

## Standard Development Timeline

This section is maintained by the drafting team during the development of the standard and will be removed when the standard is adopted by the NERC Board of Trustees (Board).

### Description of Current Draft

<u>Completed Actions</u>	<u>Date</u>
<u>Standards Committee approved Standard Authorization Request (SAR) for posting</u>	<u>January 25, 2023</u>
<u>SAR posted for comment</u>	<u>February 7 – March 8, 2023</u>

<u>Anticipated Actions</u>	<u>Date</u>
<u>45-day formal or informal comment period with ballot</u>	<u>July to September 2023</u>
<u>45-day formal or informal comment period with additional ballot</u>	<u>December 2023 to January 2024</u>
<u>45-day final ballot</u>	<u>February 2024</u>
<u>Board adoption</u>	<u>May 2024</u>

## **New or Modified Term(s) Used in NERC Reliability Standards**

This section includes all new or modified terms used in the proposed standard that will be included in the *Glossary of Terms Used in NERC Reliability Standards* upon applicable regulatory approval. Terms used in the proposed standard that are already defined and are not being modified can be found in the *Glossary of Terms Used in NERC Reliability Standards*. The new or revised terms listed below will be presented for approval with the proposed standard. Upon Board adoption, this section will be removed.

### **Term(s):**

None

## A. Introduction

1. **Title:** Event Reporting
2. **Number:** EOP-~~004-4004-5~~
3. **Purpose:** To improve the reliability of the Bulk Electric System (**BES**) by requiring the reporting of events by Responsible Entities.
4. **Applicability:**
  - 4.1. **Functional Entities:** For the purpose of the Requirements and the EOP-004 Attachment 1 contained herein, the following Functional Entities will be collectively referred to as “Responsible Entity.”
    - 4.1.1. Reliability Coordinator
    - 4.1.2. Balancing Authority
    - 4.1.3. Transmission Owner
    - 4.1.4. Transmission Operator
    - 4.1.5. Generator Owner
    - 4.1.6. Generator Operator
    - 4.1.7. Distribution Provider
5. **Effective Date:** See the Implementation Plan for EOP-~~004-4004-5~~.

## B. Requirements and Measures

- R1. Each Responsible Entity shall have an event reporting Operating Plan in accordance with EOP-~~004-4004-5~~ Attachment 1 that includes the protocol(s) for reporting to the Electric Reliability Organization and other organizations (e.g., the Regional Entity, company personnel, the Responsible Entity’s Reliability Coordinator, law enforcement, or governmental authority). [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]
- M1. Each Responsible Entity will have a dated event reporting Operating Plan that includes protocol(s) and each organization identified to receive an event report for event types specified in EOP-~~004-4004-5~~ Attachment 1 and in accordance with the entity responsible for reporting.
- R2. Each Responsible Entity shall report events specified in EOP-~~004-4004-5~~ Attachment 1 to the entities specified per their event reporting Operating Plan by the later of 24 hours of recognition of meeting an event type threshold for reporting or by the end of the Responsible Entity’s next business day (4 p.m. local time will be considered the end of the business day). [*Violation Risk Factor: Medium*] [*Time Horizon: Operations*]

*Assessment]*

- M2.** Each Responsible Entity will have as evidence of reporting an event to the entities specified per their event reporting Operating Plan either a copy of the completed EOP-~~004-4~~004-5 Attachment 2 form or a ~~DOE-OE~~DOE-417 form; and some evidence of submittal (e.g., operator log or other operating documentation, voice recording, electronic mail message, or confirmation of facsimile) demonstrating that the event report was submitted by the later of 24 hours of recognition of meeting an event type threshold for reporting or by the end of the Responsible Entity's next business day (4 p.m. local time will be considered the end of the business day).

## C. Compliance

### 1. Compliance Monitoring Process

#### 1.1. Compliance Enforcement Authority:

"Compliance Enforcement Authority" means NERC or the Regional Entity, or any entity as otherwise designated by an Applicable Governmental Authority, in their respective roles of monitoring and/or enforcing compliance with mandatory and enforceable Reliability Standards in their respective jurisdictions.

#### 1.2. Evidence Retention:

~~The Responsible Entity shall keep data or evidence to show compliance as identified below unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation:~~

The following evidence retention ~~periods~~period(s) identify the period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention period specified below is shorter than the time since the last audit, the Compliance Enforcement Authority may ask an entity to provide other evidence to show that it was compliant for the ~~full-time~~full-time period since the last audit.

