

# Project 2009-03 - Emergency Operations

## Mapping Document

### Project Purpose

The Emergency Operations Five-Year Review Team (EOP FYRT) was appointed by the Standards Committee Executive Committee on April 22, 2013. The EOP FYRT has reviewed the following Emergency Operations standards: EOP-001-2.1b, EOP-002-3.1 and EOP-003-2 to decide if revisions are needed in the scope of this project in relation to P81 and FERC directives. This project is a comprehensive review of this set of EOP standards to ensure that the requirements are clear and unambiguous. Many of the requirements in this set of standards were translated from Operating Policies as part of the Version 0 process, and the standards were due for a comprehensive review. Suggestions for improvement, possible consolidation and for requirements to be considered for retirement under Paragraph 81 have been submitted by stakeholders, other drafting teams and FERC staff.

On October 17, 2013 the Standards Committee accepted the recommendations of the EOP FYRT and appointed a drafting team to implement the recommendations and begin formal development. The Standards Committee further authorized the posting of the Standard Authorization Request (SAR) developed by the EOP FYRT.

Project 2009-03 – Emergency Operations (EOP-011-1) is being coordinated with Project 2008-02 – Undervoltage Load Shedding, which proposes to retire EOP-003-2 Requirements R2, R4, and R7 since these requirements are proposed to be covered by PRC-010-1, Requirement R1; this translation is illustrated in this document and will also be referenced in Project 2008-02's [mapping document](#). The project schedules and implementation plans for these two projects are being closely coordinated to ensure that no gaps or duplication will result from the products developed by the two drafting teams.

Standard: EOP-001-2.1b, Emergency Operations Planning		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
<p><b>R1.</b> Balancing Authorities shall have operating agreements with adjacent Balancing Authorities that shall, at a minimum, contain provisions for emergency assistance, including provisions to obtain emergency assistance from remote Balancing Authorities.</p>	<p>Translated to EOP-011-1, Emergency Operations.</p>	<p><b>EOP-011-1, R2</b>                      R2. Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies. At a minimum, the Emergency Operating Plan shall include the following elements: [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]</p> <ul style="list-style-type: none"> <li>2.1. Roles and responsibilities to activate the Emergency Operating Plan.</li> <li>2.2. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing a Capacity Emergency or Energy Emergency;</li> <li>2.3. Criteria to declare an Energy Emergency Alert, per Attachment 1;</li> <li>2.4. Strategies to prepare for and mitigate Emergencies including, at a minimum:                             <ul style="list-style-type: none"> <li>2.4.1. Generating resources in its Balancing Authority Area:                                     <ul style="list-style-type: none"> <li>2.4.1.1. capability and availability;</li> </ul> </li> </ul> </li> </ul>

Standard: EOP-001-2.1b, Emergency Operations Planning		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		2.4.1.2. fuel supply and inventory concerns; 2.4.1.3. fuel switching capabilities; and 2.4.1.4. environmental constraints. 2.4.2. Voluntary Load reductions; 2.4.3. Public appeals; 2.4.4. Requests to government agencies to implement their programs to achieve necessary energy reductions; 2.4.5. Reduction of internal utility energy use; 2.4.6. Customer fuel switching; 2.4.7. Use of Interruptible Load, curtailable Load and demand response; 2.4.8. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding; and 2.4.9. Mitigation of reliability impacts of extreme weather conditions. 2.5. Strategies for coordinating Emergency Operating Plans with impacted Balancing Authorities and impacted Transmission Operators.
		<b>EOP-011-1, R1</b>

Standard: EOP-001-2.1b, Emergency Operations Planning		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
<p><b>R2.</b> Each Transmission Operator and Balancing Authority shall:</p> <ul style="list-style-type: none"> <li><b>R2.1.</b> Develop, maintain, and implement a set of plans to mitigate operating emergencies for insufficient generating capacity.</li> <li><b>R2.2.</b> Develop, maintain, and implement a set of plans to mitigate operating emergencies on the transmission system.</li> <li><b>R2.3.</b> Develop, maintain, and implement a set of plans for load shedding</li> </ul>	<p>Translated to EOP-011-1, Emergency Operations.</p>	<p>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]</p> <ul style="list-style-type: none"> <li>1.1. Roles and responsibilities to activate the Emergency Operating Plan;</li> <li>1.2. Strategies to prepare for and mitigate Emergencies including, at a minimum:               <ul style="list-style-type: none"> <li>1.2.1. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing an operating Emergency;</li> <li>1.2.2. Voltage control;</li> <li>1.2.3. Cancellation or recall of Transmission and generation outages;</li> <li>1.2.4. System reconfiguration;</li> <li>1.2.5. Redispatch of generation request;</li> </ul> </li> </ul>

Standard: EOP-001-2.1b, Emergency Operations Planning		
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		<p>1.2.6. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding;</p> <p>1.2.7. Mitigation of reliability impacts of extreme weather conditions; and</p> <p>1.3. Strategies for coordinating Emergency Operating Plans with impacted Transmission Operators and impacted Balancing Authorities.</p> <p><b>EOP-011-1, R2</b></p> <p>R2. Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies. At a minimum, the Emergency Operating Plan shall include the following elements: [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]</p> <p>2.1. Roles and responsibilities to activate the Emergency Operating Plan.</p> <p>2.2. Notification to the Reliability Coordinator, to include current and projected System conditions,</p>

Standard: EOP-001-2.1b, Emergency Operations Planning		
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		<p>when experiencing a Capacity Emergency or Energy Emergency;</p> <p>2.3. Criteria to declare an Energy Emergency Alert, per Attachment 1;</p> <p>2.4. Strategies to prepare for and mitigate Emergencies including, at a minimum:</p> <p>2.4.1. Generating resources in its Balancing Authority Area:</p> <p>2.4.1.1. capability and availability;</p> <p>2.4.1.2. fuel supply and inventory concerns;</p> <p>2.4.1.3. fuel switching capabilities; and</p> <p>2.4.1.4. environmental constraints.</p> <p>2.4.2. Voluntary Load reductions;</p> <p>2.4.3. Public appeals;</p> <p>2.4.4. Requests to government agencies to implement their programs to achieve necessary energy reductions;</p> <p>2.4.5. Reduction of internal utility energy use;</p> <p>2.4.6. Customer fuel switching;</p> <p>2.4.7. Use of Interruptible Load, curtailable Load and demand response;</p>

Standard: EOP-001-2.1b, Emergency Operations Planning		
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		<p>2.4.8. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding; and</p> <p>2.4.9. Mitigation of reliability impacts of extreme weather conditions.</p> <p>2.5. Strategies for coordinating Emergency Operating Plans with impacted Balancing Authorities and impacted Transmission Operators.</p>
<p><b>R3.</b> Each Transmission Operator and Balancing Authority shall have emergency plans that will enable it to mitigate operating emergencies. At a minimum, Transmission Operator and Balancing Authority emergency plans shall include:</p> <p><b>R3.1.</b> Communications protocols to be used during emergencies.</p> <p><b>R3.2.</b> A list of controlling actions to resolve the emergency. Load reduction, in sufficient quantity to resolve the emergency within NERC-established timelines, shall be one of the controlling actions.</p>	<p>Translated to EOP-011-1, Emergency Operations; Retired R3.1 under Criteria A and B7 of Paragraph 81 guidelines; Retired R3.4 under Criteria A and B1 of Paragraph 81 guidelines.</p>	<p><b>EOP-011-1, R1</b></p> <p>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]</p> <p>1.1. Roles and responsibilities to activate the Emergency Operating Plan;</p> <p>1.2. Strategies to prepare for and mitigate Emergencies including, at a minimum:</p>

Standard: EOP-001-2.1b, Emergency Operations Planning		
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<p><b>R3.3.</b> The tasks to be coordinated with and among adjacent Transmission Operators and Balancing Authorities.</p> <p><b>R3.4.</b> Staffing levels for the emergency.</p>		<p>1.2.1. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing an operating Emergency;</p> <p>1.2.2. Voltage control;</p> <p>1.2.3. Cancellation or recall of Transmission and generation outages;</p> <p>1.2.4. System reconfiguration;</p> <p>1.2.5. Redispatch of generation request;</p> <p>1.2.6. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding;</p> <p>1.2.7. Mitigation of reliability impacts of extreme weather conditions; and</p> <p>1.3. Strategies for coordinating Emergency Operating Plans with impacted Transmission Operators and impacted Balancing Authorities.</p> <p><b>EOP-011-1, R2</b></p> <p>R2. Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate Capacity and</p>



Standard: EOP-001-2.1b, Emergency Operations Planning		
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		<p>Energy Emergencies. At a minimum, the Emergency Operating Plan shall include the following elements:                      [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]</p> <p>2.1. Roles and responsibilities to activate the Emergency Operating Plan.</p> <p>2.2. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing a Capacity Emergency or Energy Emergency;</p> <p>2.3. Criteria to declare an Energy Emergency Alert, per Attachment 1;</p> <p>2.4. Strategies to prepare for and mitigate Emergencies including, at a minimum:</p> <p>2.4.1. Generating resources in its Balancing Authority Area:</p> <p>2.4.1.1. capability and availability;</p> <p>2.4.1.2. fuel supply and inventory concerns;</p> <p>2.4.1.3. fuel switching capabilities; and</p> <p>2.4.1.4. environmental constraints.</p> <p>2.4.2. Voluntary Load reductions;</p> <p>2.4.3. Public appeals;</p>

Standard: EOP-001-2.1b, Emergency Operations Planning		
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		<p>2.4.4. Requests to government agencies to implement their programs to achieve necessary energy reductions;</p> <p>2.4.5. Reduction of internal utility energy use;</p> <p>2.4.6. Customer fuel switching;</p> <p>2.4.7. Use of Interruptible Load, curtailable Load and demand response;</p> <p>2.4.8. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding; and</p> <p>2.4.9. Mitigation of reliability impacts of extreme weather conditions.</p> <p>2.5. Strategies for coordinating Emergency Operating Plans with impacted Balancing Authorities and impacted Transmission Operators.</p> <p><b>Retirements:</b>  <b>Requirement R3.1</b></p> <ul style="list-style-type: none"> <li>• Meets Criterion B7 and Criterion A of Paragraph 81;</li> <li>• Covered by EOP-001-2.1b Requirement R4 in Attachment 1 (proposed Requirements R1 and R2 in EOP-011-1); and</li> </ul>

Standard: EOP-001-2.1b, Emergency Operations Planning		
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		<ul style="list-style-type: none"> <li>COM-001 and COM-002 are descriptive in the identification of protocols to use and, thus, adequately cover the generic reference.</li> </ul> <p><b>Requirement R3.2</b></p> <ul style="list-style-type: none"> <li>Meets Criterion B7 and Criterion A of Paragraph 81;</li> <li>Covered by EOP-001-2.1b Requirement R4 in Attachment 1 (proposed Requirements R1 and R2 in EOP-011-1); and</li> <li>Load reduction within timelines is covered by BAL-002 Requirement R2.</li> </ul> <p><b>Requirement R3.4</b></p> <ul style="list-style-type: none"> <li>Meets Criterion B1 of Paragraph 81; and</li> <li>Staffing levels are administrative in nature.</li> </ul>
<p><b>R4.</b> Each Transmission Operator and Balancing Authority shall include the applicable elements in Attachment 1-EOP-001 when developing an emergency plan.</p>	<p>Translated to EOP-011-1, Emergency Operations.</p>	<p><b>EOP-011-1, R1</b></p> <p>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</p>

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		<p>include the following elements: [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]</p> <ol style="list-style-type: none"> <li>1.1. Roles and responsibilities to activate the Emergency Operating Plan;</li> <li>1.2. Strategies to prepare for and mitigate Emergencies including, at a minimum:               <ol style="list-style-type: none"> <li>1.2.1. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing an operating Emergency;</li> <li>1.2.2. Voltage control;</li> <li>1.2.3. Cancellation or recall of Transmission and generation outages;</li> <li>1.2.4. System reconfiguration;</li> <li>1.2.5. Redispatch of generation request;</li> <li>1.2.6. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding;</li> <li>1.2.7. Mitigation of reliability impacts of extreme weather conditions; and</li> </ol> </li> </ol>

