## **Standard Development Timeline**

This section is maintained by the drafting team during the development of the standard and will be removed when the standard becomes effective.

# **Development Steps Completed**

- 1. Standards Committee authorized moving the SAR forward to standard development 10/17/2013.
- 2. SAR posted for comment 11/06/13-12/05/13.
- 3. Informal posting for comment 03/28/14-04/28/14.
- 4. Initial formal posting for comment with parallel initial ballot 07/02/14-08/15/14.

## **Description of Current Draft**

This is the secondthird draft of the proposed standard and is being posted for formal stakeholder comments and initial ballot. This draft includes the modifications based on the Five-Year Review Team recommendations, comments submitted by stakeholders during the SAR comment period, comments submitted by stakeholders during the informal comment period, as well as the formal comment period, other items identified in the SAR, and applicable FERC directives from FERC Order No. 693.

Anticipated Actions	Anticipated Date
Additional 45-day Formal Comment Period with Parallel Initial Ballot	JulySeptember 2014
Final ballot	October 2014
BOT adoption	November 2014
File standard with regulatory authorities	<del>December 2014</del>

### **Effective Dates**

The standard shall become effective on the first day of the first calendar quarter that is 12 months after the date that the standard is approved by an applicable governmental authority or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a standard to go into effect. Where approval by an applicable governmental authority is not required, the standard shall become effective on the first day of the first calendar quarter that is 12 months after the date the standard is adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.

# **Version History**

Version	Date	Action	Change Tracking
1	TBD	Initial Standard	Merged EOP-001-2.1b, EOP-002-3.1 and EOP- 003-2.

### **Definitions of Terms Used in Standard**

This section includes all newly-defined or revised terms used in the proposed standard. Terms already defined in the Reliability Standards Glossary of Terms are not repeated here. New or revised definitions listed below become approved when the proposed standard is approved. When the standard becomes effective, these defined terms will be removed from the individual standard and added to the Glossary.

The <u>Emergency Operations Standard Drafting Team (EOP SDT proposed) proposes</u> to revise the current approved definition of **Energy Emergency** as follows:

**Energy Emergency** - A condition when a Load-Serving Entity or Balancing Authority has exhausted all other resource options and can no longer meet its eustomers' expected energy Load obligations.

The proposed revisions are intended to clarify that an Energy Emergency is not necessarily limited to a Load-Serving Entity. This term, or variations of it, are also used in other standards, as indicated below. The EOP SDT is obligated to review other standards in which this term is used to determine if reliability gaps or redundancies are created by the proposed revision to the defined term. The EOP SDT does not believe that the proposed revisions change the reliability intent of other requirements or definitions. The following is a list of standards and definitions using the term:

- BAL-002-WECC Contingency Reserve: This standard becomes enforceable on October 1, 2014. The EOP SDT does not believe that the proposed definition revision will create any redundancies or gaps in reliability.
- IRO-005-3.1a Reliability Coordination Current Day Operations This standard was revised under Project 2006-06 and the reference to Energy Emergency was removed from the standard. The standard was approved by the NERC BOT and filed with FERC. NERC has requested that FERC defer action on its petition and is revising this standard under Project 2014-03, TOP/IRO Reliability Standards. This project is scheduled to be completed no later than January 31, 2015. The two standard drafting teams are coordinating the definition revision to ensure there are no redundancies.
- MOD-004-1 Capacity Benefit Margin: This standard is being retired and replaced with MOD-001-2 Modeling, Data, and Analysis Available Transmission System Capability (NERC BOT approved February 6, 2014). The term "Energy Emergency" is not used in the new standard. The EOP SDT does not believe that the proposed definition revision will create any redundancies or gaps in reliability to the existing approved standard.
- INT-004-3 Dynamic Transfers: This standard was a revision to INT-004-2 under
   Project 2008-12. INT-004-3 was approved by the NERC BOT and filed with FERC. The
   EOP SDT does not believe that the proposed definition revision will create any
   redundancies or gaps in reliability.
- Defined term Emergency Request for Interchange: This term is not used in any existing approved standard.

When this standard has received ballot approval, the text boxes will be moved to the Application Guidelines Section of the Standard.

### A. Introduction

1. Title: Emergency Operations

2. Number: EOP-011-1

**3. Purpose:** To mitigate address the effects of operating Emergencies by ensuring each Transmission Operator and Balancing Authority has developed Emergency Operating Plans Plan(s) to mitigate operating Emergencies, and that those plans are coordinated within a Reliability Coordinator Area.

## 4. Applicability:

### 4.1. Functional Entities:

- **4.1.1** Balancing Authority
- **4.1.2** Reliability Coordinator
- **4.1.3** Transmission Operator

# 5. Background:

EOP-011-1 consolidates requirements from three standards: EOP-001-2.1b, EOP-002-3.1, and EOP-003-2.

The Project 2009-03 Emergency Operations Standard Drafting Team (EOP SDT) developed EOP-011-1 by considering the following inputs:

- Applicable FERC directives;
- Five Year Review Team (FYRT) recommendations;
- Independent Expert Review Panel recommendations; and
- Paragraph 81 criteria.

The standard streamlines the requirements for Emergency operations for the Bulk Electric System (BES) into a clear and concise standard that is organized by Functional Entity. In addition, the revisions clarify the critical requirements for Emergency Operations, while ensuring strong communication and coordination across the Functional Entities.

## **B.** Requirements and Measures

- R1. Each Transmission Operator shall develop, maintain, and implement a Reliability Coordinator-approvedreviewed Emergency-Operating Plan to mitigate operating Emergencies onin its Transmission System. At a minimum, the Emergency Operator Area. The Operating Plan shall include the following-elements, as applicable:
  [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning, Long-term Planning]
  - **1.1.** Roles and responsibilities to activate for activating the Emergency Operating Plan;
  - **1.2.** Strategies Processes to prepare for and mitigate Emergencies including, at a minimum:
    - **1.2.1.** Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing an operating Emergency;
    - **1.2.2.** Voltage control;
    - **1.2.3.** <u>1.2.2.</u> Cancellation or recall of Transmission and generation outages;
    - **1.2.4.1.2.3.** System Transmission system reconfiguration;
    - **1.2.5.1.2.4.** Redispatch of generation request;
    - 1.2.6.1.2.5. Operator Provisions for operator-controlled manual Load shedding plan coordinated to minimize that minimizes the use of overlap with automatic Load shedding; and are capable of being implemented in a timeframe adequate for mitigating the Emergency; and
    - **1.2.7.** <u>Mitigation of reliability Reliability</u> impacts of extreme weather conditions; and.
  - **1.3.** Strategies for coordinating Emergency Operating Plans with impacted Transmission Operators and impacted Balancing Authorities.

# **Rationale for Requirement R1:**

The EOP SDT examined the recommendation of the EOP FYRT and FERC directive to provide guidance on applicable entity responsibility that was included in EOP-001-2.1b. The EOP SDT removed EOP-001-2.1b, Attachment 1, and incorporated it into this standard under the applicable requirements. This also establishes a separate requirement for the Transmission Operator to create an Operating Plan for mitigating operating Emergencies in its Transmission Operator Area.

The Operating Plan can be one plan, or it can be multiple plans.

"Notification to the Reliability Coordinator, to include current and projected conditions, when experiencing an operating Emergency" was retained. This is a process in the plan that determines how you will make a notification to the Reliability Coordinator.

To meet the associated measure, an entity would likely provide evidence that such an evaluation was conducted along with an explanation of why any overlap of Loads between manual and automatic load shedding was unavoidable or reasonable.

If any Parts of Requirement R1 are not applicable, the Transmission Operator should note "not applicable" in the Operating plan.

With respect to automatic Load shedding schemes that include both UVLS and UFLS, the EOP SDT's intent is to keep manual and automatic Load shed schemes as separate as possible, but realizes that sometimes, due to system design, there will be overlap. The intent in Requirement R1 Part 1.2.6 is to minimize, as much as possible, the use of manual Load shedding which is already armed for automatic Load shedding. The automatic Load shedding schemes are the important backstops against Cascading outages or System collapse. If any entity manually sheds a Load which was included in an automatic scheme, it reduces the effectiveness of that automatic scheme. Each entity should review their automatic Load shedding schemes and coordinate their manual processes so that any overlapping use of Loads is avoided to the extent reasonably possible.

- M1. Each Transmission Operator will have a dated and approved Emergency Operating Plan developed in accordance with Requirement R1 that has been approved and reviewed by its Reliability Coordinator; evidence such as shown with the documented approval from its Reliability Coordinatora review or revision history to indicate that the Operating Plan has been maintained; and will have as evidence, such as operator logs or other operating documentation, voice recordings or other communication documentation to show that its planOperating Plan was implemented for times when an Emergency has occurred, in accordance with Requirement R1.
- **R2.** Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergencyreviewed Operating Plan to mitigate Capacity Emergencies and Energy Emergencies. At a minimum, the EmergencyThe Operating

Plan shall include the following <u>elements</u>, as <u>applicable</u>: [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning, <u>Long-term Planning</u>]

- **2.1.** Roles and responsibilities to activate for activating the Emergency Operating Plan;
- **2.2.** Processes to prepare for and mitigate Emergencies including:
  - **2.1.1.2.2.1.** Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing a Capacity Emergency or Energy Emergency;
  - **2.1.2.2.2.** Criteria to declare Requesting an Energy Emergency Alert, per Attachment 1;
- **2.2.** Strategies to prepare for and mitigate Emergencies including, at a minimum:
  - **2.2.1.2.2.3.** Generating Managing generating resources in its Balancing Authority Area to address:
    - **2.2.1.1.**2.2.3.1. capability and availability;
    - <u>2.2.1.2.2.2.3.2.</u> fuel supply and inventory concerns;
    - 2.2.1.3.2.2.3.3. fuel switching capabilities; and
    - <del>2.2.1.4.</del>2.2.3.4. environmental constraints.
  - **2.2.2.2.2.4.** Voluntary Public appeals for voluntary Load reductions;
  - **2.2.3.** Public appeals;
  - **2.2.4.2.2.5.** Requests to government agencies to implement their programs to achieve necessary energy reductions;
  - 2.2.5.2.2.6. Reduction of internal utility energy use;
  - **2.2.6.** Customer fuel switching;
  - **2.2.7.** Use of Interruptible Load, curtailable Load and demand response;
  - **2.2.8.** Operator Provisions for operator controlled manual Load shedding plan coordinated to minimize that minimizes the use of overlap with automatic Load shedding; and are capable of being implemented in a timeframe adequate for mitigating the Emergency; and
  - **2.2.9.** Mitigation of reliability Reliability impacts of extreme weather conditions.
- **2.3.** Strategies for coordinating Emergency Operating Plans with impacted Balancing Authorities and impacted Transmission Operators.

Rationale for Requirement R2: To address the recommendation of the FYRT and the FERC directive to provide guidance on applicable entity responsibility in EOP-001-2.1b, Attachment 1, the EOP SDT removed EOP-001-2.1b, Attachment 1, and incorporated it into this standard under the applicable requirements. EOP-011-1 also establishes a separate requirement for the Balancing Authority to create its Emergency Operating Plan to address Capacity and Energy Emergencies.

The Operating Plan can be one plan, or it can be multiple plans.

An Operating Plan is implemented by carrying out its stated actions.

If any Parts of Requirement R2 are not applicable, the Balancing Authority should note "not applicable" in the Operating Plan.

The EOP SDT retained the statement "Operator-controlled manual Load shedding," as it was in the current EOP-003-2 and is consistent with the intent of the EOP SDT.

With respect to automatic Load shedding schemes that include both UVLS and UFLS, the EOP SDT's intent is to keep manual and automatic Load shedding schemes as separate as possible, but realizes that sometimes, due to system design, there will be overlap. The intent in Requirement R2 Part 2.2.8. is to minimize as much as possible the use manual Load shedding which is already armed for automatic Load shedding. The automatic Load shedding schemes are the important backstops against Cascading outages or System collapse. If an entity manually sheds a Load that was included in an automatic scheme, it reduces the effectiveness of that automatic scheme. Each entity should review its automatic Load shedding schemes and coordinate its manual processes so that any overlapping use of Loads is avoided to the extent possible.

The EOP SDT retained Requirement R8 from EOP-002-3.1 and added it to the Parts in Requirement R2.

- M2. Each Balancing Authority will have a dated and approved Emergency Operating Plan developed in accordance with Requirement R2 that has been approved and reviewed by its Reliability Coordinator; evidence such as shown with the documented approval from its Reliability Coordinatora review or revision history to indicate that the Operating Plan has been maintained; and will have as evidence, such as operator logs or other operating documentation, voice recordings, or other communication documentation to show that its planOperating Plan was implemented for times when an Emergency has occurred, in accordance with Requirement R2.
- R3. Each The Reliability Coordinator shall approve or disapprove, with stated reasons for disapproval, Emergency Operating Plans submitted by Transmission Operators and Balancing Authorities, within 30 calendar days of submittal.receipt, shall review each Operating Plan to mitigate operating Emergencies submitted by a Transmission Operator or a Balancing Authority regarding any reliability risks that are identified between Operating Plans.
  - **3.1.** The Reliability Coordinator shall:
    - 3.1.1. Review each submitted Operating Plan on the basis of compatibility and inter-dependency with other Balancing Authorities' and Transmission Operators' Operating Plans;

- 3.1.2. Review each submitted Operating Plan for coordination to avoid risk to Wide Area reliability; and
- **2.3.1.3.1.3.** Notify each Balancing Authority and Transmission Operator of the results. [Violation Risk Factor: MediumHigh] [Time Horizon: Operations Planning]

Rationale for R3: The SDT agreed with industry comments that the Reliability Coordinator does not need to approve BA and TOP plans. The SDT has changed this requirement to remove the approval but still require the RC to review each entity's plan, looking specifically for reliability risks. This is consistent with the Reliability Coordinator's role within the Functional Model and meets the FERC directive regarding the RC's involvement in Operating Plans for mitigating emergencies.

- M3. The Reliability Coordinator will have documentation, such as <u>dated</u> e-mails <u>with</u> receipts or registered mail receipts, other correspondences that it approved or <u>disapproved</u>, with stated reasons for <u>disapproval</u>, the reviewed Transmission Operator and Balancing Authority <u>submitted and revised Emergency</u> Operating Plans within 30 calendar days of submittal in accordance with Requirement R3.
- R4. Each Transmission Operator and Balancing Authority shall address any reliability risks identified by its Reliability Coordinator pursuant to Requirement R3 and resubmit its Operating Plan to its Reliability Coordinator within a time period specified by its Reliability Coordinator. [Violation Risk Factor: High] [Time Horizon: Operation Planning]

Rationale for Requirement R4: Requirement R4 supports the coordination of Operating Plans within a Reliability Coordinator Area in order to identify and correct any Wide Area reliability risks. The EOP SDT expects the Reliability Coordinator to make a reasonable request for response time. The time period requested by the Reliability Coordinator to the Transmission Operator and Balancing Authority to update the Operating Plan will depend on the scope and urgency of the requested change.

M4. The Transmission Operator and Balancing Authority will have documentation, such as dated emails or other correspondence, with an Operating Plan version history showing that it responded and updated the Operating Plan within the timeframe identified by its Reliability Coordinator in accordance with Requirement R4.

R3.R5. Each Reliability Coordinator that receives an Emergency notification from a Transmission Operator or Balancing Authority shall notify, as soon as practical within 30 minutes from the time of receiving notification, other impacted Reliability Coordinators, Balancing Authorities and Transmission Operators in its Reliability Coordinator Area, and neighboring Reliability Coordinators. [Violation Risk Factor: High] [Time Horizon: Real-Time Operations]

Rationale for R5: The EOP SDT used the existing requirement in EOP-002-3.1 for the Balancing Authority and added the words "within 30 minutes from the time of receiving notification" to the requirement to communicate the intent that timeliness is important, while balancing the concern that in an Emergency there may be a need to alleviate excessive notifications on Balancing Authorities and Transmission Operators. By adding this time limitation, a measurable standard is set for when the Reliability Coordinator must complete these notifications.

M4.M5. Each Reliability Coordinator that receives an Emergency notification from a Balancing Authority or Transmission Operator will have, and provide upon request, evidence that could include, but is not limited to, operator logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent evidence that will be used to determine if <a href="https://example.com/itthe-Reliability Coordinator">https://example.com/itthe-Reliability Coordinator</a> communicated the Balancing Authorities, and Transmission Operators in <a href="https://example.coordinators">https://example.coordinators</a>, in accordance with Requirement R5, with other Balancing Authorities, and Transmission Operators in <a href="https://example.coordinators">https://example.coordinators</a>.

**R4.R6.** Each Reliability Coordinator that has a Balancing Authority experiencing a potential or actual Energy Emergency within its Reliability Coordinator Area shall initiatedeclare an Energy Emergency Alert, as detailed in Attachment 1. [Violation Risk Factor: High] [Time Horizon: Real-Time Operations]

Rationale for R6: Requirement R6 was created to address the FERC directive to have the Reliability Coordinator involved to ensure that the Energy Emergency Alert is declared.

M5.M6. Each Reliability Coordinator, with a Balancing Authority experiencing a potential or actual Energy Emergency within its Reliability Coordinator Area, will have, and provide upon request, evidence that could include, but is not limited to, operator logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent evidence that it <a href="initiated declared">initiated declared</a> an Energy Emergency Alert, as detailed in Attachment 1, in accordance with Requirement R5R6.

# C. Compliance

# 1. Compliance Monitoring Process

### 1.1. Compliance Enforcement Authority

As defined in the NERC Rules of Procedure, "Compliance Enforcement Authority" (CEA) means NERC or the Regional Entity in their respective roles of monitoring and enforcing compliance with the NERC Reliability Standards.

### 1.2. Evidence Retention

The Balancing Authority, Reliability Coordinator, and Transmission Operator shall keep data or evidence to show compliance, as identified below, unless directed by its Compliance Enforcement Authority (CEA) to retain specific evidence for a longer period of time as part of an investigation. For instances where the evidence retention period specified below is shorter than the time since the last audit, the CEA may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit.

- The Transmission Operator shall retain the current Emergency Operating Plan, evidence of review or revision history plus each version issued since the last audit and evidence of compliance since the last audit for Requirement Requirements R1, and Measure M1 and M4.
- The Balancing Authority shall retain the current Emergency Operating Plan, evidence of review or revision history plus each version issued since the last audit and evidence of compliance since the last audit for Requirement Requirements R2, and Measure M4.
- The Reliability Coordinator shall maintain evidence of compliance since the last audit for Requirements R3, R4R5, and R5R6 and Measures M3, M4M5, and M5M6.

If a Balancing Authority, Reliability Coordinator or Transmission Operator is found non-compliant, it shall keep information related to the non-compliance until found compliant.

The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

### 1.3. Compliance Monitoring and Assessment Processes:

Compliance Audit

**Self-Certification** 

Spot Check

Compliance Investigation

Self-ReportingReport

**Complaints** Complaint

1.4. Additional Compliance Information	1.4.	Additional	<b>Compliance</b>	Informatio
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None

**Table of Compliance Elements** 

R #	Time Horizon	VRF		Violation S	Severity Levels	
			Lower VSL	Moderate VSL	High VSL	Severe VSL
R1	Real-time Operations, Operations Planning, Long-term Planning	High	The Transmission Operator had a Reliability Coordinator approved Emergency Operating Plan to mitigate operating Emergencies on its Transmission System but failed to include one of the Sub-Parts 1.2.1 – 1.2.7 as applicable.	The Transmission Operator haddeveloped a Reliability Coordinator- approved Emergencyreviewed Operating Plan to mitigate operating Emergencies on its Transmission SystemOperator Area but failed to include two of the Sub Parts 1.2.1 1.2.7 as applicablemaintain it.	The Transmission Operator had a Reliability Coordinator approved Emergencydeveloped an Operating Plan to mitigate operating Emergencies onin its Transmission SystemOperator Area but failed to include three of the Sub Parts 1.2.1 1.2.7 as applicable.  OR  The Transmission Operator failed to have a Reliability Coordinator approved Emergency Operating Plan to mitigate operating Emergencies on its	The Transmission Operator had a Reliability Coordinator approved Emergencyfailed to develop an Operating Plan to mitigate operating Emergencies onin its Transmission System but failed to include four or more of the Sub- Parts 1.2.1 – 1.2.7.  OR The Transmission Operator Area .  OR failed to haveThe Transmission Operator developed

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R #	Time Horizon	VRF		Violation	n Severity Levels	
			Lower VSL	Moderate VSL	High VSL	Severe VSL
					Transmission System but failed to include either Part 1.1 or Part 1.3.  OR  The Transmission Operator had a Reliability Coordinator approved Emergency Operating Plan to mitigate operating Emergencies on its Transmission System but failed to maintain it-reviewed by the Reliability Coordinator.	a Reliability Coordinator- approved Emergencyreviewed Operating Plan to mitigate operating Emergencies onin its Transmission System.  OR The Transmission Operator had a Reliability Coordinator- approved Emergency Operating Plan to mitigate operating Emergencies on its Transmission Systems Operator Area but failed to implement it-for an operating

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R #	Time Horizon	VRF		Violation S	Severity Levels	
			Lower VSL	Moderate VSL	High VSL	Severe VSL
R2	Real-time Operations, Operations Planning, Long-term Planning	High	The Balancing Authority had a Reliability Coordinator- approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies but failed to include one of the Sub-Parts 2.4.1—2.4.9. N/A	The Balancing Authority haddeveloped a Reliability Coordinator-approved Emergencyreviewed Operating Plan to mitigate Capacity and Energyoperating Emergencies but failed to include two of the Sub-Parts 2.4.1 - 2.4.9.maintain it.	The Balancing Authority had a Reliability Coordinator approved Emergencydeveloped an Operating Plan to mitigate Capacity and Energyoperating Emergencies but failed to include three ofhave it reviewed by the Sub- Parts 2.4.1— 2.4.9.Reliability Coordinator.  OR The Balancing Authority had a Reliability	The Balancing Authority had a Reliability Coordinator- approved Emergencyfailed to develop an Operating Plan to mitigate Capacity and Energyoperating Emergencies but failed to include four or more of the Sub Parts 2.4.1 2.4.9 OR
					Coordinator- approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies but	The Balancing Authority failed to havedeveloped a Reliability Coordinator-

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R #	Time Horizon	VRF		Violatio	n Severity Levels	
			Lower VSL	Moderate VSL	High VSL	Severe VSL
					failed to include either Part 2.1 or Part 2.2 or Part 2.3 or Part 2.5.  OR  The Balancing Authority had a Reliability Coordinator approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies but failed to maintain it.	approved Emergencyreviewed Operating Plan to mitigate Capacity and Energy Emergencies.  OR The Balancing Authority had a Reliability Coordinator- approved Emergency Operating Plan to mitigate Capacity and Energyoperating Emergencies but failed to implement it-for a Capacity or Energy Emergency.

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R #	Time Horizon	VRF		Violation S	Severity Levels	
			Lower VSL	Moderate VSL	High VSL	Severe VSL
<u>R3</u>	Operations Planning	<u>High</u>	N/A	<u>N/A</u>	The Reliability Coordinator identified a reliability risk but failed to notify the Balancing Authority or Transmission Operator within 30 days.	The Reliability Coordinator identified a reliability risk but failed to notify the Balancing Authority or Transmission Operator.
R3 <u>R4</u>	Operations Planning	Medium High	The Reliability Coordinator approved or disapproved, with stated reasons for disapproval, a Transmission Operator and Balancing Authority submitted or revised Emergency Operating Plans in more than 30 days but less	The Reliability Coordinator approved or disapproved, with stated reasons for disapproval, a Transmission Operator and Balancing Authority submitted or revised Emergency Operating Plans in more than 40 days but less than or equal to 50 days.N/A	The Reliability Coordinator approved or disapproved, with stated reasons for disapproval, a Transmission Operator andor Balancing Authority submitted or revised Emergency Operating Plans in more than 50 days but less than or equal to 60 days.  OR Thefailed to update and resubmit the	The Reliability Coordinator approved or disapproved, with stated reasons for disapproval, a Transmission Operator andor Balancing Authority submitted or revised Emergencyfailed to update and resubmit the Operating Plans in

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R #	Time Horizon	VRF		Violation	Severity Levels	
			Lower VSL	Moderate VSL	High VSL	Severe VSL
			than or equal to 40 days. N/A		Operating Plan to the Reliability Coordinator within the timeframe specified by the Reliability Coordinator disapproved a Transmission Operator and Balancing Authority submitted or revised Emergency Operating Plans within 30 calendar days of submittal but failed to provide the reasons for disapproval.	more than 60 days.  OR  The Reliability Coordinator failed to approve or disapprove, with stated reasons for disapproval, a Transmission Operator and Balancing Authority submitted or revised Emergency Operating PlansPlan to the Reliability Coordinator.
R4 <u>R5</u>	Real-time Operations	High	N/A	N/A	The Reliability Coordinator that received an Emergency notification from a Transmission Operator	The Reliability Coordinator that received an Emergency notification from a Transmission

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R #	Time Horizon	VRF		Violation	Severity Levels	
			Lower VSL	Moderate VSL	High VSL	Severe VSL
					or Balancing Authority did notify other impacted Reliability Coordinators, Balancing Authorities and Transmission Operators but did not do so as soon as practical.notify within 30 minutes from the time of receiving notification.	Operator or Balancing Authority failed to notify, as soon as practical, other impacted Reliability Coordinators, Balancing Authorities and Transmission Operators.
R5R6	Real-time Operations	High	N/A	The Reliability Coordinator that had a Balancing Authority experiencing a potential or actual Energy Emergency within its Reliability Coordinator Area failed to notify the other Reliability Coordinators, Balancing Authorities and Transmission Operators when the alert has ended. N/A	The Reliability Coordinator that had a Balancing Authority experiencing a potential or actual Energy Emergency within its Reliability Coordinator Area failed to initiate an Energy Emergency Alert and hold conference calls between Reliability Coordinators as necessary to	The Reliability Coordinator that had a Balancing Authority experiencing a potential or actual Energy Emergency within its Reliability Coordinator Area failed to initiatedeclare an Energy Emergency Alert and notify all other Reliability

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R #	Time Horizon	VRF	Violation Severity Levels			
			Lower VSL	Moderate VSL	High VSL	Severe VSL
					communicate System conditions. N/A	Coordinators of the situation via the Reliability Coordinator Information System (RCIS)  OR  The Reliability Coordinator that had a Balancing Authority experiencing a potential or actual Energy Emergency within its Reliability Coordinator Area failed to initiate an Energy Emergency Alert and notify all Balancing Authorities and Transmission Operators in its reliability area.

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# **D.** Regional Variances

None.

# **E.** Interpretations

None.

# F. Associated Documents

None.

# **Attachment 1-EOP-011-1 Energy Emergency Alerts**

### Introduction

This Attachment provides the process and descriptions of the levels used by the Reliability Coordinator (RC) in which it communicates the condition of a Balancing Authority (BA) which is experiencing an Energy Emergency.

# LSEs were removed from Attachment 1, as an LSE has no Real-time reliability functionality with respect to EEAs.

EOP-002-3.1 Requirement R9 was in place to allow for a Transmission Service Provider to change the priority of a service request, informing the Reliability Coordinator so that the service would not be curtailed by a TLR; and since the Tagging Specs did not allow profiles to be changed, this was the only method to accomplish it. Under NAESB WEQ Etag Spec v1811 R3.6.1.3, this has been modified and now the TSP has the ability to change the Transmission priority which, in turn, is reflected in the IDC. This technology change allows for the deletion of Requirement R9 in its entirety. Requirement R9 meets with Criterion A of Paragraph 81 and should be retired.

# A. General Responsibilities

- **1. Initiation by RC.** <u>Reliability Coordinator.</u> An Energy Emergency Alert (EEA) may be initiated only by a <u>RC-Reliability Coordinator</u> at 1) the <u>RC'sReliability Coordinator's</u> own request, or 2) upon the request of the requesting BAan energy deficient Balancing Authority.
- **2. Notification.** A RCReliability Coordinator who declares an EEA shall notify all BAsBalancing Authorities and Transmission Operators (TOP) in its Reliability Coordinator Area. The RCReliability Coordinator shall also notify all other RCs of the situation via the Reliability Coordinator Information System (RCIS). Additionally, conference calls between RCs shall be held as necessary to communicate System conditions. The RC shall also notify the other RCs, Bas, and TOPs when the EEA has endedadjacent Reliability Coordinators.

Rationale for (2) Notification: The EOP SDT deleted the language, "The Reliability Coordinator shall also notify all other Reliability Coordinators of the situation via the Reliability Coordinator Information System (RCIS). Additionally, conference calls between RCs shall be held as necessary to communicate system conditions. The RC shall also notify the other RCs when the alert has ended" as duplicative to proposed IRO-014-3 Requirement R1:

"R1. Each Reliability Coordinator shall have and implement Operating Procedures, Operating Processes, or Operating Plans, for activities that require notification or coordination of actions that may impact adjacent Reliability Coordinator Areas, to support Interconnection reliability. These Operating Procedures, Operating Processes, or Operating Plans shall include, but are not limited to, the following:

- **1.1** Communications and notifications, and the process to follow in making those notifications.
- **1.2** Energy and capacity shortages.
- 1.3 Control of voltage, including the coordination of reactive resources.

  Exchange of information including planned and unplanned outage information to support its

  Operational Planning Analyses and Real-time Assessments.
  - **1.5** Authority to act to prevent and mitigate system conditions which could adversely impact other Reliability Coordinator Areas.
  - **1.6** Provisions for weekly conference calls."

### B. EEA Levels

### Introduction

To ensure that all RCsReliability Coordinator s clearly understand potential and actual Energy Emergencies in the Interconnection, NERC has established fourthree levels of EEAs. The RCsReliability Coordinator s will use these terms when explainingcommunicating Energy Emergencies to each other. An EEA is an Emergency procedure, not a daily operating practice, and is not intended as an alternative to compliance with NERC reliability standard. The RCReliability Standards. The Reliability Coordinator may declare whatever alert level is necessary, and need not proceed through the alerts sequentially.

1. EEA 1 — All available generation resources in use.

### Circumstances:

- Requesting BAThe Balancing Authority is experiencing conditions where all available
  generation resources are committed to meet firm Load, firm transactions, and reserve
  commitments, and is concerned about sustaining its required OperatingContingency
  Reserves.
- Non-firm wholesale energy sales (other than those that are recallable to meet reserve requirements) have been curtailed.
- 2. EEA 2 Load management procedures in effect.

#### **Circumstances:**

- Requesting BAThe Balancing Authority is no longer able to provide its customers' expected energy requirements and is an energy deficient Balancing Authority.
- Requesting BAAn energy deficient Balancing Authority has implemented its approved Emergency OperationsOperating Plan to mitigate Emergencies.
- An energy deficient Balancing Authority is still able to maintain minimum Contingency Reserve requirements.

During EEA 2, RCs and requesting BAsReliability Coordinator s and energy deficient Balancing Authorities s have the following responsibilities:

- 2.1 Notifying other BAsBalancing Authorities and market participants. The requesting BAThe energy deficient Balancing Authority shall communicate its needs to other BAsBalancing Authorities and market participants. Upon request from the requesting BAenergy deficient Balancing Authority, the respective RCReliability Coordinator shall post the declaration of the alert level, along with the name of the requesting BAenergy deficient Balancing Authority on the RCIS website.
- <u>2.2 Declaration period.</u> The requesting BAThe energy deficient Balancing Authority shall update its RCReliability Coordinator of the situation at a minimum of every hour until the EEA 2 is terminated. The Reliability Coordinator shall update the energy deficiency information posted on the RCIS website as changes occur and pass this information on to the impacted Reliability Coordinator s, Balancing Authorities and Transmission Operators.
- 2.3 Sharing information on resource availability. The Reliability Coordinator of a Balancing Authority with available resources shall coordinate, as appropriate, with the Reliability Coordinator that has an energy deficient Balancing Authority.
- **2.4 Evaluating and mitigating Transmission limitations.** The Reliability Coordinator shall review Transmission outages and work with the Transmission Operator to see if it's possible to return any Transmission Elements that may relieve the loading on System Operating Limits (SOLs) or Interconnection Reliability Operating Limits (IROLs).
- **2.22.5** Requesting Balancing Authority actions. Before requesting an EEA 3, the energy deficient Balancing Authority must make use of all available resources; this includes, but is not limited to:

- **2.5.1** All available generation units are on line. All generation capable of being on line in the time frame of the Emergency is on line.
- **2.5.2 Demand-Side Management**. Activate Demand-Side Management within provisions of any applicable agreements.

Rationale for <u>EEA 2</u>: <u>The EOP SDT modified the "Circumstances" for EEA 2 to show that an entity will be in this level when it has implemented its Operating Plan to mitigate Emergencies but is still able to maintain Contingency reserves.</u>

### 3. EEA 3—Firm Load interruption is imminent or in progress.

### **Circumstances:**

• The energy deficient Balancing Authority is unable to meet minimum Contingency Reserve requirements.

<u>During EEA 3, Reliability Coordinator s and Balancing Authorities have the following responsibilities:</u>

- 3.1 Continue actions from EEA 2. The Reliability Coordinator s and the energy deficient Balancing Authority shall continue to take all actions initiated during EEA 2.
- 2.13.2 <u>Declaration Period.</u> The RCThe Balancing Authority shall update its Reliability Coordinator of the situation at a minimum of every hour until the EEA 3 is terminated. The Reliability Coordinator shall update the energy deficiency information posted on the RCIS website as changes occur and pass this information on to the impacted RCs, BAs and TOPsReliability Coordinator s, Balancing Authorities, and Transmission Operators.
- **2.3 Sharing information on resource availability.** A BA with available resources shall contact the requesting BA and coordinate with the RC as appropriate.
- **2.4 Evaluating and mitigating Transmission limitations.** The RC shall review Transmission outages and work with the TOP to see if it's possible to return the Transmission element that may relieve the Loading on System Operating Limits (SOLs) or Interconnection Reliability Operating Limits (IROLs).
- **2.5**2.6 BA actions. Before declaring an EEA 3, the requesting BA must make use of all available resources; this includes, but is not limited to:
  - **2.5.1** All available generation units are on line. All generation capable of being on line in the time frame of the Emergency is on line, including quick-start and peaking units not being held for contingency reserves, regardless of cost.
  - **2.5.2 Demand-Side Management curtailed.** Initiate Demand Side Management within provisions of any applicable agreements not being held for contingency reserves.
- 3. EEA 3 Inability to meet Operating Reserve requirement or Firm Load interruption is imminent or in progress.

#### Circumstances:

• Requesting BA is unable to meet Operating Reserve requirements and foresees a need for possible interruption of firm Load.

During EEA 3, RCs and BAs have the following responsibilities:

- **3.2** Continue actions from EEA 2. The RCs and the requesting BA shall continue to take all actions initiated during EEA 2.
- **3.3** Operating Reserves. Operating Reserves are being utilized such that the requesting BA is carrying reserves below the required minimum or has initiated Emergency assistance through its Operating Reserve sharing program. In this situation, the requesting BA must be able to shed an amount of firm Load in order to meet its Operating Reserve requirement.
- **3.4 Declaration Period.** The BA shall update its RC of the situation at a minimum of every hour until the EEA 3 is terminated. The RC shall update the energy deficiency information posted on the RCIS website as changes occur and pass this information on to the impacted BAs and TOPs.
- shall evaluate the risks of revising SOLs and IROLs for the possibility of delivery of energy to the requesting BA.energy deficient Balancing Authority. Reevaluation of SOLs and IROLs shall be coordinated with other RCsReliability Coordinators and only with the agreement of the TOPTransmission Operator whose Transmission Owner (TO) equipment would be affected. SOLs and IROLs shall only be revised as long as an EEA 3 condition exists, or as allowed by the TOPTransmission Operator whose equipment is at risk. The following are minimum requirements that must be met before SOLs or IROLs are revised:
  - 3.5.13.3.1 Requesting BAEnergy deficient Balancing Authority obligations. The requesting BA must agree that energy deficient Balancing Authority, upon notification from its RCReliability Coordinator of the situation, it will immediately take whatever actions are necessary to mitigate any undue risk to the Interconnection. These actions may include Load shedding.
- 3.63.4 Returning to pre-Emergency conditions. Whenever energy is made available to a requesting BAan energy deficient Balancing Authority such that the Transmission Systems can be returned to its pre-Emergency SOLs or IROLs condition, the requesting BAenergy deficient Balancing Authority shall request the RCReliability Coordinator to downgrade the alert level.
  - 3.6.13.4.1 Notification of other parties. Upon notification from the requesting

    BAenergy deficient Balancing Authority that an alert has been downgraded, the

    RCReliability Coordinator shall notify the impacted RCsReliability Coordinator s

    (via the RCIS), BAsBalancing Authorities and TOPsTransmission Operators that its Systems can be returned to its normal limits.
- **Alert 0 Termination.** When the requesting BAenergy deficient Balancing Authority is able to meet its Load and Operating Reserve requirements, it shall request its RCReliability Coordinator to terminate the EEA.

**Notification.** The RCReliability Coordinator shall notify all other RCsReliability Coordinator s via the RCIS of the termination. The RCReliability Coordinator shall also notify the impacted BAsBalancing Authorities and TOPsTransmission Operators.

# **Application Guidelines**

Guidelines	and	<b>Technical</b>	<b>Basis</b>
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Rationales to be added here after balloting.
Requirement R1:
Requirement R2:
Requirement R3:
Requirement R4:
Requirement R5: