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. <u>Standards Committee (SC)</u> authorized moving the SAR forward to standard development 10/17/2013.
- 2. SAR posted for comment 11/06/13-12/05/13.
- 2.3.Informal posting for comment 03/28/14-04/28/14.

Description of Current Draft

This is the <u>first second</u> draft of the proposed standard and is being posted for <u>informal formal</u> stakeholder comments <u>and initial ballot</u>. This draft includes the modifications based on the Five-Year Review Team recommendations, comments submitted by stakeholders during the SAR comment period, <u>comments submitted by stakeholders during the informal comment period</u>, as well as other items identified in the SAR and applicable FERC directives from FERC Order 693.

Anticipated Actions	Anticipated Date
30-day Informal Comment Period	March 2014
45-day Formal Comment Period with Parallel Initial Ballot	June 2014
Final ballot	September October 2014
BOT adoption	November _2014
File standard with regulatory authorities	December 2014

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.

Energy Emergency - A condition when a Load-Serving Entity <u>or Balancing Authority</u> has exhausted all other <u>resource</u> options and can no longer <u>provide meet</u> its <u>customers'</u> expected <u>energy Load requirementsobligations</u>.

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, is 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 has made a review of other standards in which the term "energy emergency" is used and does not believe the proposed revisions change the reliability intent of requirements or definitions.

- BAL-002-WECC Contingency Reserve: This standard becomes enforceable on October 1st, 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 Revisions. 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.

BAL-002-WECC-2 - Contingency Reserve

- R1. Each Balancing Authority and each Reserve Sharing Group shall maintain a minimum amount of Contingency Reserve, except within the first sixty minutes following an event requiring the activation of Contingency Reserve, that is: [Violation Risk Factor: High] [Time Horizon: Real time operations]
 - 1.1. The greater of either:
 - The amount of Contingency Reserve equal to the loss of the most severe single contingency;

- R1. Each Balancing Authority and each Reserve Sharing Group shall maintain a minimum amount of Contingency Reserve, except within the first sixty minutes following an event requiring the activation of Contingency Reserve, that is: [Violation Risk Factor: High] [Time Horizon: Real time operations]
 - 1.1. The greater of either:
 - The amount of Contingency Reserve equal to the loss of the most severe single contingency;
 - The amount of Contingency Reserve equal to the sum of three percent of hourly integrated Load plus three percent of hourly integrated generation.
 - 1.2. Comprised of any combination of the reserve types specified below:
 - Operating Reserve Spinning
 - Operating Reserve Supplemental
 - Interchange Transactions designated by the Source Balancing Authority as Operating Reserve – Supplemental
 - Reserve held by other entities by agreement that is deliverable on Firm Transmission Service
 - A resource, other than generation or load, that can provide energy or reduce energy consumption
 - Load, including demand response resources, Demand-Side Management resources,
 Direct Control Load Management, Interruptible Load or Interruptible Demand, or any
 other Load made available for curtailment by the Balancing Authority or the Reserve
 Sharing Group via contract or agreement.
 - All other load, not identified above, once the Reliability Coordinator has declared an
 energy emergency alert signifying that firm load interruption is imminent or in
 progress.
 - 1.3. Based on real-time hourly load and generating energy values averaged over each Clock Hour (excluding Qualifying Facilities covered in 18 C.F.R.\straction\) 292.101, as addressed in FERC Order 464).
 - 1.4 An amount of capacity from a resource that is deployable within ten minutes.

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 the effects of operating Emergencies, up to and including manual Load shedding, by ensuring each Transmission Operator and Balancing Authority has developed Emergency Operating Plans, and 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 is a new standard that consolidates requirements from three existing Emergency Operations 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 purpose of EOP 011-1 is to mitigate the effects of operating Emergencies, up to and including manual Load shedding, by implementing Emergency Operating Plans. The standard streamlines the requirements for Emergency Operations for the BES-Bulk Electric System (BES) into a clearer and more concise standard that is organized by Functional Entity in order to eliminate the ambiguity in previous versions. 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-approved Emergency Operating Plan to mitigate operating Emergencies on its Transmission System. At a minimum, the Emergency Operating Plan shall include the following elements: [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]
 - **1.1.** Definition of roles Roles and responsibilities to activate and implement the Emergency Operating Plan.
 - **1.2.** Procedures, processes or strategies Strategies 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;
 - **1.2.1.1.2.2.** Plans to control Voltage Control voltage;
 - **1.2.2.1.2.3.** <u>Processes for cancelling Cancellation</u> or recalling <u>of Transmission and generation</u> outages;
 - **1.2.3.** <u>1.2.4.</u> <u>Processes for System reconfiguration;</u>
 - **1.2.4.** <u>1.2.5.</u> <u>Processes for redispatch Redispatch of generation request;</u>
 - **1.2.5.** <u>1.2.6.</u> Operator-controlled <u>Manual manual Load</u> shedding plan coordinated to minimize the use of automatic Load shedding;
 - **1.2.6.** <u>1.2.7.</u> <u>Strategies to be used to mitigate Mitigation of reliability impacts of extreme weather conditions—; and</u>
 - **1.3.** A process for revising its Emergency Operating Plan to account for changes in its SystemStrategies 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 Emergency Operating Plan.

