

**Southwest Power Pool**  
**CONSOLIDATED BALANCING AUTHORITY STEERING COMMITTEE MEETING**  
**April 12, 2012**  
**Oklahoma City, Oklahoma**  
**8:00 a.m. to 3:00 p.m.**

**Agenda Item 1 – Call to Order**

The meeting was called to order at 8:30 a.m. Introductions were made. (Attachment 1 – CBASC Agenda 04\_12\_12r.doc and Attachment 2 – CBASC Attendance sheet 041212.xls)

**Agenda Item 2 – Emergency Operations Plan Details**

The group continued to work on the new draft of the Emergency Operating Plan (Attachment 3 – SPPBA EOP DRAFT for discussion purposes only 04062012.docx)

**Agenda Item 3 – Review MOPC discussion CIP Issues**

Paul Johnson reviewed the outcome of the MOPC discussion on CIP issues. No official action items were taken from the MOPC meeting, but the Steering Committee and SPP Compliance staff continued to discuss the issues. An additional update on the CIP issue and how it relates to CBASC registration will be made to MOPC in July. Paul asked Stacy to prepare a letter to the CEA documenting the discussion held at the March 15 meeting.

**Agenda Item 4 – Discussion on Criteria 7.9**

Paul Johnson explained that Criteria 7.9 could be used to help document the interchange equipment operator processes. He was also concerned about the handling of non-interchange meter equipment. Shari agreed to find the owner of the criteria 7.9 in order to work with that group on any changes needed to that section of Criteria. (Attachment 4 – CBA Steering Committee Action items 04\_12\_2012.xls)

**Agenda Item 5 – Additional Items and next meetings**

The following meetings were planned:

Teleconference - April 18, 2012 1:00 p.m. to 4:00 p.m. CPT  
Teleconference - April 24, 2012 2:00 p.m. to 5:00 p.m. CPT  
Face to Face - Joint meeting CBASC and MCG - May 9 and 10, 2012 in Dallas

**Agenda Item 6 – Adjournment**

With no further business, the meeting was adjourned.

Respectfully submitted,

Shari L Brown  
Staff Secretary, CBASC



**Southwest Power Pool, Inc.**  
**CONSOLIDATED BALANCING AUTHORITY**  
**Oklahoma City, Oklahoma**

April 12, 2012 - 8:00 p.m. to 3:00 p.m.

**• A G E N D A •**

Revised

1. Call to Order .....Paul Johnson
2. Emergency Operational Plan details .....Paul Johnson
3. Review MOPC discussion CIP issues .....Paul Johnson
4. Discussion on Criteria 7.9 .....Paul Johnson
5. Additional Items and next meetings .....Paul Johnson
6. Adjournment.....Paul Johnson

*Relationship-Based • Member-Driven • Independence Through Diversity*  
*Evolutionary vs. Revolutionary • Reliability & Economics Inseparable*

Consolidated Balancing Authority Steering Committee Attendance

Date: 04-12-2012

Attend	Status	First Name	Last Name	Position	Company
X	M	Paul	Johnson	Chairman	American Electric Power
	M	Steve	Haun	Member	Lincoln Electric System
	M	Noman	Williams	Member	Sunflower Electric Power Corporation
	M	Jessica	Tucker	Member	Kansas City Power & Light Company
X	M	Shari	Brown	Staff Secretary	Southwest Power Pool
	M	David	Pritchard	CBA Steering Committee	American Electric Power
	M	Mike	Stafford	CBA Steering Committee	Grand River Dam Authority
X	M	Shah	Hossain	CBA Steering Committee	Westar
X	M	Greg	McCauley	CBA Steering Committee	OGE Electric Services
X	M	Ron	Gunderson	CBA Steering Committee	Nebraska Public Power District
X	M	Douglas	Collins	CBA Steering Committee	Omaha Public Power District
	M	Eric	Ruskamp	CBA Steering Committee	Lincoln Electric System
	M	Bob	Adam	CBA Steering Committee	Board of Public Utilities (Kansas City, KS)
	M	Rick	McCord	CBA Steering Committee	Empire District Electric Company
	M	Randy	Root	CBA Steering Committee	Grand River Dam Authority
X	M	Bill	Nolte	CBA Steering Committee	Sunflower Electric Power Corporation

Status: M - Member P - Proxy S- SPP Staff G - Guest

Consolidated Balancing Authority Steering Committee Attendance

Date: 04-12-2012

	M	Alan	Derichsweiler	CBA Steering Committee	Western Farmers Electric Cooperative
X	M	William	Grant	CBA Steering Committee	Xcel Energy
	M	Jessica	Collins	CBA Steering Committee	Xcel Energy.
X	G	Bryan	Taggart		Westar Energy
X	G	Mike	Gammon		Kansas City Power & Light Company
X	S	Philip	Propes		Southwest Power Pool
X	S	Stacy	Duckett		Southwest Power Pool
X	G	Tracey	Stewart		Southwestern Power Administration
X	G	Mike	Wech		Southwestern Power Administration
X	G	Terry	Pyle		Oklahoma Gas & Electric
X	G	Steve	Wolf		Board of Public Utilities (Kansas City, KS)
X	S	Ramy-Claude	James		Accenture
X	S	Ron	Losh		Southwest Power Pool
X	G	Mahmoud	Safi		Omaha Public Power District
X	G	Ed	Hammons		Grand River Dam Authority
X	S	Beth	Miller		Southwest Power Pool
X	S	Billy	Whitfield		Southwest Power Pool

Status: M - Member P - Proxy S- SPP Staff G - Guest

Consolidated Balancing Authority Steering Committee Attendance

Date: 04-12-2012

X	G	John	Allen		City of Springfield
X	G	Doug	Peterchuck		Omaha Public Power District
X	G	Joshua	Roper		Kansas City Power & Light Company
X	S	Greg	Sorenson		Southwest Power Pool
X	S	Mark	Robinson		Southwest Power Pool
X	G	John	Rhea		Oklahoma Gas & Electric
X	G	Ron	Ciesiel		Southwest Power Pool
X	S	Travis	Lux		Southwest Power Pool
X	S	Gary	Snow		Southwest Power Pool
X	G	Gerry	Sherry		Southwest Power Pool

Status: M - Member P - Proxy S- SPP Staff G - Guest

# Emergency Operating Plan

*DRAFT- for purposes of determining  
specifics for separation of duties between  
SPP and members*

April 06, 2012

Southwest Power Pool Balancing Authority



---

## 1 Revision History

---

Date or Version Number	Author	Change Description
<b>10/24/2011 Version 1.0</b>	Jim Gonzalez	Initial Creation of Draft for Group Review
<b>11/21/2011 Version 1.1</b>	Jim Gonzalez	Comments from EOP Task Force Meeting 11/21/2011 13:00 – 15:00
<b>11/28/2011 Version 1.2</b>	Jim Gonzalez	Comments from EOP Task Force Meeting 11/28/2011 14:00 – 15:00
<b>12/7/2011 Version 1.3</b>	Jim Gonzalez	Comments from EOP Task Force Meeting 12/5/2011 14:00 – 15:00
<b>12/14/2011 Version 1.4</b>	Jim Gonzalez	Comments from EOP Task Force Meeting 12/12/2011 14:00-15:00 Approved changes that Task Force Agreed on
<b>1/4/2012 Version 1.5</b>	Jim Gonzalez	Comments from EOP Task Force Meeting 12/19/2011 14:00-15:00 Removed BA issuing Directive and replaced with language agreed on from meeting on 12/19/2011.
<b>1/10/2012 Version 1.6</b>	Jim Gonzalez	Comments from EOP Task Force Meeting 1/9/2012 14:00-15:00 and additional cleanup before moving to version 2.0.
<b>1/10/2012 Version 2.0</b>	Jim Gonzalez	Accepted all changes from previous version and deleted old comments that had been addressed.
<b>1/17/2012 Version 2.1</b>	Jim Gonzalez	Comments from meeting on 1/16/2012.
<b>4/06/2012 Version 2.2</b>	Shari Brown	Comments from meeting on 3/20/2012 and comments and changes from members for meeting on 4/12/2012.