Standard: EOP-001-2.1b, Emergency Operations Planning		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<p>1.3. Strategies for coordinating Emergency Operating Plans with impacted Transmission Operators and impacted Balancing Authorities.</p> <p><b>EOP-011-1, R2</b></p> <p>R2. Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies. At a minimum, the Emergency Operating Plan shall include the following elements: [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]</p> <p>2.1. Roles and responsibilities to activate the Emergency Operating Plan.</p> <p>2.2. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing a Capacity Emergency or Energy Emergency;</p> <p>2.3. Criteria to declare an Energy Emergency Alert, per Attachment 1;</p> <p>2.4. Strategies to prepare for and mitigate Emergencies including, at a minimum:</p>

Standard: EOP-001-2.1b, Emergency Operations Planning		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<p>2.4.1. Generating resources in its Balancing Authority Area:</p> <ul style="list-style-type: none"> <li>2.4.1.1. capability and availability;</li> <li>2.4.1.2. fuel supply and inventory concerns;</li> <li>2.4.1.3. fuel switching capabilities; and</li> <li>2.4.1.4. environmental constraints.</li> </ul> <p>2.4.2. Voluntary Load reductions;</p> <p>2.4.3. Public appeals;</p> <p>2.4.4. Requests to government agencies to implement their programs to achieve necessary energy reductions;</p> <p>2.4.5. Reduction of internal utility energy use;</p> <p>2.4.6. Customer fuel switching;</p> <p>2.4.7. Use of Interruptible Load, curtailable Load and demand response;</p> <p>2.4.8. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding; and</p> <p>2.4.9. Mitigation of reliability impacts of extreme weather conditions.</p>

Standard: EOP-001-2.1b, Emergency Operations Planning		
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		2.5. Strategies for coordinating Emergency Operating Plans with impacted Balancing Authorities and impacted Transmission Operators.
<p><b>R5.</b> The Transmission Operator and Balancing Authority shall annually review and update each emergency plan. The Transmission Operator and Balancing Authority shall provide a copy of its updated emergency plans to its Reliability Coordinator and to neighboring Transmission Operators and Balancing Authorities.</p>	<p>Translated to EOP-011-1, Emergency Operations.</p>	<p><b>EOP-011-1, R1</b></p> <p>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]</p> <p>1.1. Roles and responsibilities to activate the Emergency Operating Plan;</p> <p>1.2. Strategies to prepare for and mitigate Emergencies including, at a minimum:</p> <p>1.2.1. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing an operating Emergency;</p> <p>1.2.2. Voltage control;</p>

Standard: EOP-001-2.1b, Emergency Operations Planning		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<p>1.2.3. Cancellation or recall of Transmission and generation outages;</p> <p>1.2.4. System reconfiguration;</p> <p>1.2.5. Redispatch of generation request;</p> <p>1.2.6. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding;</p> <p>1.2.7. Mitigation of reliability impacts of extreme weather conditions; and</p> <p>1.3. Strategies for coordinating Emergency Operating Plans with impacted Transmission Operators and impacted Balancing Authorities.</p> <p><b>EOP-011-1, R2</b></p> <p>R2. Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies. At a minimum, the Emergency Operating Plan shall include the following elements:                      [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]</p>



Standard: EOP-001-2.1b, Emergency Operations Planning		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<p>2.1. Roles and responsibilities to activate the Emergency Operating Plan.</p> <p>2.2. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing a Capacity Emergency or Energy Emergency;</p> <p>2.3. Criteria to declare an Energy Emergency Alert, per Attachment 1;</p> <p>2.4. Strategies to prepare for and mitigate Emergencies including, at a minimum:</p> <p>2.4.1. Generating resources in its Balancing Authority Area:</p> <p>2.4.1.1. capability and availability;</p> <p>2.4.1.2. fuel supply and inventory concerns;</p> <p>2.4.1.3. fuel switching capabilities; and</p> <p>2.4.1.4. environmental constraints.</p> <p>2.4.2. Voluntary Load reductions;</p> <p>2.4.3. Public appeals;</p> <p>2.4.4. Requests to government agencies to implement their programs to achieve necessary energy reductions;</p> <p>2.4.5. Reduction of internal utility energy use;</p>

Standard: EOP-001-2.1b, Emergency Operations Planning		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		2.4.6. Customer fuel switching; 2.4.7. Use of Interruptible Load, curtailable Load and demand response; 2.4.8. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding; and 2.4.9. Mitigation of reliability impacts of extreme weather conditions. 2.5. Strategies for coordinating Emergency Operating Plans with impacted Balancing Authorities and impacted Transmission Operators.
<p><b>R6.</b> The Transmission Operator and Balancing Authority shall coordinate its emergency plans with other Transmission Operators and Balancing Authorities as appropriate. This coordination includes the following steps, as applicable:</p> <p><b>R6.1.</b> The Transmission Operator and Balancing Authority shall establish and maintain reliable communications between interconnected systems.</p>	<p>Retired under Criteria B6 and B7 of P81 guidelines.</p>	<p><b>Retirements</b></p> <p><b>Requirement R6.1</b></p> <ul style="list-style-type: none"> <li>• Meets Criterion B7 of Paragraph 81; and</li> <li>• Redundant with COM-001.</li> </ul> <p><b>Requirement R6.2</b></p> <ul style="list-style-type: none"> <li>• Meets Criterion B6 of Paragraph 81;</li> <li>• Speaks to an action to be taken during capacity issues that is not feasible in accomplishing; and</li> </ul>

Standard: EOP-001-2.1b, Emergency Operations Planning		
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<p><b>R6.2.</b> The Transmission Operator and Balancing Authority shall arrange new interchange agreements to provide for emergency capacity or energy transfers if existing agreements cannot be used.</p> <p><b>R6.3.</b> The Transmission Operator and Balancing Authority shall coordinate transmission and generator maintenance schedules to maximize capacity or conserve the fuel in short supply. (This includes water for hydro generators.)</p> <p><b>R6.4.</b> The Transmission Operator and Balancing Authority shall arrange deliveries of electrical energy or fuel from remote systems through normal operating channels.</p>		<ul style="list-style-type: none"> <li>Transaction arrangements are a commercial practice.</li> </ul> <p><b>Requirement R6.3</b></p> <ul style="list-style-type: none"> <li>Meets Criterion B7 of Paragraph 81; and</li> <li>Covered by EOP-001-2.1b Requirement R4 in Attachment 1 (proposed Requirements R1 and R2 in EOP-011-1).</li> </ul> <p><b>Requirement R6.4</b></p> <ul style="list-style-type: none"> <li>Meets Criterion A of Paragraph 81; and</li> <li>Does not provide benefit to the reliability of the BES.</li> </ul>

