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**RCC Meeting
November 3 - 4, 2004
Agenda Item 9.5**

October 25, 2004

Members, Reliability Coordinating Committee

Re: NPCC Reliability Assessment Program (NRAP) Summary Report

The NPCC Reliability Assessment Program Summary Report has been updated (as of October 25, 2004 - see attached) and will be presented at the November 3 – 4, 2004 Reliability Coordinating Committee meeting.

The full updated NRAP report is 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 full report is only “distributed” with this reference.

Sincerely,

Phil Fedora

Philip A. Fedora
Director, Market Reliability Interface

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 Infrastructure Security and Technology
NPCC Working Group Chairs
NPCC Staff

**NPCC RELIABILITY ASSESSMENT PROGRAM
SUMMARY REPORT**

Page #	PROJECT DESCRIPTION	2004 BUDGET	2004 EXPENSE
3	CO-1 Control Performance Working Group	\$25,000	\$8,675
3	CO-2 Dispatcher Training Working Group	\$30,000	\$7,850
4	CO-7 Operational Review Working Group	\$5,000	\$0
4	CO-8 System Operations Managers Working Group	\$25,000	\$10,750
5	C-15 Solar Alert Service	\$15,000	\$15,000
5	CO-10 Operational Tools Working Group	\$15,000	\$4,550
6	LESPWG Lake Erie Security Process Working Group	\$15,000	\$0
6	ATCWG (CO-13) Available Transfer Capability Working Group	\$5,000	\$3,900
7	DCWG Data Collection Working Group	\$5,000	\$3,025
7	Inter-ISO Inter-ISO Planning Working Group	\$5,000	\$0
8	IRCWG Inter-Control Area Restoration Coordination Working Group	\$10,000	\$9,050
8	CO-12 Summer Security Assessment Working Group	\$15,000	\$5,800
9	CP-8 Working Group on Review of Resource and Transmission Adequacy	\$60,000	\$8,429
9	CP-2004 Summer 2004 Multi-Area Probabilistic Reliability Assessment	\$55,000	\$21,250
10	CP-TIE Review of Interconnection Assistance Reliability Benefits	\$25,000	\$45,029
10	CP-9 Review of NERC Reliability Standards Working Group	\$25,000	\$12,450
11	CP-10 Collaborative Planning Initiative	\$10,000	\$0
11	RPF Regional Planning Forum	\$50,000	\$3,827

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Page #	PROJECT DESCRIPTION	2004 BUDGET	2004 EXPENSE
12	CP-11 <i>NPCC Basic Criteria for Design and Operation of Interconnected Power Systems Review Working Group</i>	\$10,000	\$450
12	JGWG Joint Glossary Working Group	\$5,000	\$0
13	SS-37 Base Case Development Working Group	\$10,000	\$4,350
13	SS-38 Inter-Area Dynamic Analysis Working Group	\$20,000	\$12,550
13	TRS Transmission Reliability Study	\$50,000	\$0
14	ISTWG Infrastructure Security and Technology Working Group	\$5,000	\$0
14	MEN MAAC-ECAR-NPCC Working Group	\$10,000	\$4,300
14	MMWG Multiregional Modeling Working Group	\$5,000	\$0
15	NERC-ISN Interregional Security Network (ISN)	\$120,000	\$108,209
15	SEDRWG Synchronized Event Data Reporting Working Group	\$12,000	\$4,650
	TOTAL	\$642,000¹	\$294,094

¹ At its September 9, 2003 meeting, the Executive Committee approved a recommendation that NPCC's 2004 Regional Budget include \$412,000 in Account #800 "Project Expense". Historically, total expenses have generally ranged from approximately 60 to 80 percent of the annual budget estimate.

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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 (TFCO), it conducts investigations of control performance problems.	2004 Budget:	\$25,000
			Expense to Date:	\$8,675
			Completion Date:	December 2004
	Status/ Comments:	The Control Performance Working Group has: 1) developed a merged draft of former NPCC Documents C-19 and C-20, developing the reserve product naming convention; 2) developed a new Document C-38, "Procedure for Operating Reserve Assistance", 3) monitored the implementation of the NERC ACE Diversity Interchange process, reviewing the effectiveness of the NERC Disturbance Control Standard; and 4) reviewed appropriate NERC Standard Authorization Requests.		
	NPCC Contact:	Jerry Mosier		

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 CO-2 Working Group also evaluates and propose new techniques and training aids as they become available.	2004 Budget:	\$30,000
			Expense to Date:	\$7,850
			Next Seminar:	November 2004
	Status/ Comments:	The Operator/Scheduler Training Seminar is being held on Nov. 3-4 2004 in Connecticut.		
	NPCC Contact:	Jerry Mosier		

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Item	Name	Assignment		
CO-7	Operational Review 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.	2004 Budget:	\$5,000
			Expense to Date:	\$0
			Completion Date:	December 2004
	Status/ Comments:	The need for a reformulated Working Group is being considered in light of the NERC Blackout 2003 recommendations.		
	NPCC Contact:	Paul Roman		

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 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.	2004 Budget:	\$25,000
			Expense to Date:	\$10,750
			Completion Date:	December 2004
	Status/ Comments:	The CO-8 Working Group is currently pursuing: 1) the development of operator tutorial DVDs for all NPCC Areas to ensure that each Area operator has a wide-area perspective of the bulk electric system and a basic level of understanding of neighboring Areas; 2) closely following the development and implementation of the NERC Functional Model; 3) overseeing the development of the NPCC OSS facilitated Transaction Checkout process; and, 4) discussing the proper implementation of the NERC Energy Emergency Alert.		
	NPCC Contact:	Jerry Mosier		

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Item	Name	Assignment		
C-15	Solar Alert Service	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
			2004 Budget:	\$15,000
			Expense to Date:	\$15,000
			Frequency of Reviews:	3 Years
			Next Review Date:	March 2006
	Status/ Comments:	The NPCC Area control rooms have implemented the software package incorporating the Solar Terrestrial Dispatch notification/alert process. No need for any revisions at this time.		
	NPCC Contact:	Jerry Mosier		

Item	Name	Assignment		
CO-10	Operational Tools Working Group	The 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 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.	2004 Budget:	\$15,000
			Expense to Date:	\$4,550
			Completion Date:	December 2004
	Status/ Comments:	CO-10 meetings were held in August, September and October. Facilitated Transaction Checkout has been implemented at NYISO, IMO and ISO-NE. It is in testing in Quebec and under review at the Maritimes, PJM and MISO. Presentations on Facilitated Checkout (background, benefits, process, time savings, cost savings, status) have been provided to NERC RCWG/ORS, TFCO, CO-8 and will be provided to RCC. CO-10 is addressing Blackout Recommendation 10 (existing operational tools and best practices). Direction on how to address this is being developed through the NERC Real-Time Tools Best Practices Task Force. CO-10 is represented directly on that Task Force.		
	NPCC Contact:	Paul Roman		

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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, the New York ISO, the Pennsylvania-New Jersey-Maryland Interconnection Association and the Michigan Electric Coordinated Systems.	2004 Budget:	\$15,000
			Expense to Date:	\$0
			Completion Date:	December 2004
	Status/ Comments:	LESPWG has resumed activities and met on Sept. 10. The Working Group will provide input at FERC on a Lake Erie tag analysis study that is being conducted by FERC Staff.		
	NPCC Contact:	Paul Roman		

Item	Name	Assignment		
ATCWG (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.	2004 Budget:	\$5,000
			Expense to Date:	\$3,900
			Completion Date:	December 2004
	Status/ Comments:	The CO-13 (f/n/a/ the ATCWG) Working Group is coordinating 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.		
	NPCC Contact:	Guy Zito		

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Item	Name	Assignment		
DCWG	Data Collection 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.	2004 Budget:	\$5,000
			Expense to Date:	\$3,025
			Completion Date:	December 2004
	Status/ Comments:	Currently under development is an EIA Form 411 data collection system that will be internet based. The DCWG commented on the proposed expansion of the EIA 411 data collection effort to the OMB (Office of Management and Budget) in October 2004.		
	NPCC Contact:	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.	2004 Budget:	\$5,000
			Expense to Date:	\$0
			Completion Date:	December 2004
	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. The document is currently in its final stage of execution by NY, New England, and PJM and has been presented to the respective Area's stakeholders. NPCC has developed and is maintaining a website for the effort.		
	NPCC Contact:	Guy Zito		

