

U.S. – Canada Blackout Report NYSRC Actions on Report Recommendations

Report Recommendation	Source Of Status Reports	NYSRC Action	NYSRC Committee Responsibility	Status*
<i>Group I. Institutional Issues Related to Reliability</i>				
1. Make reliability standards mandatory and enforceable, with penalties for noncompliance.	Congress, FERC	Monitor National reliability legislation.	EC	Congress has not yet enacted needed energy legislation. The US & Canada have created a Bilateral ERO Oversight Group to provide guidance & input to NERC and Regional Councils. On 4/19/04 FERC affirmed NERC Standards are minimum requirements and declared that adherence to reliability standards are required under its Open Access Transmission Tariff.
2. Develop a regulator-approved funding mechanism for NERC and the regional reliability councils, to ensure their independence from the parties they oversee.	FERC, NERC, NPCC, NYPS	Monitor funding mechanism and determine impact on NYSRC.	EC	The NYISO initiated discussion with the IRC in Nov. 2004. Further action is dependent on energy legislation and establishment of an ERO.
3. Strengthen the institutional framework for reliability management in North America.	FERC, DOE	Determine impact on NYSRC.	EC	A NERC Regional Managers Committee report which examined the future role of the Regional Reliability Councils was approved by the NERC Members on 10/14/04. MAAC, MAIN, ECAR, and MRO are consolidating into one council. A follow-up report, approved on 5/2/05, stated the fundamental principles

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				necessary for organizations to perform reliability functions.
4. Clarify that prudent expenditures and investments for bulk system reliability (including investments in new technologies) will be recoverable through transmission rates.	FERC, NYPSC, NYISO	Monitor FERC, NYPSC, and NYISO actions.	EC	On 4/19/04 FERC reaffirmed its policy that it will approve applications to recover prudent costs necessary to ensure reliability. Will be filed as part the NYISO Comprehensive Planning Process.
5. Track implementation of recommended actions to improve reliability. (NERC #5)		Monitor NERC, NPCC, NYISO, NYPSC, and federal actions on Blackout report recommendations.	EC, RRS, RCMS	The Bilateral Group has designated a team to work with NERC to track the status of the DOE recommendations.
6. FERC should not approve the operation of new RTOs or ISOs until they have met minimum functional requirements.	FERC	Monitor FERC action.	EC	FERC has reaffirmed that it will take reliability into account before authorizing new ISOs and RTOs to become operational.
7. Require any entity operating as part of the bulk power system to be a member of a regional reliability council if it operates within the council's footprint.	FERC	Monitor FERC action.	EC	Completed. The NYISO is part of NPCC.
8. Shield operators who initiate load shedding pursuant to approved guidelines from liability or retaliation.	NYPSC	Monitor legislative and regulatory actions.	EC	Currently under development by the NYISO.
9. Integrate a "reliability impact" consideration into the regulatory decision-making process.	FERC, NYPSC	Monitor FERC, NYISO and NYPSC actions.	EC	Completed. FERC issued an order in Dec. 2004 and has created a new reliability division to ensure reliability.
10. Establish an independent source of reliability performance information.	DOE	Monitor DOE action.	RCMS	Under consideration.
11. Establish requirements for collection and reporting of data needed for post-blackout analyses.	FERC	Monitor FERC action.	RCMS	On 5/3/05 the NERC BOT approved recommendations from the blackout investigation

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				team to develop standards covering disturbance monitoring equipment.
12. Commission an independent study of the relationships among industry restructuring, competition, and reliability.	DOE	Monitor DOE action.	EC	In progress. NERC will participate in a study on the subject.
13. DOE should expand its research programs on reliability-related tools and technologies.	DOE	Monitor DOE action.	EC	In progress.
14. Establish a standing framework for the conduct of future blackout and disturbance investigations.	US Government	Monitor federal action.	EC	In progress. NERC has developed blackout and disturbance response procedures. A DOE report is under preparation.
<i>Group II. Support and Strengthen NERC's Actions of February 10, 2004</i>				
15. Correct the direct causes of the August 14, 2003 blackout. (NERC #1)	NERC, NPCC, NYISO	Monitor NERC, NPCC & NYISO actions.	RRS	Completed. NPCC verified that NYISO meets identified mitigation measures.
16. Establish enforceable standards for maintenance of electrical clearances in right-of-way areas. (NERC #4)	NERC, NPCC	Following review of NERC & NPCC actions, determine the need for NYSRC minimum line clearance criteria.	RRS	NERC is developing transmission vegetation management standards, for which RRS is providing comments. In January 2004 NERC started collecting vegetation-related outage data.
17. Strengthen the NERC Compliance Enforcement Program. (NERC #2)	NERC, NPCC	Review new NERC Compliance Templates (recently approved by the NERC BOT) and modify NYSRC Compliance Templates, as required, following NYSRC actions related to NERC #4, 6-9, and 11-14.	RCMS	Completed. The NYSRC has approved the "NYISO Response to the NYSRC on the Blackout", pending minor revisions. NPCC reports no significant violations to date. NERC has implemented improvements to its compliance program.
18. Support and strengthen NERC's Reliability Readiness Audit Program. (NERC #3)	NERC, NYISO	Review results of April 14-15 NYISO reliability readiness audit, and take action as required.	RCMS	Completed. RCMS reviewed NERC's July 2004 NYISO readiness audit report and found no

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				rule violations. NEC plans additional audits in 2005.
19. Improve near-term and long-term training and certification requirements for operators, reliability coordinators, and operator support staff. (NERC #6)	NERC, NPCC	Following review of NERC & NPCC actions, determine the need for new NYSRC criteria requiring enhanced operator training for responding to system emergencies.	RRS	NERC will implement in 2005 new operating training standards and accreditation requirements. NYISO has verified compliance with NERC recommendations. RRS has included enhanced NYISO operator restoration training requirements in PRR 76.
20. Establish clear definitions for normal, alert and emergency operational system conditions. Clarify roles, responsibilities, and authorities of reliability coordinators and control areas under each condition. (NERC #9)	NERC, NPCC	Following review of NERC & NPCC actions, determine the need for new NYSRC criteria specifying the NYISO's Reliability Coordinator and Control Area responsibilities and authorities.	RRS	In progress. NERC is currently revising these definitions.
21. Make more effective and wider use of system protection measures. (NERC #8)	NERC, NPCC	Following review of NERC & NPCC actions, determine the need for new NYSRC criteria to address enhanced under-frequency load shedding capability adequacy and limiting the propagation of cascading failures.	EC/RRS	NPCC TFCP developed a white paper on the merits of controlled separation. Messrs. Clagett, Smith and Loehr provided TFCP a response to the paper and plan to meet with TFCP in May. TFCP will translate recommendations in this white paper into a TFCP work plan. NERC is developing SARs for new protection and control standards.
22. Evaluate and adopt better real-time tools for operators and reliability coordinators. (NERC #10)	NERC	Monitor NERC action. Likely, there is no requirement for a new NYSRC rule.	RRS	NERC has established a TF to focus on tools for situational awareness. Work is expected to be complete by late 2005. NERC is considering a

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				“defense in depth” measurement, alarming, and backstop system. Wide Area ACE displays were installed in the NYISO control room for the Summer of 2004.
23. Strengthen reactive power and voltage control practices in all NERC regions. (NERC #7)	NERC, NPCC, NYISO	Following review of NERC, NPCC and NYISO actions, determine the need for new NYSRC criteria to address reactive power, voltage control and stability issues [PRR #8].	RRS	NERC is reviewing effectiveness of existing standards on reactive power and voltage control. The NYISO Phase I Reactive Study has been completed. Phase II is underway with completion in December 2005. PRR #8 development is awaiting NYISO Reactive Study completion and any modifications of NERC & NPCC standards.
24. Improve quality of system modeling data and data exchange practices. (NERC #14)	NERC, NPCC	Following review of NPCC action, determine the need for modifying existing NYSRC criteria to improve the quality of system modeling data.	RRS	RRS has prepared PRRs 73, 74, and 77 for the improvement of system modeling data. Regions are reviewing their models and procedures for model validation and benchmarking.
25. NERC should reevaluate its existing reliability standards development process and accelerate the adoption of enforceable standards.	NERC	Participate in NERC process for developing Version 0 Reliability Standards. (RRS)	RRS	Completed. NERC has adopted the Version 0 Standards and has set priorities concerning development of new standards.
26. Tighten communications protocols, especially for communications during alerts and emergencies. Upgrade communication system hardware where appropriate. (NERC #9)	NERC, NPCC, NYISO	Following review of NERC, NPCC and NYISO actions, determine the need for new NYSRC criteria specifying the NYISO’s Reliability Coordinator and Control Area responsibilities and authorities.	RRS	Completed. NERC approved revisions to standards to clarify the functions, responsibilities and authorities of