## 2 Table of Contents

<b>1</b>	<b>Revision History .....</b>	<b>1</b>
<b>2</b>	<b>Table of Contents .....</b>	<b>2</b>
<b>3</b>	<b>Glossary .....</b>	<b>6</b>
	3.1.1 Balancing Authority .....	6
	3.1.2 Balancing Authority Area .....	6
	3.1.3 Block Demand Response Resource .....	6
	3.1.4 Bulk Electric System .....	6
	3.1.5 Contingency Reserve .....	6
	3.1.6 CROW .....	6
	3.1.7 Day-Ahead Market .....	6
	3.1.8 Day-Ahead Reliability Unit Commitment .....	6
	3.1.9 Day-Ahead Study Analysis .....	6
	3.1.10 Dispatchable Demand Resource .....	6
	3.1.11 Dispatch Status .....	6
	3.1.12 Eastern Interconnect .....	7
	3.1.13 Emergency Operation Plan .....	7
	3.1.14 Energy .....	7
	3.1.15 Export Interchange Transaction .....	7
	3.1.16 FERC Critical Energy Infrastructure Information .....	7
	3.1.17 Fuel-Strapped Resource .....	7
	3.1.18 Good Utility Practice .....	7
	3.1.19 Import Interchange Transaction .....	7
	3.1.20 Independent Power Producers .....	7
	3.1.21 Interchange Transaction .....	7
	3.1.22 Integrated Marketplace .....	7
	3.1.23 Manual Dispatch Instruction .....	7
	3.1.24 Market Participant .....	7
	3.1.25 Market Protocols .....	8
	3.1.26 Maximum Emergency Capacity Operating Limit .....	8
	3.1.27 Minimum Emergency Capacity Operating Limit .....	8



3.1.28	Operating Day .....	8
3.1.29	Operating Reserve .....	8
3.1.30	Regulation-Up .....	8
3.1.31	Regulation-Down .....	8
3.1.32	Reliability Coordinator .....	8
3.1.33	Reserve Zone .....	8
3.1.34	Variable Energy Resource .....	8
<b>4</b>	<b>Introduction.....</b>	<b>9</b>
4.1	Policy and Guideline Statements .....	9
4.2	Related Documents .....	9
<b>5</b>	<b>Emergency Plan Overview.....</b>	<b>10</b>
5.1	Authority and Responsibility .....	10
5.2	Annual Review of Emergency Operating Plan.....	10
5.3	Coordination of Emergency Operating Plan.....	10
5.3.1	Communications for EOP.....	11
5.3.2	Planning ahead.....	11
5.4	Operating Agreements with Neighboring Entities.....	<b>Error! Bookmark not defined.</b>
5.5	Staffing Levels .....	12
5.6	Communication Protocols.....	12
5.6.1	Requests of Government .....	13
5.6.2	Notifications of government agencies .....	13
5.6.3	Notification of Operating Entities .....	13
5.6.4	Public Appeals.....	14
5.6.5	Loss of Communications .....	14
5.6.6	Planned Database/ICCP Maintenance .....	<b>Error! Bookmark not defined.</b>
5.7	Elements included in Development of Emergency Operating Plan.....	16
<b>6</b>	<b>Capacity and Energy Emergencies.....</b>	<b>17</b>
6.1	Responsibility .....	17
6.2	Capacity and Energy Emergency Mitigations & Alerts .....	18
6.2.1	Level One Energy Emergency Alerts & Actions .....	18
6.2.2	Level Two Energy Emergency Alerts & Actions.....	19
6.2.3	Level Three Energy Emergency Alerts & Actions.....	20
6.2.4	Monitoring Energy Emergency Alert Level .....	21
6.3	Member Entity Alerts for Capacity and Energy Emergencies.....	21

6.3.1	System-Wide Reserve Shortage Alert .....	21
6.3.2	Reserve Zone Shortage Alert .....	22
6.3.3	Emergency Capacity Shortage Notification .....	22
6.3.4	Forecast Minimum Generation Alert .....	23
6.3.5	Real-Time Minimum Generation Notification .....	24
6.4	BAAL and Disturbance Control Standard Deviation .....	25
6.4.1	Request emergency assistance from RC – need to add information .....	25
6.4.2	Use of System Frequency Bias .....	25
6.5	System Energy use Plan .....	25
<b>7</b>	<b>Fuel Limitation Emergencies .....</b>	<b>27</b>
7.1	Background .....	27
7.2	Forecasted Fuel Limitation .....	27
7.3	Real-Time Fuel Limitation .....	28
7.4	Operation of Fuel Limited Resources .....	29
7.5	Maximizing Resource Output .....	30
7.6	Notification to Maximize Independent Power Producer Resource Output .....	30
7.7	Notification to Optimize Fuel Supply .....	30
7.8	Fuel Supply and Inventory plan .....	30
7.8.1	SPP Member Reporting Procedures .....	30
7.8.2	Inter-RTO Fuel Coordination Procedure .....	31
7.9	Fuel Switching Plan .....	32
<b>8</b>	<b>Transmission Emergencies and System Restoration .....</b>	<b>Error! Bool</b>
8.1	Day-Ahead Transmission Security Emergency Alerts .....	35
8.1.1	Maximum Emergency Generation Alert (for Transmission Security) .....	<b>Error! Bookmark not defined.</b>
8.1.2	Voltage Reduction Alert (For Transmission Security) .....	35
8.2	Real-Time Transmission Security Emergency Actions .....	35
8.2.1	Active Load Management Action .....	35
8.2.2	Voltage Reduction and Curtailment of Non-Critical Plant Load .....	35
8.2.3	Manual Load Shed Warning .....	<b>Error! Bookmark not defined.</b>
8.2.4	Post Contingency Local Load Relief Warning .....	36
8.3	Interconnection Reliability Operating Limits (IROL) Facilities .....	<b>Error! Bookmark not defined.</b>
8.4	System Restoration .....	36
<b>9</b>	<b>Load Management/Load Shedding .....</b>	<b>37</b>

9.1	Plan Requirements .....	37
9.2	Automatic Load Shed .....	37
9.3	Manual Load Shed .....	37
9.4	Firm Export Curtailment.....	37
9.5	Load Management .....	38
9.5.1	Voltage Reduction .....	Error! Bookmark not defined.
9.5.2	Public Appeals.....	Error! Bookmark not defined.
9.5.3	Interruptible Load .....	Error! Bookmark not defined.
9.5.4	Utility Load Conservation Measures .....	39
9.5.5	Load Management Notification.....	39
<b>10</b>	<b>Other System Emergencies .....</b>	<b>40</b>
10.1	Conservative Operations .....	40
10.2	Weather Related Emergencies .....	40
10.2.1	Overview .....	40
10.2.2	Cold Weather Alert .....	41
10.2.3	Hot Weather Alert .....	41
10.3	Thunderstorms and Tornadoes.....	41
10.4	Solar Magnetic Disturbances .....	42
10.5	Loss of Energy Management System (EMS).....	43
<b>11</b>	<b>Reporting and Data Retention.....</b>	<b>45</b>
11.1	Sabotage/Terrorism Reporting .....	45
11.2	Reporting System Disturbances to the Department of Energy .....	46
11.3	Reporting System Disturbances to NERC .....	47
11.4	Reporting Capacity or Energy Shortages to FERC.....	48
11.5	Fuel Limitation Reporting.....	49
11.6	Seasonal Reporting.....	49
11.7	Real-Time Reporting.....	50
11.8	Operation of Fuel Limited Units .....	51
11.9	Analysis of System Events and Disturbances .....	51
<b>12</b>	<b>Appendix A: Elements in Development of the Emergency Plan .....</b>	<b>53</b>
<b>13</b>	<b>Appendix B: Emergency Notification Scripts .....</b>	<b>55</b>
<b>14</b>	<b>Appendix C: SPP BA Contact List.....</b>	<b>57</b>

---

## 3 Glossary

---

### 3.1.1 Balancing Authority

As defined in SPP Open Access Tariff

### 3.1.2 Balancing Authority Area

As defined in SPP Open Access Tariff

### 3.1.3 Block Demand Response Resource

As defined in Market Protocols

### 3.1.4 Bulk Electric System

As Defined by NERC

### 3.1.5 Contingency Reserve

As defined in Market Protocols

### 3.1.6 CROW

Control Room Operations Window – The web-based tool used for Outage submission and coordination in the SPP Balancing Authority.

### 3.1.7 Day-Ahead Market

As defined in Market Protocols

### 3.1.8 Day-Ahead Reliability Unit Commitment

As defined in Market Protocols

### 3.1.9 Day-Ahead Study Analysis

The various studies that SPP performs in order to meet the obligations specified in NERC Standard TOP-002-2.

### 3.1.10 Dispatchable Demand Resource

As defined in Market Protocols

### 3.1.11 Dispatch Status

As defined in Market Protocols

**3.1.12 Eastern Interconnect**

One of the North American Interconnections commonly referred to as the Eastern Interconnection roughly described as the Bulk Electric System east of the Rocky Mountains excluding the core of Texas and the Province of Québec.

**3.1.13 Emergency Operation Plan**

This document and all appendices

**3.1.14 Energy**

As defined in Market Protocols

**3.1.15 Export Interchange Transaction**

As defined in Market Protocols

**3.1.16 FERC Critical Energy Infrastructure Information**

As Defined by FERC

**3.1.17 Fuel-Strapped Resource**

Generation facility that is restricted from normal operation due to a fuel-related issue.

**3.1.18 Good Utility Practice**

As Defined in SPP Open Access Tariff

**3.1.19 Import Interchange Transaction**

As defined in Market Protocols

**3.1.20 Independent Power Producers**

As Defined by FERC

**3.1.21 Interchange Transaction**

As defined in Market Protocols

**3.1.22 Integrated Marketplace**

SPP Market as defined by Market Protocols

**3.1.23 Manual Dispatch Instruction**

As defined in Market Protocols

**3.1.24 Market Participant**

As defined in SPP Open Access Tariff

**3.1.25 Market Protocols**

As defined in SPP Open Access Tariff

**3.1.26 Maximum Emergency Capacity Operating Limit**

As defined in Market Protocols

**3.1.27 Minimum Emergency Capacity Operating Limit**

As defined in Market Protocols

**3.1.28 Operating Day**

As defined in Market Protocols

**3.1.29 Operating Reserve**

As defined in Market Protocols

**3.1.30 Regulation-Up**

As defined in Market Protocols

**3.1.31 Regulation-Down**

As defined in Market Protocols

**3.1.32 Reliability Coordinator**

As Defined by NERC

**3.1.33 Reserve Zone**

As defined in Market Protocols

**3.1.34 Variable Energy Resource**

As defined in Market Protocols

---

## 4 Introduction

---

### 4.1 Policy and Guideline Statements

It is the policy of Southwest Power Pool (SPP) Balancing Authority to maintain, at all time, the continued integrity of the SPP Balancing Authority Area. This includes providing the maximum amount of reasonable assistance to neighboring entities when a disturbance occurs that is external to the SPP Balancing Authority. SPP Balancing Authority will maintain balance between Resources and load in accordance with all applicable NERC Reliability Standards. Any action taken by SPP Balancing Authority will be in accordance with Good Utility Practice.

This plan is aimed at maintaining reliable power system operation associated with the Bulk Electric System. The main focus is on preventing widespread or major power outages involving generating Resources, transmission lines, and transmission substations that are critical to the supply of power to major points of distribution. Although localized interruptions are considered beyond the scope of this document, it is important to recognize that parts of this plan will be of benefit in those situations.

The Emergency Operation Plan is primarily directed toward providing the fundamental concepts that will be instrumental in mitigating emergencies as they arise. