCC Staff: | Guy Zito | | |

| Item | Name | Assignment | | |
|------------------|--------------------------|--|-------------------------|----------------------|
| Inter-ISO | Inter-ISO Working Group | The Inter-ISO Working Group was formed to address Inter-Regional planning and Inter-Area issues of projects that have "cross border" impacts while providing an open stakeholder forum and committee structure to allow market input. | 2005 Budget: | \$5,000 |
| | | | Expense to Date: | \$0 |
| | | | Completion Date: | December 2005 |
| | Status/ Comments: | The Working Group has developed a Northeastern Planning Protocol document that outlines how Inter-Regional planning will be done. All NPCC Areas and PJM are involved with the effort. NPCC has developed and is maintaining a website for the effort. NPCC also participated in the group's meeting of PJM and NPCC stakeholders, and presented how NPCC supports wide-Area collaborative planning. | | |
| | NPCC Staff: | Guy Zito | | |