

## **ISO New England Operating Procedure No. 10 Emergency Incident and Disturbance Notifications**

Effective Date: May 21, 2008

### REFERENCES:

1. U.S. OMB No. 1901-0288 -Emergency Incident and Disturbance Report. (Reporting forms are available at <ftp://ftp.eia.doe.gov/pub/electricity/eiafor417.doc>)
2. Title 10 of Code of Federal Regulations - Sections 205.350 through 205.353.
3. NERC Standard CIP – 001 - Sabotage Reporting.
4. NERC Standard EOP – 004 – Disturbance Reporting.
5. NPCC Document B-13 - Guide for Reporting System Disturbances
6. NPCC Document C-17 - Procedures for Monitoring and Reporting Critical Operating Tool Failures
7. ISO New England Operating Procedure No. 20 – Analysis and Reporting of Power System Emergencies (OP-20).
8. NERC Standard TOP-007 - Reporting SOL and IROL Violations
9. System Operating Procedure -SOP-RTMKTS.0125.0020 Communicate with Internal and External Parties

Local Control Center Instruction No:

CONVEX:	CONVEX Operating Instruction # 0010 – Disturbance and Significant Incident Processing and Reporting
MAINE:	Maine Operating Procedure No. 10 - Power System Emergency Reporting Procedures
NEW HAMPSHIRE:	OP-0010 - Power System Emergency Reporting Procedures
NSTAR	NSTAR OP-10 Emergency Incident and Disturbance Notifications
REMVEC II:	REMVEC II Operating Procedure No. 10 - State Regulatory Agency Reports of Major System Disturbance/Outage/Incident
VELCO:	VELCO Operating Procedure OP-10

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Appendix A - Federal and State Regulatory Agency Reports of Major System Disturbance/Outage/Incident

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## I. INTRODUCTION

Federal and state government agencies, North American Electric Reliability Corporation (NERC), Northeast Power Coordinating Council Inc. (NPCC), ISO New England, Local Control Centers, and Market Participants shall be notified of system conditions or disturbances that impact the reliability of the bulk power system as well as physical, cyber and communication system sabotage / attack events. This Procedure establishes the reporting criteria, assigns reporting responsibility, and describes the nature and timing of required reports for:

- ISO New England
- Local Control Centers
- Market Participants
- NPCC
- Department of Energy (DOE)
- NERC (Includes Department of Homeland Security)
- Federal Bureau of Investigation (FBI)
- State Regulatory Agencies

Market Participants shall have in place processes and procedures to immediately report system conditions or disturbances that impact the reliability of the bulk power system as well as physical, cyber and communication system sabotage / attack events within their operation and as required report to the following:

- ISO New England
- Local Control Center
- State Regulatory Agencies (Local FBI Agency, state and local agencies)
- DOE

Local Control Centers shall have in place processes and procedures to immediately report system conditions or disturbances that impact the reliability of the bulk power system as well as physical, cyber and communication system sabotage / attack events within their operation and as required report to the following:

- ISO New England
- Applicable Market Participants
- State Regulatory Agencies (Local FBI agency, state and local agencies)
- DOE

NERC CIP Standards, require ISO, Local Control Centers and Market Participants to reduce risks to the reliability of the electric power system from any compromise of critical cyber assets. Physical, cyber and communication system sabotage / attack events that impact electric power system adequacy or reliability may include but are not limited to:

- Criminal or Malicious activities
- Illicit activities to gain detailed system information
- Probing of physical or cyber security system information
- Suspicious activities including picture or note taking
- Threats or attacks
- Cyber and communication disruptions

Contact information for assistance in reporting can be found in OP 10 Appendix A - Federal and State Regulatory Agency Reports of Major System Disturbance/Outage/Incident.

## **II. GENERAL REQUIREMENTS AND REPORTING GUIDANCE**

ISO New England, Local Control Centers, and Market Participant shall:

- Follow the reporting communication path described in OP 10 Appendix B – Communications and Reporting Matrix
- Report system conditions or disturbances as well as physical, cyber and communication system sabotage / attack events that impact the reliability of the bulk power system and as required, assign scribes to document the events
- Provide status updates to appropriate parties

ISO shall determine the extent of impact on the reliability of the bulk power system within the New England Balancing Authority Area and adjacent power systems and inform the Local Control Centers, adjacent power systems and Market Participants as necessary.

ISO shall make notifications using the Reliability Coordinator Information System (RCIS) during real-time events involving DOE, NERC and NPCC reports.

ISO shall communicate incidents to appropriate parties in accordance with SOP-RTMKTS.0125.00.0020 Communicate with Internal and External Parties.

### III. DEPARTMENT OF ENERGY (DOE) REPORTING

This section describes the criteria for filing reports with the DOE. Reporting responsibilities for the ISO and Market Participants are described.

#### A. REPORTING CRITERIA

- The DOE requires that the ISO and Market Participants (Including Computer, Physical, and Telecommunication Security Support Centers) submit **mandatory** reports promptly to the DOE Headquarters Operation Center for system conditions or disturbances that impact the reliability of the bulk power system as well as physical, cyber and communication system sabotage / attack events:
  - **Within 60 minutes** of the time the incident begins report an Emergency Alert to the DOE Operation Center for system conditions or disturbances **that impact** the reliability of the bulk power system including **Actual** physical, cyber and communication system attack events as described in Form OE-417 at:

<ftp://ftp.eia.doe.gov/pub/electricity/eiafor417.doc>
  - **Within 6 hours** of the **time the incident** begins report a Normal Alert to the DOE Operation Center for system conditions or disturbances that impact the reliability **of the bulk** power system including **Suspected** physical, cyber and **communication** system events as described in Form OE-417 at:

<ftp://ftp.eia.doe.gov/pub/electricity/eiafor417.doc>
  - **Within 48 hours** of the time the incident begins report any updates and submit a Final report to the DOE Operation Center as described in Form OE-417 at:

<ftp://ftp.eia.doe.gov/pub/electricity/eiafor417.doc>
- When DOE reporting is performed, NERC and NPCC shall also be notified. NERC and NPCC shall be contacted through the ISO
- The DOE may require additional reporting if a special investigation is required
- Reports to the DOE can be performed 24 hours a day, 7 days a week by using the following methods:
  1. Voice (202) 586-8100
  2. Fax (202) 586-8485
  3. E-mail [doehqeoc@hq.doe.gov](mailto:doehqeoc@hq.doe.gov)

Form OE-417 contains the reporting requirements, quick reference guide, and glossary of terms and should be referenced for any reporting requirement changes. Reports shall be made for the following:

- Actual physical attack that causes major interruptions or impacts to critical infrastructure facilities or to operations
- Actual cyber or communications attack that causes major interruptions of electrical system operations
- Complete operational failure or shut-down of the transmission and/or distribution electrical system
- Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system
- Uncontrolled loss of 300 MW or more of firm system loads for more than 15 minutes from a single incident
- Load shedding of 100 MW or more implemented under emergency operational policy
- System-wide voltage reductions of 3 percent or more
- Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system
- Suspected physical attacks that could impact electric power system adequacy or reliability; or vandalism which target components of any security systems
- Suspected cyber or communications attacks that could impact electric power system adequacy or vulnerability
- Loss of electric service to more than 50,000 customers for 1 hour or more
- Fuel supply emergencies that could impact electric power system

#### **B. MARKET PARTICIPANT REPORTING**

Market Participants shall report incidents as required by the DOE to the ISO, their Local Control Center and applicable state regulatory agencies, in addition to the DOE. All reporting to the ISO shall be to the Control Room, Operations Shift Supervisor by telephone.

Market Participants shall notify ISO New England when fuel supply emergencies that could impact electric power system adequacy or reliability occur. The ISO and the Market Participant together shall determine if the resource availability will affect the adequacy or reliability of the bulk power system. If this limited availability affects the adequacy or reliability of the bulk power system, the Market Participant shall notify the DOE in accordance with Form OE-417 requirements.

### **C. LOCAL CONTROL CENTER REPORTING**

The Local Control Centers shall report incidents as required by the DOE to the ISO, applicable Market Participants and applicable state regulatory agencies, in addition to the DOE. All reporting to the ISO shall be to the Control Room, Operations Shift Supervisor by telephone.

### **D. ISO REPORTING**

ISO shall report incidents as required by the DOE to the Local Control Centers, NPCC and to applicable Market Participants in addition to the DOE. The ISO shall report incidents required by the DOE to NERC using the DOE form and emailing the information to: [esisac@nerc.com](mailto:esisac@nerc.com).

ISO shall make notifications using the RCIS during real-time events involving DOE reports.

ISO shall forward DOE reports to NPCC by e-mailing Jerry Mosier [jmosier@npcc.org](mailto:jmosier@npcc.org) or faxing Jerry Mosier at 212-302 2782.

ISO shall submit a letter to the DOE following conclusion of an export of emergency energy to either New Brunswick (NB) or Hydro-Quebec (HQ). The ISO New England Manager – Operations, or their designee, is responsible for submitting this report, within five (5) days. The report will indicate: the gross amount of kilowatt-hours of emergency electric energy delivered, the consideration received thereof, the maximum hourly rate of transmission, in kilowatts, and the receiving Balancing Authority Area (i.e. NB or HQ). If no emergency energy transactions are made in a given year, ISO will file a report indicating “no activity” for the previous year.

ISO shall communicate as required by the DOE to appropriate parties in accordance with SOP-RTMKTS.0125.00.0020 Communicate with Internal and External Parties.

## **IV. STATE REGULATORY AGENCY REPORTING**

This section describes the criteria for filing reports with the state regulatory agencies.

### **A. REPORTING CRITERIA**

Any system conditions or disturbances that impact the reliability of the bulk power system as well as physical, cyber and communication system sabotage / attack events requiring a report to the DOE, must also be reported to appropriate state regulatory agencies. Information provided should be identical to that provided to the DOE as outlined in the DOE Form OE-417 report format.

### **B. MARKET PARTICIPANT REPORTING**

The Market Participant shall report incidents to the ISO and their respective Local Control Center, in addition to the state regulatory agencies. All reporting to the ISO shall be to the Control Room, Operations Shift Supervisor by telephone. State reporting requirements for Market Participants are the responsibility of the individual Market Participants.

Market Participants shall establish communication contacts, as applicable, with local Federal Bureau of Investigation (FBI) or Royal Canadian Mounted Police (RCMP) officials and report to them as appropriate given their circumstances.

The ISO shall provide Market Participants with appropriate bulk power supply system information required to enable proper incident reports to the state agencies.

### **C. LOCAL CONTROL CENTER REPORTING**

The Local Control Centers shall determine the need for reports and report incidents to the ISO, in addition to the state regulatory agencies. All reporting to the ISO shall be to the Control Room, Operations Shift Supervisor by telephone.

The ISO shall provide the Local Control Centers with the bulk power supply system information required to enable proper incident reports to the state agencies.

### **D. ISO REPORTING**

The ISO shall report to state regulatory agencies using the Director, Media and Corporate Communications, the Director of External Affairs or their designees.

The ISO Control Room, Operations Shift Supervisor shall report physical, cyber and communication system sabotage / attack events to the FBI by telephone.

ISO shall communicate to appropriate parties in accordance with SOP-RTMKTS.0125.00.0020 Communicate with Internal and External Parties.

## **V. NERC AND NPCC REPORTING**

This section of the Procedure describes the reporting requirements to NERC and NPCC. It should be noted that NERC communicates incident reports from its Reliability Coordinators (ISO New England) to the Federal Bureau of Investigation (FBI) - National Infrastructure Protection Center (NIPC).

### **A. REPORTING CRITERIA**

NERC requires reporting procedures for disturbances or unusual occurrences. NERC also requires reporting procedures for physical, cyber and communication system sabotage / attack events as well as the communication of the incident, response guidelines, listing of personnel to contact and method of reporting.

NPCC requires reporting of unforeseen failures of essential operating tools and systems to monitor, assess and respond to power system problems. A critical failure mode occurs when there is an unplanned loss of critical operational real-time data collection or any key element of the primary reliability tool set for situational awareness based on the interpretation of the current NPCC Criteria and NERC standards. This failure will impede the ability of the RC staff to monitor and assess the reliability of the Bulk Power System (BPS). Furthermore this will reduce the ability of the RC to reliably monitor conditions and to prepare or re-prepare for or from system

contingencies. NPCC requires, at a minimum, that the ISO have monitoring and analysis tools and systems in place and report unforeseen failures of such tools and systems, including:

- Primary voice communication system
- Uninterruptible power supply (UPS)
- Primary reliability tool set (generally, the Energy Management System (EMS)), including:
  - -Telemetry data systems (including SCADA and ICCP-specific data)
  - -Alarm and visualization tools
  - -Network topology processor
  - -State estimator
  - -Contingency analysis
  - -All other operational tools deemed by the ISO to be essential for monitoring and analyzing the BPS to allow reliable operation.
- NERC and NPCC reports shall be made when DOE reports are made
- When NERC reporting is performed, NPCC shall also be notified
- NERC reports shall be made for the following:
  - The loss of a bulk power transmission component that significantly affects the integrity of the interconnection system operation
  - The occurrence of an interconnected system separation or system islanding or both
  - Any System Operator or Operator action resulting in:
    - Sustained voltage excursions equal to or greater than  $\pm 10\%$ , or
    - Major damage to power system components, or
    - An event other than those covered above that a System Operator in another electric transmission system might encounter and should be aware of, or
    - Failure, degradation, or a “near miss” of system protection, system protection schemes, remedial action schemes, or other operating systems that do not require system operator intervention
  - An Interconnection Reliability Operating Limit (IROL) violation as required in NERC Standard TOP-007 - Reporting SOL and IROL Violations. NERC Standard EOP-004-0 — Disturbance Reporting requests that reports be sent to [esisac@nerc.com](mailto:esisac@nerc.com)
  - An actual or suspected act of physical or cyber sabotage / attack or terrorism directed at the bulk electric system or its components with intent to deny service or disrupt or degrade the reliability of the bulk electric system

**B. MARKET PARTICIPANT REPORTING**

Market Participants shall notify the ISO for all incidents requiring a NERC and NPCC report. Market Participants shall also notify their respective Local Control Center when ISO has been requested to notify NERC and NPCC.

Market Participants shall make their operating personnel aware of sabotage / attack events on its facilities and or multi-site sabotage / attack affecting larger portions of the Interconnection and report these events as soon as possible to the ISO for NERC reporting.

**C. LOCAL CONTROL CENTER REPORTING**

Local Control Centers shall have procedures for sabotage / attack incidents, which include the recognition of sabotage / attack, communication of incident, response guidelines, and listing of personnel to contact and reporting of the incident.

Local Control Centers shall make their operating personnel aware of sabotage / attack events on its facilities and or multi-site sabotage / attack affecting larger portions of the Interconnection and report these events to ISO for NERC and NPCC reporting.

**D. ISO REPORTING**

ISO shall report incidents to NERC and NPCC. The ISO New England Manager Operations, or their designee, is responsible for submitting reports to NPCC.

ISO shall report sabotage / attack incidents to NERC using the Reliability Coordinator Information System (RCIS) or submit verbal communication reports using the NERC Reliability Coordinator Hotline if the RCIS is unavailable.

ISO shall make notifications using the RCIS during real-time events involving NERC and NPCC reports.

ISO shall communicate incidents to appropriate parties in accordance with SOP-RTMKTS.0125.00.0020 Communicate with Internal and External Parties.

**VI. EVENTS REQUIRING ANALYSIS AND REPORTS**

ISO New England shall conduct an analysis and prepare additional and follow up reports for system conditions or disturbances that impact the reliability of the bulk power system as well as physical, cyber and communication system sabotage / attack events in accordance with ISO New England Operating Procedure No. 20 – Analysis and Reporting of Power System Emergencies (OP-20).

The ISO Manager of Operations, or their designee, is responsible for communicating the conclusions to system conditions or disturbances that impact the reliability of the bulk power system as well as physical, cyber and communication system sabotage / attack events to the Local Control Centers, Reliability Committee and adjacent NPCC Balancing Authority Areas.

For unforeseen failures of essential operating tools and systems that meet the reporting criteria described in Section V.A above, event notification and a follow-up report is required if the failure state exists longer than the times indicated below.

- Loss of the ISO's Primary Voice Communication System for 10 minutes or longer is reportable.
- Loss of the ISO's Uninterruptible Power Supply (UPS) for 10 minutes or longer is reportable.
- Loss of the ISO's primary reliability tool set (EMS) and the associated reliability applications for 60 minutes or longer is reportable.
- Loss of an LCC's primary reliability tool set (EMS) and the associated reliability applications that results in an inability of that LCC to provide load shedding capability in response to an IROL in that LCC's area for 30 minutes or longer is reportable.
- Unplanned evacuation of the ISO Control Room to the BCC is always reportable.
- Unplanned evacuation of any of the Local Control Centers which would directly impact the ISO's ability to securely operate, monitor and/or respond to operating limit violations or contingencies is also reportable by the ISO.

For critical operating tool or system failures that exceed the specified times listed above, the ISO must:

- Complete and submit an event notification form (NPCC Document C-17, Appendix A) to the chairpersons of the following NPCC groups: (1) CO-8 (System Operations Managers Working Group); (2) CO-10 (Operational Tools Working Group); and (3) TFCO (Task Force on Coordination of Operation) by way of email, fax or priority postal service within 10 calendar days of the incident.
- Provide a follow-up summary of its internal report to the CO-10 Chairperson within 30 calendar days of the incident.

For operating tool or system problems that are determined by ISO to be minimal in nature or that do not exceed the timing guidelines above, there are no formal reporting requirements. However, in such cases, NPCC encourages its members to share their experiences for the mutual benefit of others via informal discussion at regular CO-10 meetings.

**OP 10 REVISION HISTORY**

**Document History** (This Document History documents action taken on the equivalent NEPOOL Procedure prior to the RTO Operations Date as well revisions made to the ISO New England Procedure subsequent to the RTO Operations Date.)

<b>Rev. No.</b>	<b>Date</b>	<b>Reason</b>
Rev 1	09/24/98	
Rev 2	10/03/03	
Rev 3	02/01/05	Updated to conform to RTO terminology
Rev 4	05/06/05	Update for initiation of VELCO Local Control Center and NERC Version 0 Standards
Rev 5	11/04/05	Revised to clarify initial reporting and communications
Rev 6	02/03/06	Updated for new DOE OE 417 Reporting Form
Rev 7	10/13/06	Revised SOP title referenced in this OP
Rev 8	04/13/07	Revised document and organization references
Rev 9	05/21/08	Annual Review by Procedure Owner. Updated for NSTAR becoming an LCC. Updated for revised NPCC Document C-17