Standard: EOP-002-3.1, Capacity and Energy Emergencies		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
<p><b>R1.</b> Each Balancing Authority and Reliability Coordinator shall have the responsibility and clear decision-making authority to take whatever actions are needed to ensure the reliability of its respective area and shall exercise specific authority to alleviate capacity and energy emergencies.</p>	<p>Retired under Criteria A and B7 of P81 guidelines.</p>	<p><b>Retired – redundant with PER-001, R1 with respect to the Balancing Authority and IRO-001-1.1, Requirement R3 for the Reliability Coordinator.</b></p>
<p><b>R2.</b> Each Balancing Authority shall, when required and as appropriate, take one or more actions as described in its capacity and energy emergency plan to reduce risks to the interconnected system.</p>	<p>Translated to EOP-011-1, Emergency Operations.</p>	<p><b>EOP-011-1, R2</b>                      R2. Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies. At a minimum, the Emergency Operating Plan shall include the following elements:                      [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]                      2.1. Roles and responsibilities to activate 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;</p>

Standard: EOP-002-3.1, Capacity and Energy Emergencies		
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		<p>2.3. Criteria to declare an Energy Emergency Alert, per Attachment 1;</p> <p>2.4. Strategies to prepare for and mitigate Emergencies including, at a minimum:</p> <p>2.4.1. Generating resources in its Balancing Authority Area:</p> <p>2.4.1.1. capability and availability;</p> <p>2.4.1.2. fuel supply and inventory concerns;</p> <p>2.4.1.3. fuel switching capabilities; and</p> <p>2.4.1.4. environmental constraints.</p> <p>2.4.2. Voluntary Load reductions;</p> <p>2.4.3. Public appeals;</p> <p>2.4.4. Requests to government agencies to implement their programs to achieve necessary energy reductions;</p> <p>2.4.5. Reduction of internal utility energy use;</p> <p>2.4.6. Customer fuel switching;</p> <p>2.4.7. Use of Interruptible Load, curtailable Load and demand response;</p> <p>2.4.8. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding; and</p>

Standard: EOP-002-3.1, Capacity and Energy Emergencies		
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		<p>2.4.9. Mitigation of reliability impacts of extreme weather conditions.</p> <p>2.5. Strategies for coordinating Emergency Operating Plans with impacted Balancing Authorities and impacted Transmission Operators.</p>
<p><b>R3.</b> A Balancing Authority that is experiencing an operating capacity or energy emergency shall communicate its current and future system conditions to its Reliability Coordinator and neighboring Balancing Authorities.</p>	<p>Translated to EOP-011-1, Emergency Operations.</p>	<p><b>EOP-011-1, R2</b></p> <p>R2. Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies. At a minimum, the Emergency Operating Plan shall include the following elements: [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]</p> <p>2.1. Roles and responsibilities to activate the Emergency Operating Plan.</p> <p>2.2. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing a Capacity Emergency or Energy Emergency;</p> <p>2.3. Criteria to declare an Energy Emergency Alert, per Attachment 1;</p>

Standard: EOP-002-3.1, Capacity and Energy Emergencies		
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		<p>2.4. Strategies to prepare for and mitigate Emergencies including, at a minimum:</p> <p>2.4.1. Generating resources in its Balancing Authority Area:</p> <ul style="list-style-type: none"> <li>2.4.1.1. capability and availability;</li> <li>2.4.1.2. fuel supply and inventory concerns;</li> <li>2.4.1.3. fuel switching capabilities; and</li> <li>2.4.1.4. environmental constraints.</li> </ul> <p>2.4.2. Voluntary Load reductions;</p> <p>2.4.3. Public appeals;</p> <p>2.4.4. Requests to government agencies to implement their programs to achieve necessary energy reductions;</p> <p>2.4.5. Reduction of internal utility energy use;</p> <p>2.4.6. Customer fuel switching;</p> <p>2.4.7. Use of Interruptible Load, curtailable Load and demand response;</p> <p>2.4.8. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding; and</p> <p>2.4.9. Mitigation of reliability impacts of extreme weather conditions.</p>

Standard: EOP-002-3.1, Capacity and Energy Emergencies		
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		2.5. Strategies for coordinating Emergency Operating Plans with impacted Balancing Authorities and impacted Transmission Operators.
<b>R4.</b> A Balancing Authority anticipating an operating capacity or energy emergency shall perform all actions necessary including bringing on all available generation, postponing equipment maintenance, scheduling interchange purchases in advance, and being prepared to reduce firm load.	Translated to EOP-011-1, Emergency Operations.	<p><b>EOP-011-1, R2</b></p> <p>R2. Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies. At a minimum, the Emergency Operating Plan shall include the following elements: [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]</p> <p>2.1. Roles and responsibilities to activate the Emergency Operating Plan.</p> <p>2.2. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing a Capacity Emergency or Energy Emergency;</p> <p>2.3. Criteria to declare an Energy Emergency Alert, per Attachment 1;</p> <p>2.4. Strategies to prepare for and mitigate Emergencies including, at a minimum:</p>



Standard: EOP-002-3.1, Capacity and Energy Emergencies

Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<ul style="list-style-type: none"> <li>2.4.1. Generating resources in its Balancing Authority Area:                             <ul style="list-style-type: none"> <li>2.4.1.1. capability and availability;</li> <li>2.4.1.2. fuel supply and inventory concerns;</li> <li>2.4.1.3. fuel switching capabilities; and</li> <li>2.4.1.4. environmental constraints.</li> </ul> </li> <li>2.4.2. Voluntary Load reductions;</li> <li>2.4.3. Public appeals;</li> <li>2.4.4. Requests to government agencies to implement their programs to achieve necessary energy reductions;</li> <li>2.4.5. Reduction of internal utility energy use;</li> <li>2.4.6. Customer fuel switching;</li> <li>2.4.7. Use of Interruptible Load, curtailable Load and demand response;</li> <li>2.4.8. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding; and</li> <li>2.4.9. Mitigation of reliability impacts of extreme weather conditions.</li> </ul>

Standard: EOP-002-3.1, Capacity and Energy Emergencies		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		2.5. Strategies for coordinating Emergency Operating Plans with impacted Balancing Authorities and impacted Transmission Operators.
<p><b>R5.</b> A deficient Balancing Authority shall only use the assistance provided by the Interconnection’s frequency bias for the time needed to implement corrective actions. The Balancing Authority shall not unilaterally adjust generation in an attempt to return interconnection frequency to normal beyond that supplied through frequency bias action and Interchange Schedule changes. Such unilateral adjustment may overload transmission facilities.</p>	<p>Translated to EOP-011-1, Emergency Operations.</p>	<p><b>EOP-011-1, R2</b>                      R2. Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies. At a minimum, the Emergency Operating Plan shall include the following elements:                      [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]</p> <p>2.1. Roles and responsibilities to activate the Emergency Operating Plan.</p> <p>2.2. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing a Capacity Emergency or Energy Emergency;</p> <p>2.3. Criteria to declare an Energy Emergency Alert, per Attachment 1;</p> <p>2.4. Strategies to prepare for and mitigate Emergencies including, at a minimum:</p>

Standard: EOP-002-3.1, Capacity and Energy Emergencies

Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<ul style="list-style-type: none"> <li>2.4.1. Generating resources in its Balancing Authority Area:                             <ul style="list-style-type: none"> <li>2.4.1.1. capability and availability;</li> <li>2.4.1.2. fuel supply and inventory concerns;</li> <li>2.4.1.3. fuel switching capabilities; and</li> <li>2.4.1.4. environmental constraints.</li> </ul> </li> <li>2.4.2. Voluntary Load reductions;</li> <li>2.4.3. Public appeals;</li> <li>2.4.4. Requests to government agencies to implement their programs to achieve necessary energy reductions;</li> <li>2.4.5. Reduction of internal utility energy use;</li> <li>2.4.6. Customer fuel switching;</li> <li>2.4.7. Use of Interruptible Load, curtailable Load and demand response;</li> <li>2.4.8. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding; and</li> <li>2.4.9. Mitigation of reliability impacts of extreme weather conditions.</li> </ul>

Standard: EOP-002-3.1, Capacity and Energy Emergencies		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		2.5. Strategies for coordinating Emergency Operating Plans with impacted Balancing Authorities and impacted Transmission Operators.
<p><b>R6.</b> If the Balancing Authority cannot comply with the Control Performance and Disturbance Control Standards, then it shall immediately implement remedies to do so. These remedies include, but are not limited to:</p> <ul style="list-style-type: none"> <li><b>R6.1.</b> Loading all available generating capacity.</li> <li><b>R6.2.</b> Deploying all available operating reserve.</li> <li><b>R6.3.</b> Interrupting interruptible load and exports.</li> <li><b>R6.4.</b> Requesting emergency assistance from other Balancing Authorities.</li> <li><b>R6.5.</b> Declaring an Energy Emergency through its Reliability Coordinator; and</li> <li><b>R6.6.</b> Reducing load, through procedures such as public appeals, voltage reductions, curtailing interruptible loads and firm loads.</li> </ul>	Translated to EOP-011-1, Emergency Operations.	<p><b>EOP-011-1, R2</b></p> <p>R2. Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies. At a minimum, the Emergency Operating Plan shall include the following elements: [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]</p> <ul style="list-style-type: none"> <li>2.1. Roles and responsibilities to activate the Emergency Operating Plan.</li> <li>2.2. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing a Capacity Emergency or Energy Emergency;</li> <li>2.3. Criteria to declare an Energy Emergency Alert, per Attachment 1;</li> <li>2.4. Strategies to prepare for and mitigate Emergencies including, at a minimum:</li> </ul>

Standard: EOP-002-3.1, Capacity and Energy Emergencies

Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<ul style="list-style-type: none"> <li>2.4.1. Generating resources in its Balancing Authority Area:                             <ul style="list-style-type: none"> <li>2.4.1.1. capability and availability;</li> <li>2.4.1.2. fuel supply and inventory concerns;</li> <li>2.4.1.3. fuel switching capabilities; and</li> <li>2.4.1.4. environmental constraints.</li> </ul> </li> <li>2.4.2. Voluntary Load reductions;</li> <li>2.4.3. Public appeals;</li> <li>2.4.4. Requests to government agencies to implement their programs to achieve necessary energy reductions;</li> <li>2.4.5. Reduction of internal utility energy use;</li> <li>2.4.6. Customer fuel switching;</li> <li>2.4.7. Use of Interruptible Load, curtailable Load and demand response;</li> <li>2.4.8. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding; and</li> <li>2.4.9. Mitigation of reliability impacts of extreme weather conditions.</li> </ul>

Standard: EOP-002-3.1, Capacity and Energy Emergencies		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		2.5. Strategies for coordinating Emergency Operating Plans with impacted Balancing Authorities and impacted Transmission Operators.
<p><b>R7.</b> Once the Balancing Authority has exhausted the steps listed in Requirement 6, or if these steps cannot be completed in sufficient time to resolve the emergency condition, the Balancing Authority shall:</p> <p><b>R7.1.</b> Manually shed firm load without delay to return its ACE to zero; and</p> <p><b>R7.2.</b> Request the Reliability Coordinator to declare an Energy Emergency Alert in accordance with Attachment 1-EOP-002 “Energy Emergency Alerts.”</p>	Translated to EOP-011-1, Emergency Operations.	<p><b>EOP-011-1, R2</b></p> <p>R2. Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies. At a minimum, the Emergency Operating Plan shall include the following elements: [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]</p> <p>2.1. Roles and responsibilities to activate the Emergency Operating Plan.</p> <p>2.2. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing a Capacity Emergency or Energy Emergency;</p> <p>2.3. Criteria to declare an Energy Emergency Alert, per Attachment 1;</p> <p>2.4. Strategies to prepare for and mitigate Emergencies including, at a minimum:</p>

Standard: EOP-002-3.1, Capacity and Energy Emergencies		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		2.4.1. Generating resources in its Balancing Authority Area: <ul style="list-style-type: none"> <li>2.4.1.1. capability and availability;</li> <li>2.4.1.2. fuel supply and inventory concerns;</li> <li>2.4.1.3. fuel switching capabilities; and</li> <li>2.4.1.4. environmental constraints.</li> </ul> 2.4.2. Voluntary Load reductions; <li>2.4.3. Public appeals;</li> <li>2.4.4. Requests to government agencies to implement their programs to achieve necessary energy reductions;</li> <li>2.4.5. Reduction of internal utility energy use;</li> <li>2.4.6. Customer fuel switching;</li> <li>2.4.7. Use of Interruptible Load, curtailable Load and demand response;</li> <li>2.4.8. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding; and</li> <li>2.4.9. Mitigation of reliability impacts of extreme weather conditions.</li>

Standard: EOP-002-3.1, Capacity and Energy Emergencies		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		2.5. Strategies for coordinating Emergency Operating Plans with impacted Balancing Authorities and impacted Transmission Operators.
<p><b>R8.</b> A Reliability Coordinator that has any Balancing Authority within its Reliability Coordinator area experiencing a potential or actual Energy Emergency shall initiate an Energy Emergency Alert as detailed in Attachment 1-EOP-002 “Energy Emergency Alerts.” The Reliability Coordinator shall act to mitigate the emergency condition, including a request for emergency assistance if required.</p>	Translated to EOP-011-1, Emergency Operations.	<p><b>EOP-011-1, R5</b>                      R5. Each Reliability Coordinator that has a Balancing Authority experiencing a potential or actual Energy Emergency within its Reliability Coordinator Area shall initiate an Energy Emergency Alert, as detailed in Attachment 1. [Violation Risk Factor: High] [Time Horizon: Real-Time Operations]</p>
<p><b>R9.</b> When a Transmission Service Provider expects to elevate the transmission service priority of an Interchange Transaction from Priority 6 (Network Integration Transmission Service from Non-designated Resources) to Priority 7 (Network Integration transmission Service from designated Network Resources) as permitted in its transmission tariff:  <b>R9.1.</b> The deficient Load-Serving Entity shall request its Reliability Coordinator to</p>	Retired per P81 – this is addressed in NAESB tagging specification.	<p><b>LSEs have no Real-time reliability functionality with respect to EEAs.</b>                      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</p>



Standard: EOP-002-3.1, Capacity and Energy Emergencies		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
<p>initiate an Energy Emergency Alert in accordance with Attachment 1-EOP-002 “Energy Emergency Alerts.”</p> <p><b>R9.2.</b> The Reliability Coordinator shall submit the report to NERC for posting on the NERC Website, noting the expected total MW that may have its transmission service priority changed.</p> <p><b>R9.3.</b> The Reliability Coordinator shall use EEA 1 to forecast the change of the priority of transmission service of an Interchange Transaction on the system from Priority 6 to Priority 7.</p> <p><b>R9.4.</b> The Reliability Coordinator shall use EEA 2 to announce the change of the priority of transmission service of an Interchange Transaction on the system from Priority 6 to Priority 7.</p>		<p>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.</p>
<p><b>Attachment 1</b>  <b>2.6.4 Operating Reserves.</b> Operating reserves are being utilized such that the Energy.</p>	<p>Translated to EOP-011-1, Attachment 1.</p>	<p><b>Attachment 1</b>  <b>3.1 Operating Reserves.</b> Operating Reserves are being utilized such that the requesting BA is carrying reserves below the required minimum</p>

Standard: EOP-002-3.1, Capacity and Energy Emergencies		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
Deficient Entity is carrying reserves below the required minimum or has initiated emergency assistance through its operating reserve sharing program.		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.

Standard: EOP-003-2, Load Shedding Plans		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
<p><b>R1.</b> After taking all other remedial steps, a Transmission Operator or Balancing Authority operating with insufficient generation or transmission capacity shall shed customer load rather than risk an uncontrolled failure of components or cascading outages of the Interconnection.</p>	<p>Translated to EOP-011-1, Emergency Operations.</p>	<p><b>EOP-011-1, R1</b>                      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]</p> <ul style="list-style-type: none"> <li>1.1. Roles and responsibilities to activate the Emergency Operating Plan;</li> <li>1.2. Strategies to prepare for and mitigate Emergencies including, at a minimum:                             <ul style="list-style-type: none"> <li>1.2.1. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing an operating Emergency;</li> <li>1.2.2. Voltage control;</li> <li>1.2.3. Cancellation or recall of Transmission and generation outages;</li> </ul> </li> </ul>

Standard: EOP-003-2, Load Shedding Plans		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<p>1.2.4. System reconfiguration;                      1.2.5. Redispatch of generation request;                      1.2.6. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding;                      1.2.7. Mitigation of reliability impacts of extreme weather conditions; and                      1.3. Strategies for coordinating Emergency Operating Plans with impacted Transmission Operators and impacted Balancing Authorities.</p> <p><b>EOP-011-1, R2</b>                      R2. Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies. At a minimum, the Emergency Operating Plan shall include the following elements:                      [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]                      2.1. Roles and responsibilities to activate the Emergency Operating Plan.</p>

Standard: EOP-003-2, Load Shedding Plans		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<p>2.2. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing a Capacity Emergency or Energy Emergency;</p> <p>2.3. Criteria to declare an Energy Emergency Alert, per Attachment 1;</p> <p>2.4. Strategies to prepare for and mitigate Emergencies including, at a minimum:</p> <p>2.4.1. Generating resources in its Balancing Authority Area:</p> <p>2.4.1.1. capability and availability;</p> <p>2.4.1.2. fuel supply and inventory concerns;</p> <p>2.4.1.3. fuel switching capabilities; and</p> <p>2.4.1.4. environmental constraints.</p> <p>2.4.2. Voluntary Load reductions;</p> <p>2.4.3. Public appeals;</p> <p>2.4.4. Requests to government agencies to implement their programs to achieve necessary energy reductions;</p> <p>2.4.5. Reduction of internal utility energy use;</p> <p>2.4.6. Customer fuel switching;</p>

Standard: EOP-003-2, Load Shedding Plans		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<p>2.4.7. Use of Interruptible Load, curtailable Load and demand response;</p> <p>2.4.8. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding; and</p> <p>2.4.9. Mitigation of reliability impacts of extreme weather conditions.</p> <p>2.5. Strategies for coordinating Emergency Operating Plans with impacted Balancing Authorities and impacted Transmission Operators.</p>
<p><b>R2.</b> Each Transmission Operator shall establish plans for automatic load shedding for undervoltage conditions if the Transmission Operator or its associated Transmission Planner(s) or Planning Coordinator(s) determine that an under-voltage load shedding scheme is required.</p>	<p>EOP-003-2, R2 maps to PRC-010-1, R1.</p> <p>Applicability is changed to the PC or TP because the PC or TP is responsible for the program design.</p>	<p><b>Proposed Language in PRC-010-1:</b></p> <p><b>R1.</b> Each Planning Coordinator or Transmission Planner that is developing a UVLS Program shall evaluate its effectiveness and subsequently provide the UVLS Program’s specifications and implementation schedule to the UVLS entities responsible for implementing the UVLS program. The evaluation shall include, but is not limited to, studies and analyses that show: <i>[Violation Risk Factor: High] [Time Horizon: Long-term Planning]</i></p>

Standard: EOP-003-2, Load Shedding Plans		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<p><b>1.1.</b> The implementation of the UVLS Program resolves the identified undervoltage issues that led to its development and design.</p> <p><b>1.2.</b> The UVLS Program is integrated through coordination with generator voltage ride-through capabilities and other protection and control systems, including, but not limited to, transmission line protection, auto-reclosing, Remedial Action Schemes, and other undervoltage-based load shedding programs.</p> <p>These tasks need to be performed in a planning horizon in order to be implemented before any operational issues arise. EOP-011-1 relates to Real-time operations and the operations planning time horizon.</p>
<p><b>R3.</b> Each Transmission Operator and Balancing Authority shall coordinate load shedding plans, excluding automatic under-frequency load shedding plans, among other interconnected Transmission Operators and Balancing Authorities.</p>	<p>Translated to EOP-011-1, Emergency Operations.</p>	<p><b>EOP-011-1, R1</b></p> <p>R1. Each Transmission Operator shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate operating Emergencies on its Transmission System.</p>

Standard: EOP-003-2, Load Shedding Plans		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<p>At a minimum, the Emergency Operating Plan shall include the following elements: [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]</p> <ol style="list-style-type: none"> <li>1.1. Roles and responsibilities to activate the Emergency Operating Plan;</li> <li>1.2. Strategies to prepare for and mitigate Emergencies including, at a minimum:                             <ol style="list-style-type: none"> <li>1.2.1. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing an operating Emergency;</li> <li>1.2.2. Voltage control;</li> <li>1.2.3. Cancellation or recall of Transmission and generation outages;</li> <li>1.2.4. System reconfiguration;</li> <li>1.2.5. Redispatch of generation request;</li> <li>1.2.6. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding;</li> <li>1.2.7. Mitigation of reliability impacts of extreme weather conditions; and</li> </ol> </li> </ol>



Standard: EOP-003-2, Load Shedding Plans		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<p>1.3. Strategies for coordinating Emergency Operating Plans with impacted Transmission Operators and impacted Balancing Authorities.</p> <p><b>EOP-011-1, R2</b>                      R2. Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies. At a minimum, the Emergency Operating Plan shall include the following elements:                      [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]</p> <p>2.1. Roles and responsibilities to activate the Emergency Operating Plan.</p> <p>2.2. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing a Capacity Emergency or Energy Emergency;</p> <p>2.3. Criteria to declare an Energy Emergency Alert, per Attachment 1;</p> <p>2.4. Strategies to prepare for and mitigate Emergencies including, at a minimum:</p>

Standard: EOP-003-2, Load Shedding Plans		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<p>2.4.1. Generating resources in its Balancing Authority Area:</p> <ul style="list-style-type: none"> <li>2.4.1.1. capability and availability;</li> <li>2.4.1.2. fuel supply and inventory concerns;</li> <li>2.4.1.3. fuel switching capabilities; and</li> <li>2.4.1.4. environmental constraints.</li> </ul> <p>2.4.2. Voluntary Load reductions;</p> <p>2.4.3. Public appeals;</p> <p>2.4.4. Requests to government agencies to implement their programs to achieve necessary energy reductions;</p> <p>2.4.5. Reduction of internal utility energy use;</p> <p>2.4.6. Customer fuel switching;</p> <p>2.4.7. Use of Interruptible Load, curtailable Load and demand response;</p> <p>2.4.8. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding; and</p> <p>2.4.9. Mitigation of reliability impacts of extreme weather conditions.</p>

Standard: EOP-003-2, Load Shedding Plans		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		2.5. Strategies for coordinating Emergency Operating Plans with impacted Balancing Authorities and impacted Transmission Operators.
<p><b>R4.</b> A Transmission Operator shall consider one or more of these factors in designing an automatic under voltage load shedding scheme: voltage level, rate of voltage decay, or power flow levels.</p>	<p>EOP-003-2, R4 maps to PRC-010-1, R1.</p> <p>Applicability is changed to the PC or TP because the PC or TP is responsible for the program design.</p> <p>EOP-003-2, R4 is inherently embedded in PRC-010-1, R1, Part 1.1. The specific items noted are described in PRC-010-1's Guidelines and Technical Basis.</p>	<p><b>Proposed Language in PRC-010-1:</b></p> <p><b>R1.</b> Each Planning Coordinator or Transmission Planner that is developing a UVLS Program shall evaluate its effectiveness and subsequently provide the UVLS Program's specifications and implementation schedule to the UVLS entities responsible for implementing the UVLS program. The evaluation shall include, but is not limited to, studies and analyses that show: <i>[Violation Risk Factor: High] [Time Horizon: Long-term Planning]</i></p> <p><b>1.1.</b> The implementation of the UVLS Program resolves the identified undervoltage issues that led to its development and design.</p> <p><b>1.2.</b> The UVLS Program is integrated through coordination with generator voltage ride-through capabilities and other protection and control systems,</p>

Standard: EOP-003-2, Load Shedding Plans		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<p>including, but not limited to, transmission line protection, auto-reclosing, Remedial Action Schemes, and other undervoltage-based load shedding programs.</p> <p>These tasks need to be performed in a planning horizon in order to be implemented before any operational issues arise. EOP-011-1 relates to Real-time operations and the operations planning time horizon.</p>
<p><b>R5.</b> A Transmission Operator or Balancing Authority shall implement load shedding, excluding automatic under-frequency load shedding, in steps established to minimize the risk of further uncontrolled separation, loss of generation, or system shutdown.</p>	<p>Retired under Criteria A and B7 of Paragraph 81.</p>	<p><b>Redundant with R1 of EOP-003-2, which maps to EOP-011-1, R1.</b></p> <p>Requirement R5 is a refinement to EOP-003-2 Requirement R1 and is duplicative in nature to that requirement.</p>
<p><b>R6.</b> After a Transmission Operator or Balancing Authority Area separates from the Interconnection, if there is insufficient generating capacity to restore system frequency following automatic underfrequency</p>	<p>Retired under Criteria and B7 of Paragraph 81.</p>	<p><b>Redundant with R1 of EOP-003-2, which maps to EOP-011-1, R1.</b></p>

Standard: EOP-003-2, Load Shedding Plans		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
load shedding, the Transmission Operator or Balancing Authority shall shed additional load.		Requirement R6 is a refinement to EOP-003-2 Requirement R1 and is duplicative in nature to that requirement. Requirement R6 speaks of two events that must be valid to tell the BA or TOP to shed more Load. .
<b>R7.</b> The Transmission Operator shall coordinate automatic undervoltage load shedding throughout their areas with tripping of shunt capacitors, and other automatic actions that will occur under abnormal voltage, or power flow conditions.	<p>EOP-003-2, R7 maps to PRC-010-1, R1.</p> <p>Applicability is changed to the PC or TP because the PC or TP is responsible for the program design.</p> <p>EOP-003-2, R7 is inherently embedded in PRC-010-1, R1, Part 1.2. The specific items noted are described in PRC-010-1's</p>	<p><b>Proposed Language in PRC-010-1:</b></p> <p><b>R1.</b> Each Planning Coordinator or Transmission Planner that is developing a UVLS Program shall evaluate its effectiveness and subsequently provide the UVLS Program's specifications and implementation schedule to the UVLS entities responsible for implementing the UVLS program. The evaluation shall include, but is not limited to, studies and analyses that show: <i>[Violation Risk Factor: High] [Time Horizon: Long-term Planning]</i></p> <p><b>1.1.</b> The implementation of the UVLS Program resolves the identified undervoltage issues that led to its development and design.</p> <p><b>1.2.</b> The UVLS Program is integrated through coordination with generator voltage ride-through</p>

Standard: EOP-003-2, Load Shedding Plans		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
	Guidelines and Technical Basis.	<p>capabilities and other protection and control systems, including, but not limited to, transmission line protection, auto-reclosing, Remedial Action Schemes, and other undervoltage-based load shedding programs.</p> <p>These tasks need to be performed in a planning horizon in order to be implemented before any operational issues arise. EOP-011-1 relates to Real-time operations and the operations planning time horizon.</p>
<p><b>R8.</b> Each Transmission Operator or Balancing Authority shall have plans for operator controlled manual load shedding to respond to real-time emergencies. The Transmission Operator or Balancing Authority shall be capable of implementing the load shedding in a timeframe adequate for responding to the emergency.</p>	Translated to EOP-011-1, Emergency Operations.	<p><b>EOP-011-1, R1</b></p> <p>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]</p> <p>1.1. Roles and responsibilities to activate the Emergency Operating Plan;</p>

Standard: EOP-003-2, Load Shedding Plans		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<p>1.2. Strategies to prepare for and mitigate Emergencies including, at a minimum:</p> <ul style="list-style-type: none"> <li>1.2.1. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing an operating Emergency;</li> <li>1.2.2. Voltage control;</li> <li>1.2.3. Cancellation or recall of Transmission and generation outages;</li> <li>1.2.4. System reconfiguration;</li> <li>1.2.5. Redispatch of generation request;</li> <li>1.2.6. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding;</li> <li>1.2.7. Mitigation of reliability impacts of extreme weather conditions; and</li> </ul> <p>1.3. Strategies for coordinating Emergency Operating Plans with impacted Transmission Operators and impacted Balancing Authorities.</p> <p><b>EOP-011-1, R2</b></p>

Standard: EOP-003-2, Load Shedding Plans		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<p>R2. Each Balancing Authority shall develop, maintain, and implement a Reliability Coordinator-approved Emergency Operating Plan to mitigate Capacity and Energy Emergencies. At a minimum, the Emergency Operating Plan shall include the following elements: [Violation Risk Factor: High] [Time Horizon: Real-Time Operations, Operations Planning]</p> <p>2.1. Roles and responsibilities to activate the Emergency Operating Plan.</p> <p>2.2. Notification to the Reliability Coordinator, to include current and projected System conditions, when experiencing a Capacity Emergency or Energy Emergency;</p> <p>2.3. Criteria to declare an Energy Emergency Alert, per Attachment 1;</p> <p>2.4. Strategies to prepare for and mitigate Emergencies including, at a minimum:</p> <p>2.4.1. Generating resources in its Balancing Authority Area:</p> <p>2.4.1.1. capability and availability;</p> <p>2.4.1.2. fuel supply and inventory concerns;</p> <p>2.4.1.3. fuel switching capabilities; and</p>



Standard: EOP-003-2, Load Shedding Plans		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
		<p>2.4.1.4. environmental constraints.</p> <p>2.4.2. Voluntary Load reductions;</p> <p>2.4.3. Public appeals;</p> <p>2.4.4. Requests to government agencies to implement their programs to achieve necessary energy reductions;</p> <p>2.4.5. Reduction of internal utility energy use;</p> <p>2.4.6. Customer fuel switching;</p> <p>2.4.7. Use of Interruptible Load, curtailable Load and demand response;</p> <p>2.4.8. Operator-controlled manual Load shedding plan coordinated to minimize the use of automatic Load shedding; and</p> <p>2.4.9. Mitigation of reliability impacts of extreme weather conditions.</p> <p>2.5. Strategies for coordinating Emergency Operating Plans with impacted Balancing Authorities and impacted Transmission Operators.</p>