~~The applicable entity shall keep data or evidence to show compliance as identified below unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation.~~

- Each Responsible Entity shall retain the current Operating Plan plus each version issued since the last audit for Requirement R1, and Measure M1.
- Each Responsible Entity shall retain evidence of compliance since the last audit for Requirement R2 and Measure M2.

~~If a Responsible Entity is found non-compliant, it shall keep information related to the non-compliance until mitigation is complete and approved or for the duration specified above, whichever is longer.~~

~~The Compliance Enforcement Authority shall keep the last audit records and all~~

~~requested and submitted subsequent audit records.~~

### 1.3. Compliance Monitoring and Enforcement Program

: As defined in the NERC Rules of Procedure, “Compliance Monitoring and Enforcement Program” refers to the identification of the processes that will be used to evaluate data or information for the purpose of assessing performance or outcomes with the associated Reliability Standard.

## Violation Severity Levels

R #	Violation Severity Levels			
	Lower VSL	Moderate VSL	High VSL	Severe VSL
<b>R1.</b>	The Responsible Entity had an event reporting Operating Plan, but failed to include one applicable event type.	The Responsible Entity had an event reporting Operating Plan, but failed to include two applicable event types.	The Responsible Entity had an event reporting Operating Plan, but failed to include three applicable event types.	The Responsible Entity had an event reporting Operating Plan, but failed to include four or more applicable event types.  OR  The Responsible Entity failed to have an event reporting Operating Plan.
<b>R2.</b>	The Responsible Entity submitted an event report (e.g., written or verbal) to all required recipients up to 24 hours after the timing requirement for submittal.  OR  The Responsible Entity failed to submit an event report (e.g., written or verbal) to one entity identified in its event reporting Operating Plan within 24 hours or by the end of the next business day, as applicable.	The Responsible Entity submitted an event report (e.g., written or verbal) to all required recipients more than 24 hours but less than or equal to 48 hours after the timing requirement for submittal.  OR  The Responsible Entity failed to submit an event report (e.g., written or verbal) to two entities identified in its event reporting Operating Plan within 24 hours or by	The Responsible Entity submitted an event report (e.g., written or verbal) to all required recipients more than 48 hours but less than or equal to 72 hours after the timing requirement for submittal.  OR  The Responsible Entity failed to submit an event report (e.g., written or verbal) to three entities identified in its event reporting Operating Plan within 24 hours or by	The Responsible Entity submitted an event report (e.g., written or verbal) to all required recipients more than 72 hours after the timing requirement for submittal.  OR  The Responsible Entity failed to submit an event report (e.g., written or verbal) to four or more entities identified in its event reporting Operating Plan within 24 hours or by the



R #	Violation Severity Levels			
	Lower VSL	Moderate VSL	High VSL	Severe VSL
		the end of the next business day, as applicable.	the end of the next business day, as applicable.	end of the next business day, as applicable.  OR The Responsible Entity failed to submit a report for an event in EOP-004-4 Attachment 1.

### D. Regional Variances

None.

### E. Associated Documents

[LinkLink](#) to the Implementation Plan and other important associated documents.

## EOP-004 - Attachment 1: Reportable Events

NOTE: Under certain adverse conditions (e.g. severe weather, multiple events) it may not be possible to report the damage caused by an event and issue a written event report within the timing in the standard. In such cases, the affected Responsible Entity shall notify parties per Requirement R2 and provide as much information as is available at the time of the notification. Submit reports to the ERO via one of the following: e-mail: [systemawareness@nerc.net](mailto:systemawareness@nerc.net), Facsimile 404-446-9770 or Voice: 404-446-9780, select Option 1.

Submit EOP-004 Attachment 2 (or ~~DOE-OEDOE-417~~ [form](#)) pursuant to Requirements R1 and R2.

### Rationale for Attachment 1:

~~System-wide voltage reduction to maintain the continuity of the BES: The TOP is operating the system and is the only entity that would implement system-wide voltage reduction.~~

~~Complete loss of Interpersonal Communication and Alternative Interpersonal Communication capability at a BES control center: To align EOP-004-4 with COM-001-2.1. COM-001-2.1 defined Interpersonal Communication for the NERC Glossary of Terms as: “Any medium that allows two or more individuals to interact, consult, or exchange information.” The NERC Glossary of Terms defines Alternative Interpersonal Communication as: “Any Interpersonal Communication that is able to serve as a substitute for, and does not utilize the same infrastructure (medium) as, Interpersonal Communication used for day-to-day operation.”~~

~~Complete loss of monitoring or control capability at a BES control center: Language revisions to: “Complete loss of monitoring or control capability at a BES control center for 30 continuous minutes or more” provides clarity to the “Threshold for Reporting” and better aligns with the ERO Event Analysis Process.~~

Event Type	Entity with Reporting Responsibility	Threshold for Reporting
Damage or destruction of a Facility	RC, BA, TOP	Damage or destruction of a Facility within its Reliability Coordinator Area, Balancing Authority Area or Transmission Operator Area that results in action(s) to avoid a BES Emergency.

Event Type	Entity with Reporting Responsibility	Threshold for Reporting
Damage or destruction of its Facility	TO, TOP, GO, GOP, DP	Damage or destruction of its Facility that results from actual or suspected intentional human action. It is not necessary to report theft unless it degrades normal operation of its Facility.
Physical threats to its Facility	TO, TOP, GO, GOP, DP	Physical threat to its Facility excluding weather or natural disaster related threats, which has the potential to degrade the normal operation of the Facility. OR Suspicious device or activity at its Facility.
Physical threats to its BES control center	RC, BA, TOP	Physical threat to its BES control center, excluding weather or natural disaster related threats, which has the potential to degrade the normal operation of the control center. OR Suspicious device or activity at its BES control center.
Public appeal for load reduction resulting from a BES Emergency	BA	Public appeal for load reduction to maintain continuity of the BES.
System-wide voltage reduction resulting from a BES Emergency	TOP	System-wide voltage reduction of 3% or more.
Firm load <del>shedding resulting in</del> <b>shedding resulting</b> from a BES Emergency	Initiating RC, BA, or TOP	Firm load shedding $\geq$ 100 MW (manual or automatic).

Event Type	Entity with Reporting Responsibility	Threshold for Reporting
BES Emergency resulting in voltage deviation on a Facility	TOP	A voltage deviation of $\geq$ 10% of nominal voltage sustained for $\geq$ 15 continuous minutes.
Uncontrolled loss of firm load resulting from a BES Emergency	BA, TOP, DP	Uncontrolled loss of firm load for $\geq$ 15 minutes from a single incident: $\geq$ 300 MW for entities with previous year’s peak demand $\geq$ 3,000 MW OR $\geq$ 200 MW for all other entities
System separation (islanding)	RC, BA, TOP	Each separation resulting in an island $\geq$ 100 MW
Generation loss	BA	Total generation loss, within one minute, of: $\geq$ 2,000 MW in the Eastern, Western, or Quebec Interconnection OR $\geq$ 1,400 MW in the ERCOT Interconnection Generation loss will be used to report Forced Outages not weather patterns or fuel supply unavailability for dispersed power producing resources.
<b><u>IBR generation loss</u></b>	<b><u>BA</u></b>	<b><u>Total aggregated generation loss of <math>\geq</math> 500 MW from inverter-based resource(s) (IBR)<sup>1</sup> occurring within a 30 second</u></b>

<sup>1</sup> For the purposes of EOP-004-5, an IBR is a generation resource consisting of one or more IBR unit(s) that connect to the transmission or subtransmission system via a single point of connection. An IBR unit is a primary energy source containing an individual inverter device, individual converter device, or a grouping of multiple inverters/converters. IBR units  
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 July 2023

Event Type	Entity with Reporting Responsibility	Threshold for Reporting
		<p><u>period.</u></p> <p><u>IBR generation loss shall be calculated using Telemetry data<sup>2</sup> by subtracting the lowest aggregated IBR generation output observed during a 30 second period from the pre-disturbance aggregated IBR generation output.</u></p>
<p><u>Loss of DC Tie Line</u></p>	<p><u>BA</u></p>	<p><u>Loss of a DC Tie Line, between two separate asynchronous systems, loaded at ≥ 500 MW.</u></p>

of connection. An IBR unit is a primary energy source containing an individual inverter device, individual converter device, or a grouping of multiple inverters/converters. IBR units include solar photovoltaic, Type 3 and Type 4 wind, battery energy storage, high voltage direct current (HVDC) transmission, and dynamic reactive devices such as static synchronous compensators (STATCOMs) and static VAR compensators (SVCs).

<sup>2</sup> Indicated IBR generation loss due to a failure of SCADA or Telemetry data is not reportable under this requirement.

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Event Type	Entity with Reporting Responsibility	Threshold for Reporting
Complete loss of off-site power to a nuclear generating plant (grid supply)	TO, TOP	Complete loss of off-site power (LOOP) affecting a nuclear generating station per the Nuclear Plant Interface Requirements
Transmission loss	TOP	Unexpected loss within its area, contrary to design, of three or more BES Facilities caused by a common disturbance (excluding successful automatic reclosing).
Unplanned evacuation of its BES control center	RC, BA, TOP	Unplanned evacuation from its BES control center facility for 30 continuous minutes or more.
Complete loss of Interpersonal Communication and Alternative Interpersonal Communication capability at its staffed BES control center	RC, BA, TOP	Complete loss of Interpersonal Communication and Alternative Interpersonal Communication capability affecting its staffed BES control center for 30 continuous minutes or more.
Complete loss of monitoring or control capability at its staffed BES control center	RC, BA, TOP	Complete loss of monitoring or control capability at its staffed BES control center for 30 continuous minutes or more.

## EOP-004 - Attachment 2: Event Reporting Form

EOP-004 Attachment 2: Event Reporting Form			
Use this form to report events. The Electric Reliability Organization will accept the DOE-05-417 form in lieu of this form, if the entity is required to submit an-06a DOE-417 report. Submit reports to the ERO via one of the following: e-mail: <a href="mailto:systemawareness@nerc.net">systemawareness@nerc.net</a> , Facsimile 404-446-9770 or voice: 404-446- 9780, Option 1. Also submit to other applicable organizations per Requirement R1 “... (e.g., the Regional Entity, company personnel, the Responsible Entity’s Reliability Coordinator, law enforcement, or Applicable Governmental Authority).”			
Task	Comments		
1.	Entity filing the report include: Company name: Name of contact person: Email address of contact person: Telephone Number: Submitted by (name):		
2.	Date and Time of recognized event. Date: (mm/dd/yyyy) Time: (hh:mm) Time/Zone:		
3.	Did the event originate in your system?      Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/>		
<b>Event Identification and Description:</b>			
4.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">                             (Check applicable box)  <input type="checkbox"/> Damage or destruction of a Facility  <input type="checkbox"/> Physical threat to its Facility  <input type="checkbox"/> Physical threat to its BES control center  <input type="checkbox"/> BES Emergency:                                  <input type="checkbox"/> firm load shedding                                  <input type="checkbox"/> public appeal for load reduction                                  <input type="checkbox"/> System-wide voltage reduction                                  <input type="checkbox"/> voltage deviation on a Facility                                  <input type="checkbox"/> uncontrolled loss of firm load  <input type="checkbox"/> System separation (islanding)  <input type="checkbox"/> Generation loss  <input checked="" type="checkbox"/> <b>IBR generation loss</b>  <input checked="" type="checkbox"/> <b>Loss of DC Tie Line</b>  <input type="checkbox"/> Complete loss of off-site power to a nuclear generating plant (grid supply)  <input type="checkbox"/> Transmission loss  <input type="checkbox"/> Unplanned evacuation of its BES control center  <input type="checkbox"/> Complete loss of Interpersonal Communication and Alternative Interpersonal Communication capability at its staffed BES control center  <input type="checkbox"/> Complete loss of monitoring or control capability at its staffed BES control center                         </td> <td style="width: 50%; padding: 5px; vertical-align: top;">                             Written description (optional):                         </td> </tr> </table>	(Check applicable box) <input type="checkbox"/> Damage or destruction of a Facility <input type="checkbox"/> Physical threat to its Facility <input type="checkbox"/> Physical threat to its BES control center <input type="checkbox"/> BES Emergency: <input type="checkbox"/> firm load shedding <input type="checkbox"/> public appeal for load reduction <input type="checkbox"/> System-wide voltage reduction <input type="checkbox"/> voltage deviation on a Facility <input type="checkbox"/> uncontrolled loss of firm load <input type="checkbox"/> System separation (islanding) <input type="checkbox"/> Generation loss <input checked="" type="checkbox"/> <b>IBR generation loss</b> <input checked="" type="checkbox"/> <b>Loss of DC Tie Line</b> <input type="checkbox"/> Complete loss of off-site power to a nuclear generating plant (grid supply) <input type="checkbox"/> Transmission loss <input type="checkbox"/> Unplanned evacuation of its BES control center <input type="checkbox"/> Complete loss of Interpersonal Communication and Alternative Interpersonal Communication capability at its staffed BES control center <input type="checkbox"/> Complete loss of monitoring or control capability at its staffed BES control center	Written description (optional):
(Check applicable box) <input type="checkbox"/> Damage or destruction of a Facility <input type="checkbox"/> Physical threat to its Facility <input type="checkbox"/> Physical threat to its BES control center <input type="checkbox"/> BES Emergency: <input type="checkbox"/> firm load shedding <input type="checkbox"/> public appeal for load reduction <input type="checkbox"/> System-wide voltage reduction <input type="checkbox"/> voltage deviation on a Facility <input type="checkbox"/> uncontrolled loss of firm load <input type="checkbox"/> System separation (islanding) <input type="checkbox"/> Generation loss <input checked="" type="checkbox"/> <b>IBR generation loss</b> <input checked="" type="checkbox"/> <b>Loss of DC Tie Line</b> <input type="checkbox"/> Complete loss of off-site power to a nuclear generating plant (grid supply) <input type="checkbox"/> Transmission loss <input type="checkbox"/> Unplanned evacuation of its BES control center <input type="checkbox"/> Complete loss of Interpersonal Communication and Alternative Interpersonal Communication capability at its staffed BES control center <input type="checkbox"/> Complete loss of monitoring or control capability at its staffed BES control center	Written description (optional):		

## Version History

Version	Date	Action	Change Tracking
2		Merged CIP-001-2a Sabotage Reporting and EOP-004-1 Disturbance Reporting into EOP-004-2 Event Reporting; Retire CIP-001-2a Sabotage Reporting and Retired EOP-004-1 Disturbance Reporting.	Revision to entire standard (Project 2009-01)
2	November 7, 2012	Adopted by the NERC Board of Trustees	
2	June 20, 2013	FERC approved	
3	November 13, 2014	Adopted by the NERC Board of Trustees	Replaced references to Special protection System and SPS with Remedial Action Scheme and RAS
3	November 19, 2015	FERC Order issued approving EOP-004-3. Docket No. RM15-13-000.	
4	February 9, 2017	Adopted by the NERC Board of Trustees	Revised
4	January 18, 2018	FERC order issued approving EOP-004-4. Docket No. RM17-12-000	
<b><u>5</u></b>	<b><u>TBD</u></b>	<b><u>Adopted by the NERC Board of Trustees</u></b>	



### **Guideline and Technical Basis**

#### **Multiple Reports for a Single Organization**

For entities that have multiple registrations, the requirement is that these entities will only have to submit one report for any individual event. For example, if an entity is registered as a Reliability Coordinator, Balancing Authority and Transmission Operator, the entity would only submit one report for a particular event rather submitting three reports as each individual registered entity.

#### **Law Enforcement Reporting**

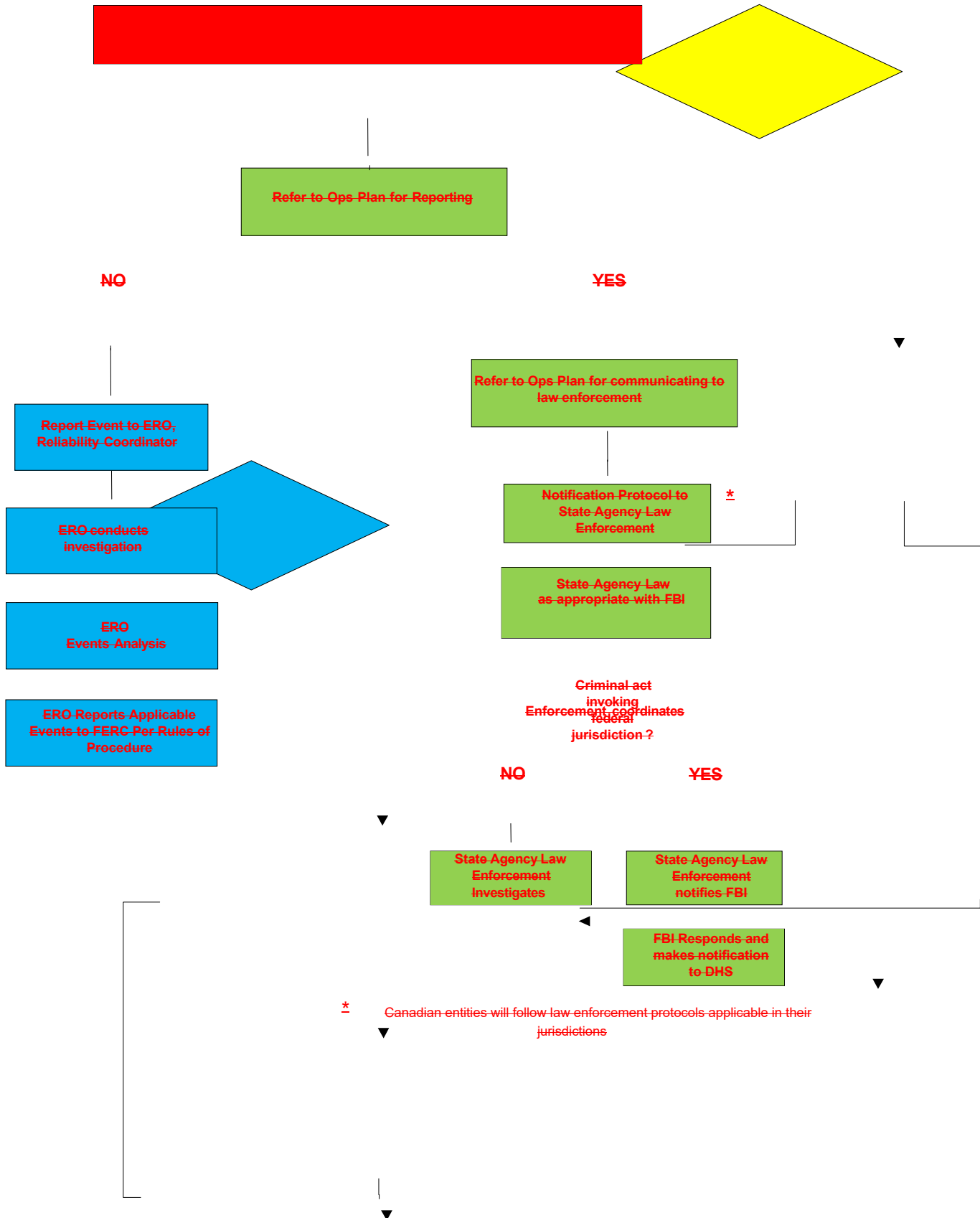
The reliability objective of EOP-004-4 is to improve the reliability of the Bulk Electric System by requiring the reporting of events by Responsible Entities. Certain outages, such as those due to vandalism and terrorism, may not be reasonably preventable. These are the types of events that should be reported to law enforcement. Entities rely upon law enforcement agencies to respond to and investigate those events which have the potential to impact a wider area of the BES. The inclusion of reporting to law enforcement enables and supports reliability principles such as protection of Bulk Electric System from malicious physical attack. The importance of BES awareness of the threat around them is essential to the effective operation and planning to mitigate the potential risk to the BES.

#### **Stakeholders in the Reporting Process**

- Industry
- NERC (ERO), Regional Entity
- FERC
- DOE
- NRC
- DHS—Federal
- Homeland Security—State
- State Regulators
- Local Law Enforcement
- State or Provincial Law Enforcement
- FBI
- Royal Canadian Mounted Police (RCMP)

The above stakeholders have an interest in the timely notification, communication and response to an incident at a Facility. The stakeholders have various levels of accountability and have a vested interest in the protection and response to ensure the reliability of the BES.

### Example of Reporting Process including Law Enforcement



### **Potential Uses of Reportable Information**

~~General situational awareness, correlation of data, trend identification, and identification of potential events of interest for further analysis in the ERO Event Analysis Process are a few potential uses for the information reported under this standard. The standard requires Functional Entities to report the incidents and provide information known at the time of the report. Further data gathering necessary for analysis is provided for under the ERO Event Analysis Program and the NERC Rules of Procedure. The NERC Rules of Procedure (section 800) provide an overview of the responsibilities of the ERO in regards to analysis and dissemination of information for reliability. Jurisdictional agencies (which may include DHS, FBI, NERC, RE, FERC, Provincial Regulators, and DOE) have other duties and responsibilities.~~