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Item	Name	Assignment		
IRCWG	Inter-Control Area Restoration Coordination Working Group	IRCWG addresses the issue of ensuring appropriate operation of key system restoration facilities and their critical components.	2004 Budget:	\$10,000
			Expense to Date:	\$9,050
			Completion Date:	December 2004
	Status/ Comments:	The report of the Inter-Control Area Restoration Coordination Working Group (CO-11), "Restoration of the NPCC Areas Following the Power System Collapse of August 14, 2003," was approved for release by the RCC at its meeting of July 14, 2004. The IRCWG is currently assisting the NPCC Compliance Monitoring and Assessment Subcommittee in its evaluation of the 2003 trial program of compliance with Section 4.10 of A-03, "Emergency Operation Criteria," which defines the testing requirements for key facilities and critical components associated with restoration. The IRCWG is also working jointly with the CMAS to develop expanded compliance templates to ultimately incorporate these same testing requirements into NPCC Document A-08, "NPCC Reliability Compliance and Enforcement Program."		

NPCC Contact: Jerry Mosier

Item	Name	Assignment		
CO-12	Summer Security Assessment Working Group	Review the overall reliability of the generation and transmission system in the NPCC Region for the 2004 Summer.	2004 Budget:	\$15,000
			Expense to Date:	\$5,800
			Completion Date:	December 2004
	Status/ Comments:	A 2004/05 Winter Assessment is underway.		
	NPCC Contact:	Paul Roman		

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Item	Name	Assignment		
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.	2004 Budget:	\$60,000
			Expense to Date:	\$8,429
			Completion Date:	December 2004
	Status/ Comments:	At their September 28 th meeting, the TFCP approved the Working Group's Summer 2005 Multi-Area Probabilistic Reliability Assessment Scope and Schedule; it will be presented to the RCC for approval at their November meeting. The Review of Interconnection Assistance Reliability Benefits and the Ontario Area Interim Review of Resource Adequacy was approved by the RCC at their July meeting.		
	NPCC Contact:	Phil Fedora		

Item	Name	Assignment		
CP- 2004	Summer 2004 Multi-Area Probabilistic Reliability Assessment	Assess NPCC Area reliability for the year 2004 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.	2004 Budget:	\$55,000
			Expense to Date:	\$21,250
			Completion Date:	May 2004
	Status/ Comments:	The study was completed on time and approved by the TFCP on April 27 th ; public release of results was held by a NPCC Media Event on May 6 th .		
	NPCC Contact:	Phil Fedora		

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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).	2004 Budget:	\$25,000
			Expense to Date:	\$45,029
			Completion Date:	December 2004

Status/ Comments: The report was approved by the RCC at their July meeting. At the request of New Brunswick, the TFCP asked the CP-8 Working Group to study the impact of the proposed second NE-NB tie line by the end of the year.

NPCC Contact: Phil Fedora

Item	Name	Assignment		
CP-9	Review of NERC Reliability Standards Working Group	Review the Standards Authorization Requests and Reliability Standards as well as participate in the NERC process. Educate and inform NPCC Membership of developments.	2004 Budget:	\$25,000
			Expense to Date:	\$12,450
			Completion Date:	December 2004

Status/ Comments: The CP-9 Working Group is focusing on the review of the Version '0' and Version 1 NERC Reliability Standards (as they are developed) and 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.

NPCC Contact: Guy Zito

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Item	Name	Assignment		
CP-10	Collaborative Planning Initiative	The CP-10 Working Group is tasked with determination of the effects of proposed new generation and transmission in the year 2006. The group initially studied the effects the additions have on existing bottlenecks as well as any new ones. The study then focused on various scenarios as defined by working group members to determine the impacts on those bottlenecks identified.	2004 Budget:	\$10,000
			Expense to Date:	\$0
			Completion Date:	December 2004
	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 was presented and accepted by the RCC at their July 2004 meeting.		
	NPCC Contact:	Guy Zito		

Item	Name	Assignment		
RPF	Regional Planning Forum	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.	2004 Budget	\$50,000
			Expense to Date:	\$3,827
			Completion Date:	December 2004
	Status/ Comments:	PowerWorld Corp. conducted a training session for Simulator version 10 on July 7-8 at NPCC. New York ISO, ISO New England and NPCC staff attended.		
	NPCC Contact:	Phil Fedora		

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Item	Name	Assignment		
CP-11	<i>NPCC Basic Criteria For Design and Operation Of Interconnected Power Systems Review Working Group</i>	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 2004 meeting.	2004 Budget	\$10,000
			Expense to Date:	\$450
			Completion Date:	December 2004
	Status/ Comments:	The CP-11 Working Group met on October 7 th and reviewed the current NPCC Bulk Power System (BPS) definition and agreed that it is appropriate. CP-11 agreed to develop a methodology for determining elements of the BPS as currently defined. The next meeting is scheduled for November 12, 2004.		
	NPCC Contact:	Stan Kopman		

Item	Name	Assignment		
JGWG	Joint Glossary Working Group	Maintain the NPCC Glossary of Terms (Document A-7) and to expand the Glossary to include new terms as necessary.	2004 Budget:	\$5,000
			Expense to Date:	\$0
			Next Review Date:	December 2004
	Status/ Comments:	This activity has been taken over the by CP-11 Working Group.		
	NPCC Contact:	Stan Kopman		

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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.	2004 Budget:	\$10,000
			Expense to Date:	\$4,350
			Completion Date:	December 2004
	Status/ Comments:	Year 2003 Base Case Development is complete and Year 2004 development effort is currently underway.		
	NPCC Contact:	Donal Kidney		

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.	2004 Budget:	\$20,000
			Expense to Date:	\$12,550
			Completion Date:	December 2004
	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.		
	NPCC Contact:	Donal Kidney		

Item	Name	Assignment		
TRS	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
			2004 Budget:	\$50,000
			Frequency of Reviews:	3 years
			Completion Date:	May 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. Currently underway.		
	NPCC Contact:	Donal Kidney		

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Item	Name	Assignment		
ISTWG	Infrastructure Security and Technology Working Group	Periodic workshops to address timely issues and update member system personnel associated with the provision of on-line computer systems for operation of the power system.	2004 Budget:	\$5,000
			Expense to Date:	\$0
			Last Workshop:	May 16, 2002
	Status/ Comments:	A Workshop has been scheduled for October 26-27, 2004 in Boston.		
	NPCC Contact:	Frantz Roc		

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.	2004 Budget:	\$10,000
			Expense to Date:	\$4,300
			Completion Date:	December 2004
	Status/ Comments:	NPCC is conducting the testing for 2004/05 Winter study. The study is complete. The report will be presented to the JIRC in November.		
	NPCC Contact:	Donal Kidney/Paul Roman		

Item	Name	Assignment		
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.	2004 Budget:	\$5,000
			Expense to Date:	\$0
			Completion Date:	December 2004
	Status/ Comments:	The MMWG was directed to review and update the existing data release policies for power flow and dynamic data and models. MMWG is assembling twelve load flow models that constitute the 2005 base case library and five dynamics library cases. Development is currently on schedule.		
	NPCC Contact:	Donal Kidney		

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Item	Name	Assignment		
NERC-ISN	Interregional Security Network (ISN)	The ISN allows for the exchange of security data between Security Coordination Centers.	2004 Budget:	\$120,000
			Expense to Date:	\$108,209
			Completion Date:	December 2004
	Status/ Comments:	Expense represents monthly NERC network charge to provide ISN services for ISO New England, the New York ISO, the IMO, TransEnergie and New Brunswick.		
	NPCC Contact:	Frantz Roc		

Item	Name	Assignment		
SEDRWG	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 better be able to quickly establish the sequence of events after any future wide area disturbance.	2004 Budget:	\$12,000
			Expense to Date:	\$4,650
			Completion Date:	April 2005
	Status/ Comments:	The SEDRWG has developed a draft report that provides background materials, identifies issues and makes recommendations. A report will be presented at the RCC November 3-4, 2004 meeting.		
	NPCC Contact:	Quoc Le		