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				reliability coordinators and control areas. The NYISO has completed its review. PRR 67 has been adopted.
27. Develop enforceable standards for transmission line ratings. (NERC #13)	NERC, NPCC	Following review of NERC and NPCC actions, determine the need to develop more stringent NYSRC operating and planning criteria, including criteria for transmission line ratings.	RRS	NERC is developing a facility rating standard for which NYSRC has provided comments. NPCC is addressing the NPCC BPS and related definitions and which facilities are considered BPS in A-10. RRS is considering a new definition for "Local Area".
28. Require use of time-synchronized data recorders. (NERC #12)	NERC, NPCC, FERC	Following review of NERC, NPCC and FERC actions, determine the need for new NYSRC criteria for requiring time-synchronized system data recorders.	RRS	NERC is developing a SAR to upgrade its Version 0 disturbance monitoring standard. PRR 69 was posted a third time for comment.
29. Evaluate and disseminate lessons learned during system restoration. (NERC #11)	NERC, NPCC, NYISO	Following review of NERC, NPCC and NYISO actions, determine the need to modify existing NYSRC blackstart capability and system restoration criteria.	RRS/RCMS	NPCC and NYISO have issued Restoration Reports on the 8/14/03 Blackout. The NYISO has also issued its final Blackout Report. RCMS & RRS have reviewed these reports to examine the need to expand existing system restoration rules. RRS is preparing PRR 76 to enhance system restoration rules which factors in the lessons derived from the Blackout. Also, NPCC is revising A-3 to recognize

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				restoration issues.
30. Clarify criteria for identification of operationally critical facilities, and improve dissemination of updated information on unplanned outages.	NERC, NYISO	Following review of NERC & NYISO actions, determine the need for new NYSRC criteria for identifying critical facilities and improving information on unplanned outages.	RRS	NPCC protocols exist. NERC is considering criteria for identifying and disseminating information regarding operationally critical facilities.
31. Clarify that the transmission loading relief (TLR) process should not be used in situations involving an actual violation of an Operating Security Limit. Streamline the TLR process.	NERC	Monitor NERC action.	RRS	Completed. NERC has revised its standards to address this issue. The NYISO does not use TLR.
<i>Group III. Physical and Cyber Security of North American Bulk Power Systems</i>				
32. Implement NERC IT standards.	NYISO	Monitor NYISO action.	RCMS	Completed by the NYISO in second quarter 2004. The NERC permanent cyber security standard, when adopted later in 2005, will address this issue.
33. Develop and deploy IT management procedures.	NYISO	Monitor NYISO action.	RCMS	Completed. The NYISO implemented this recommendation commensurate with Feb. 2005 SMD2 in service. NYISO meets DOE criteria.
34. Develop corporate-level IT security governance and strategies.	NYISO	Monitor NYISO action.	RCMS	Completed. IT Risk Mgmt Procedure and Security Matrix implemented by the NYISO.
35. Implement controls to manage system health, network monitoring, and incident management.	NYISO	Monitor NYISO action.	RCMS	Completed. NYISO implementation of BMC, IDS on-going production systems. The NERC permanent cyber security standard will complete this issue.
36. Initiate U.S.-Canada risk management study.	Fed. Gov.	Monitor federal action.	RCMS	NERC is preparing a

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				report on risk assessment methodologies. Regional discussion to be initiated at the Winter 2005 NIMOCC meeting.
37. Improve IT forensic and diagnostic capabilities.	NYISO	Monitor NYISO action.	RCMS	Completed. See Recommendation #35 response. NYISO meets DOE criteria.
38. Assess IT risk and vulnerability at scheduled intervals.	NYISO	Monitor NYISO action.	RCMS	Completed. On-going NYISO efforts by IT & Internal Audit. NYISO meets DOE criteria. NERC has developed guidelines related to the security, safety, and reliability of PCA and SCADA systems.
39. Develop capability to detect wireless and remote wireline intrusion and surveillance.	NYISO	Monitor NYISO action.	RCMS	Completed. Full implementation by the NYISO. NYISO meets DOE criteria. A NERC guideline on intrusion detection is complete.
40. Control access to operationally sensitive equipment	NYISO	Monitor NYISO action.	RCMS	Completed. The NYISO uses electronic cards to specifically authorized individuals. A NERC security guideline is complete.
41. NERC should provide guidance on employee background checks.	NERC	Monitor NERC action.	RCMS	Completed. A NERC security guideline is complete. NYISO review is complete.
42. Confirm NERC ES-ISAC as the central point for sharing security information and analysis.	NERC	Monitor NERC action.	RCMS	Completed.
43. Establish clear authority for physical and cyber security.	NYISO	Monitor NYISO action.	RCMS	Completed by the NYISO in late 2003. The NERC permanent cyber security standard will address this issue.

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44. Develop procedures to prevent or mitigate inappropriate disclosure of information.	NYISO	Monitor NYISO action.	RCMS	Completed. NYISO policies cover this recommendation. A NERC security guideline has been developed.

* Sources for this information include the following reports - NYISO Reports: *Blackout Tracking Program Updates*; NERC Status Reports, including a status report dated 7/14/05; NPCC Monthly Status Reports; and NYSRC RRS and RCMS status reports.

Committee/Subcommittee NYSRC Action Assignments: EC – NYSRC Executive Committee; RRS – Reliability Rules Subcommittee; RCMS – Reliability Compliance Monitoring Subcommittee

Bold Recommendation No: Change in status since previous report.