Requirement <u>1 Part</u> 1.2.4 was added to this standard for the Transmission Operator to address procedures, processes or strategies to prepare for and mitigate Emergencies using voltage control methods, which could include switching of capacitor and reactor banks, generator reactive output and the use of synchronous condensers.

The topic of manual Load shedding is included in Requirement R1 (Transmission Operator Emergency Operating Plan) and Requirement R2 (Balancing Authority Emergency Operating Plan) because this sometimes requires coordination between the Balancing Authority and Transmission Operator.

The EOP SDT added Requirement R1.3, a revision of Requirement R5 in EOP-001-2.1b, to establish a process for the Transmission Operator to revise its Emergency Operating Plan to account for changes in its System.

It is the EOP SDT's intent for Requirement R1 Part 1.2.6. that what is unwanted is 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 which was included in an automatic scheme, it reduces the effectiveness of that automatic scheme. The EOP SDT acknowledges that, in the formulation of manual Load shedding plans, complete exclusion of Loads armed for automatic Load shedding may not be possible. Each entity should, however, evaluate their automatic Load shedding schemes and coordinate their manual plans so that overlapping use of Loads is avoided to the extent reasonably possible.

"Emergency Operating Plan" within the requirements of EOP-011-1 is not intended as a newly-defined term. It is the intent of the EOP SDT that two defined terms are being used: the defined term "Emergency" and the defined term "Operating Plan."

- M1. Each Transmission Operator will have a dated and approved Emergency Operating Plan developed in accordance with Requirement R1_that has been approved by its Reliability Coordinator, as shown with the documented approval from its Reliability Coordinator; and will have as evidence, such as operator logs or other operating documentation, voice recordings or other communication documentation to show that its plan was implemented in accordance with Requirement R1.
- **R2.** Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate <u>capacityCapacity</u> and Energy Emergencies. At a minimum, the Emergency Operating Plan shall include: [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]
 - **2.1.** Definition of roles Roles and responsibilities to activate and implement the Emergency Operating Plan-;

- 2.2. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing a Capacity Emergency or Energy Emergency.
- **2.1.2.3.** Criteria to declare an Energy Emergency Alert, per Attachment 1;
- **2.2.2.4.** Procedures, processes or strategies Strategies to prepare for and mitigate Emergencies including, at a minimum:
 - **2.2.1.2.4.1.** Generating resources in its Balancing Authority Area:
 - 2.2.1.1.2.4.1.1. capability and availability;
 - <u>2.2.1.2.2.4.1.2.</u> fuel supply and inventory concerns;
 - **2.2.1.3.2.4.1.3.** fuel switching capabilities;
 - **2.2.1.4.2.4.1.4.** environmental constraints.
 - 2.2.2.4.2. Voluntary Load reductions;
 - **2.2.3.2.4.3.** Public appeals;
 - **2.2.4.2.4.4.** Governmental programs Requests to government agencies to implement their programs to achieve necessary energy reductions;
 - **2.2.5.2.4.5.** Reduction of internal utility energy use;
 - **2.2.6.2.4.6.** Customer fuel switching;
 - <u>2.2.7.2.4.7.</u> Use of Interruptible Load, curtailable Load and demand response;
 - **2.2.8.2.4.8.** Operator-controlled Manual manual Load shedding plan coordinated to minimize the use of automatic Load shedding; and
 - **2.2.9.** <u>Strategies for addressing Mitigation of reliability impacts of extreme weather conditions, if not covered by other elements of the plan.</u>
- 2.3.2.5. A process for revising its Strategies for coordinating Emergency Operating Plan-Plans to account for changes in its System with impacted Balancing Authorities and impacted Transmission Operators-

Rationale for Requirement R2: The EOP SDT took 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 This also establishes a separate requirement for the Balancing Authority to create its Emergency Operating Plan to address capacity and energy Emergy Emergencies.

If any Parts of Requirement R2 are not applicable, the Balancing Authority should note "not applicable" in their 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 2.4.8. 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 which was included in an automatic scheme, it reduces the effectiveness of that automatic scheme. Each entity should evaluate their automatic Load shedding schemes and coordinate their manual plans so that any overlapping use of Loads is avoided to the extent reasonably possible.

Requirement R2 Part 2.4.8 references "coordination" – the intention is that manual and automatic systems be coordinated with each other to minimize overlap of the Loads planned to be shed in each. The reference is not intended to require coordination with other entities.

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

Manual Load shedding is included in Requirement R1 (Transmission Operator Emergency)

M2. Each Balancing Authority will have a dated and approved Emergency Operating Plan developed in accordance with Requirement R2 that has been approved by its Reliability Coordinator, as shown with the documented approval from its Reliability Coordinator; and will have as evidence, such as operator logs or other operating documentation, voice recordings, or other communication documentation to show that its plan was implemented in accordance with Requirement R2.

R3. Each Reliability Coordinator shall coordinate the Emergency Operating Plans of the entities in its Reliability Coordinator Area to ensure that the plans are compatible and support reliability in the Reliability Coordinator Area. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning]

Rationale for R3: The EOP SDT agrees that Transmission Operators and Balancing Authorities should submit Emergency Operating plans to the Reliability Coordinator for approval in order for the Reliability Coordinator to ensure all Emergency Operating Plans in its Reliability Coordinator Area are coordinated and compatible. This requirement makes the standard applicable to the Reliability Coordinator; clearly and separately identifying the Transmission Operator, Balancing Authority and Reliability Coordinator issues as they relate to the Balancing Authority and Transmission Operator (to address Paragraph 548 of Order 693) and how it needs to be planned for on the BES by the specific Functional Entities.

"...the Commission finds the reliability coordinator is a necessary entity under EOP 001-0 and directs the ERO to modify the Reliability Standard to include the reliability coordinator as an applicable entity."

- M3. The Reliability Coordinator will have, and provide upon request, evidence that could include, but is not limited to, dated review documents, electronic records or studies that it coordinated each Transmission Operator's and Balancing Authority's Emergency Operating Plans within its Reliability Coordinator Area to ensure that the plans are compatible in accordance with Requirement R3.
- **R4.R3.** Each Reliability Coordinator shall approve or disapprove, with stated reasons for disapproval, Emergency Operating Plans submitted by Transmission Operators and Balancing Authority Authorities submitted or revised Emergency Operating Plans within 30 calendar days of submittal. [Violation Risk Factor: Medium] [Time Horizon:

Rationale for R4R3: Since Requirements R1 and R2 both require a submittal for approval, Requirement R4R3 requires approval or disproval. This aligns with similar requirements in EOP-006-2, Requirement 5.1.

Operations Planning]

- M4.M3. The Reliability Coordinator will have documentation, such as e-mails with receipts or registered mail receipts, that it approved or disapproved, with stated reasons for disapproval, the Transmission Operator and Balancing Authority submitted and revised Emergency Operating Plans within 30 calendar days of submittal in accordance with Requirement R4R3.
- **R5.** Each Transmission Operator that is experiencing an operating Emergency on its Transmission System shall communicate the Emergency and its current and projected System conditions to its Reliability Coordinator. [Violation Risk Factor: High] [Time Horizon: Real Time Operations]

Rationale for R5: This was an existing requirement in EOP 002-3.1 for Balancing Authorities. The EOP SDT has added this as an additional requirement for Transmission Operators. The EOP SDT revised communication of "future system conditions" to "projected system conditions." The purpose of this requirement is to apprise the Reliability Coordinator of the Transmission Operator's Real-time operations preparation and planning.

- M5. The Transmission Operator that experienced an operating Emergency on its
 Transmission System 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 it
 communicated the Emergency and its current and projected System conditions to its
 Reliability Coordinator in accordance with Requirement R5.
- R6.R4. Each Balancing Authority that is experiencing a capacity or Energy Emergency shall communicate the Emergency and its current and projected System conditions to its Reliability Coordinator. [Violation Risk Factor: High] [Time Horizon: Real Time Operations]

Rationale for R6: This was an existing requirement in EOP-002-3.1 for Balancing Authorities. The EOP SDT revised communication of "future system conditions" to "projected system conditions." This modification is intended to apprise the Reliability Coordinator of the Balancing Authority Real time operations preparation and planning.

M6. The Balancing Authority that experienced a capacity or Energy Emergency 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 it communicated the Emergency and its current and projected System conditions to its Reliability Coordinator in accordance with Requirement R6.

R7.R4. Each Reliability Coordinator that receives an Emergency notification from a Transmission Operator or Balancing Authority shall notify, as soon as practical, other impacted Reliability Coordinators, Balancing Authorities and Transmission Operators. [Violation Risk Factor: High] [Time Horizon: Real-Time Operations]

Rationale for R7R4: The EOP SDT added the words "as soon as practicable practical" to the requirement to point to the timeliness and to the relevancy of the Emergencies and to alleviate excessive notifications on Balancing Authorities and Transmission Operators. This was an existing requirement in EOP-002-3.1 for Balancing Authorities.

M7.M4. 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 it communicated the Balancing Authority's or

Transmission Operator's Emergency to impacted Reliability Coordinators, Balancing Authorities and Transmission Operators in accordance with Requirement R7R4.

R8. The Balancing Authority shall request its Reliability Coordinator to declare a NERC Energy Emergency Alert after the Balancing Authority has performed the steps in its Emergency Operating Plan and is unable to resolve the capacity or Energy Emergency condition. [Violation Risk Factor: High] [Time Horizon: Real-Time Operations]

Rationale for R8: The EOP SDT placed this language in this requirement since it was found in Requirements R6.5 and R7.2 of EOP 002 3.1. The EOP SDT agrees that manual Load shedding and other actions are addressed in the Emergency Operating Plan and it is not necessary to explicitly call for Load shedding to return ACE to zero in this standard. ACE requirements for the Balancing Authority are addressed in the BAL-001 and BAL-002 standards.

- M8. Each Balancing Authority who, after performing the steps in its Emergency Operating Plan and is unable to resolve the capacity or Energy Emergency condition, 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 requested its Reliability Coordinator to declare a NERC Energy Emergency Alert in accordance with Requirement R8.
- **R9.R5.** Each Reliability Coordinator that has a Balancing Authority or Load Serving Entity experiencing a potential or actual Energy Emergency within its Reliability Coordinator Area shall initiate an NERC Energy Emergency Alert, as detailed in Attachment 1. [Violation Risk Factor: High] [Time Horizon: Real-Time Operations]

Rationale for R9R5: The EOP SDT retained Requirement R8 from EOP 002-3.1. The Load-Serving Entity has the right, under Attachment 1, to request that an Energy Emergency Alert (EEA) be issued, but it does not have any requirements to do so; therefore, the EOP SDT elected to retain the Load Serving Entity in the requirement, but not as an applicable entity. If it becomes a reliability issue, the Balancing Authority or Reliability Coordinator will call for the EEA. Requirement R5 was created to address the FERC directive to have the Reliability Coordinator involved to ensure that the Energy Emergency Alert gets initiated.

M9.M5. Each Reliability Coordinator, that has had a Balancing Authority or Load Serving Entity 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 initiated a an NERC Energy Emergency Alert, as detailed in Attachment 1, in accordance with Requirement R9R5.

C. Compliance

- 1. Compliance Monitoring Process
 - **1.1.** Compliance Enforcement Authority

1.1. <u>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.</u>

Regional Entity

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 Balancing Authority shall retain the current Emergency Operating Plan, plus each version issued since the last audit and evidence of compliance since the last audit for Requirement R2, and Measure M2.
- The Balancing Authority shall maintain evidence of compliance since the last audit for Requirements R6 and R8 and Measures M6 and M8.
- The Reliability Coordinator shall maintain evidence of compliance since the last audit for Requirements R3, R4, R7 and R9-R5 and Measures M3, M4, M7 and M9M5.
- The Transmission Operator shall retain the current Emergency Operating Plan, plus each version issued since the last audit and evidence of compliance since the last audit for Requirement R1, and Measure M1.
- The Transmission Operator shall maintain evidence of compliance since the last audit for Requirement R5 and Measure M5.

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 Checking

Compliance Violation Investigation

Self-Reporting

Complaints

1.4. Additional Compliance Information

EOP-011-1	Emergency	Operations
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None

Table of Compliance Elements

R #	Time Horizon	VRF		Violation Sev	erity Levels	
			Lower VSL	Moderate VSL	High VSL	Severe VSL
R1	Real-time Operations, Operations Planning TBD	<u>High</u>	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 had a Reliability Coordinator- approved Emergency Operating Plan to mitigate operating Emergencies on its Transmission System but failed to include two of the Sub-Parts 1.2.1 - 1.2.7 as applicable.	The Transmission Operator had a Reliability Coordinator- approved Emergency Operating Plan to mitigate operating Emergencies on its Transmission System 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 Transmission System but failed to	The Transmission Operator had a Reliability Coordinator- approved Emergency Operating Plan to mitigate operating Emergencies on its Transmission System but failed to include four or more of the Sub- Parts 1.2.1 - 1.2.7. OR The Transmission Operator failed to have a Reliability Coordinator- approved Emergency Operating Plan 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.	mitigate operating Emergencies on its Transmission System. OR The Transmission Operator had a Reliability Coordinator- approved Emergency Operating Plan to mitigate operating Emergencies on its Transmission System but failed to implement it for an operating Emergency.
R2	Real-time Operations, Operations PlanningTBD	<u>High</u>	The Balancing Authority had a Reliability Coordinator- approved Emergency Operating Plan to mitigate Capacity	The Balancing Authority had a Reliability Coordinator-approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies but	The Balancing Authority had a Reliability Coordinator- approved Emergency Operating Plan to mitigate Capacity	Emergency Operating Plan to mitigate Capacity and Energy Emergencies but failed to include four or more of the

	and Energy	failed to include two	and Energy	Sub-Parts 2.4.1 –
	Emergencies but	of the Sub-Parts 2.4.1	Emergencies but	<u>2.4.9.</u>
	failed to include one	<u>- 2.4.9.</u>	failed to include	
	of the Sub-Parts		three of the Sub-	<u>OR</u>
	2.4.1 - 2.4.9.		Parts 2.4.1 – 2.4.9.	m D 1 '
			<u>OR</u>	The Balancing
			The Balancing	Authority failed to
			Authority had a	have a Reliability
			Reliability	Coordinator-
			Coordinator-	<u>approved</u>
			approved	Emergency
			<u>Emergency</u>	Operating Plan to
			Operating Plan to	mitigate Capacity
			mitigate Capacity	and Energy
			and Energy	Emergencies.
			Emergencies but failed to include	
			either Part 2.1 or	<u>OR</u>
			Part 2.2 or Part 2.3	The Balancing
			or Part 2.5.	Authority had a
			OR	Reliability
				Coordinator-
			The Balancing	approved
			Authority had a	Emergency
			Reliability Goodington	Operating Plan to
			Coordinator- approved	mitigate Capacity
			<u>approved</u> Emergency	and Energy
			Operating Plan to	Emergencies but
			mitigate Capacity	
			and Energy	failed to implement
				it for a Capacity or

					Emergencies but failed to maintain it. The Reliability	Energy Emergency. The Reliability
R3	Operations Planning TBD	Medium	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 than or equal to 40 days.	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.	Coordinator approved or disapproved, with stated reasons for disapproval, a Transmission Operator and Balancing Authority submitted or revised Emergency Operating Plans in more than 50 days but less than or equal to 60 days. OR The Reliability Coordinator disapproved a Transmission Operator and Balancing Authority submitted or revised Emergency Operator and Balancing Authority submitted or revised Emergency Operating Plans within 30 calendar days of submittal but failed to provide the reasons for disapproval.	Coordinator approved or disapproved, with stated reasons for disapproval, a Transmission Operator and Balancing Authority submitted or revised Emergency Operating Plans in 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 Plans.
R4	Real-time Operations TBD	High	N/A	N/A	The Reliability Coordinator that received an Emergency notification from a Transmission Operator or Balancing Authority did notify other impacted Reliability Coordinators, Balancing Authorities and Transmission Operators but did not do so as soon as practical.	The Reliability Coordinator that received an Emergency notification from a Transmission Operator or Balancing Authority failed to notify, as soon as practical, other impacted Reliability Coordinators, Balancing Authorities and Transmission Operators.
R5	Real-time Operations TBD	<u>High</u>	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	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	The Reliability Coordinator that had a Balancing Authority experiencing a potential or actual Energy Emergency within its Reliability Coordinator Area failed to initiate an

			Operators when the alert has ended.	Coordinators as necessary to communicate System conditions.	Energy Emergency Alert and notify all other Reliability 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.
R6	TBD				

EOP-011-1 Emergency Operations

R7	TBD			
R8	TBD			
R9	TBD			

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) or Load Serving Entity in its authority which is experiencing an Energy Emergency.

The Load Serving Entity or Balancing Authority who requests this assistance is referred to as an "Energy Deficient Entity."

NERC recognizes that Transmission Providers are subject to obligations under FERC-approved tariffs and other agreements, and nothing in these procedures should be interpreted as changing those obligations.

A. General Responsibilities

- **1. Initiation by** Reliability Coordinator RC. An Energy Emergency Alertalert (EEA) may be initiated only by a Reliability Coordinator RC at 1) the Reliability Coordinator RC's own request, or 2) upon the request of the Energy Deficient Entity requesting BA.
- 2. Notification. A Reliability CoordinatorRC who declares an Energy Emergency AlertEEA should-shall notify all Balancing AuthoritieBAs and Transmission Operators (TOP) in its reliability area. The Reliability CoordinatorRC should shall also notify all other Reliability CoordinatorRCs of the situation via the Reliability Coordinator Information System (RCIS). Additionally, conference calls between Reliability CoordinatorRCs should shall be held as necessary to communicate System conditions. The Reliability CoordinatorRC should shall also notify the other Reliability CoordinatorRCs, Balancing AuthoritieBAs and Transmission OperatorTOPs when the alert has ended.
- B. Energy Emergency AlertEEA Levels

Introduction

To ensure that all Reliability CoordinatorRCs clearly understand potential and actual Energy Emergencies in the Interconnection, NERC has established three four levels of Energy Emergency AlertEEAs. The Reliability CoordinatorRCs will use these terms when explaining Energy Emergencies to each other. An Energy Emergency AlertEEA is an Emergency procedure, not a daily operating practice, and is not intended as an alternative to compliance with NERC reliability standard. Ts.

The Reliability Coordinator RC may declare whatever alert level is necessary, and need not proceed through the alerts sequentially.

1. Alert 1 Forecast the need for an Energy Emergency.

Circumstances:

• Energy Deficient Entity foresees the need to issue alerts in the upcoming operating window and is concerned about Operating Reserves.

21. Alert EEA 2-1 — All available generation resources in use.

Circumstances:

- <u>Energy Deficient EntityRequesting BA</u> is experiencing conditions where all available <u>generation</u> resources are committed to meet firm Load, firm transactions, and reserve commitments, and is concerned about sustaining its required Operating Reserves.
- Non-firm wholesale energy sales (other than those that are recallable to meet reserve requirements) have been curtailed.

32. Alert 3EEA 2 — Load management procedures in effect.

Circumstances:

- Energy Deficient EntityRequesting BA is no longer able to provide its customers' expected energy requirements.
- Energy Deficient EntityRequesting BA has implemented its approved Emergency Operations Plan.

During Alert 3EEA 2, Reliability Coordinator RCs, and Balancing Authoritie requesting BAs and Energy Deficient Entities have the following responsibilities:

- 2.1 Notifying other Balancing AuthoritieBAs and market participants. The Energy
 Deficient Entityrequesting BA should shall communicate its needs to other Balancing
 AuthoritieBAs and market participants. Upon request from the Energy Deficient
 Entityrequesting BA, the respective Reliability CoordinatorRC should shall post the
 declaration of the alert level, along with the name of the Energy Deficient
 Entityrequesting BA and, if applicable, its Balancing Authority on the RCIS website.
- **2.2 Declaration period.** The Energy Deficient Entityrequesting BA should shall update its Reliability CoordinatorRC of the situation at a minimum of every hour until the Alert 3EEA 2 is terminated. The Reliability CoordinatorRC should shall update the energy deficiency information posted on the RCIS website as changes occur and pass this information on to the affected impacted Reliability CoordinatorRCs, Balancing AuthorityBAs and Transmission Providers TOPs.
- **2.3 Sharing information on resource availability.** A <u>Balancing AuthorityBA</u> with available resources <u>should shall</u> contact the <u>Energy Deficient Entityrequesting BA</u> and coordinate with the <u>Reliability CoordinatorRC</u> as appropriate.
- **2.4 Evaluating and mitigating Transmission limitations**. The Reliability Coordinator RC should shall review Transmission outages and work with the Transmission Operator 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** Energy Deficient EntityBA actions. Before declaring an Alert 4EEA 3, the Energy Deficient Entityrequesting 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 Initiate contractually interruptible Loads and demand_Demand--side Side management Management curtailed. Initiate contractually interruptible retail Loads curtailed, and demand_Demand-_side_Side management Management within provisions of any applicable activated within provisions of the agreements_not being held for contingency reserves.
- 2.5.3 Operating Reserves. Operating reserves are being utilized such that the Energy Deficient Entity is carrying reserves below the required minimum or has initiated Emergency assistance through its Operating Reserve sharing program.

Alert 4

3. <u>EEA 3</u> — <u>Inability to meet Operating Reserve requirement or Firm Load interruption is imminent or in progress.</u>

Circumstances:

- Energy Deficient EntityRequesting BA is unable to meet Operating Reserve requirements and foresees or foresees a need for possible interruption of firm Loadhas implemented firm Load obligation interruption.
- During EEA 3, RCs and BAs have the following responsibilities:
 - 3.1 Continue actions from EEA 2. The RCs and the requesting BA shall continue to take all actions initiated during EEA 2.
 - 3.2 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.
 - **3.1** Continue actions from Alert 3. The Reliability Coordinators and the Energy Deficient Entity should continue to take all actions initiated during Alert 3.
 - **3.23.3 Declaration Period.** The Energy Deficient EntityBA shouldshall update its Reliability CoordinatorRC of the situation at a minimum of every hour until the Alert 4EEA 3 is terminated. The Reliability CoordinatorRC should shall update the energy deficiency information posted on the RCIS website as changes occur and pass this information on to the affected impacted Balancing AuthoritieBAs and Transmission ProviderTOPs.
 - 3.33.4 Reevaluating and revising SOLs and IROLs. The Reliability CoordinatorRC should-shall evaluate the risks of revising SOLs and IROLs for the possibility of delivery of energy to the Energy Deficient Entityrequesting BA. Reevaluation of SOLs and IROLs should-shall be coordinated with other Reliability CoordinatorRCs and only with the agreement of the Balancing Authority or Transmission OperatorTOP whose equipment would be affected. SOLs and IROLs should-shall only be revised as long as an Alert 4EEA 3 condition exists, or as allowed by the Balancing Authority or

- Transmission Operator TOP whose equipment is at risk. The following are minimum requirements that must be met before SOLs or IROLs are revised:
- 3.3.13.4.1 Energy Deficient Entity Requesting BA obligations. The Energy Deficient Entity requesting BA must agree that, upon notification from its Reliability Coordinator RC 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.
- 3.43.5 Returning to pre-Emergency conditions. Whenever energy is made available to an Energy Deficient Entityrequesting BA such that the Transmission Systems can be returned to its pre-Emergency SOLs or IROLs condition, the Energy Deficient Entityrequesting BA should shall notify its respective request the Reliability CoordinatorRC and to downgrade the alert level.
 - 3.4.13.5.1 Notification of other parties. Upon notification from the Energy

 Deficient Entityrequesting BA that an alert has been downgraded, the Reliability

 CoordinatorRC should shall notify the affected impacted Reliability

 CoordinatorRCs (via the RCIS), Balancing AuthoritieBAs and Transmission

 OperatorTOPs that its Systems can be returned to its normal limits.
- **Alert 0 Termination.** When the Energy Deficient Entityrequesting BA believes it will be is able to supply its customers' energy requirementsmeet its Load and Operating Reserve requirements, it should shall request of its Reliability CoordinatorRC that the EEA be terminated to terminate the EEA.
 - **Notification.** The Reliability Coordinator RC should shall notify all other Reliability Coordinator RCs via the RCIS of the termination. The Reliability Coordinator RC should shall also notify the affected impacted Balancing Authoritie BAs and Transmission Operator TOPs.

Application Guidelines

Guidelin	es and T	echnic	al Basis	•
Rationale	s to be add	led here	<mark>after ball</mark>	oting.
Requiren	nent R1:			
Requiren	nent R2:			
Requiren	nent R3:			
Requiren	nent R4:			
Requiren	nent R5:			
Requiren	ient R6:			
Requiren	ient R7:			
Requiren	ient R8:			
Requiren	nent R9:			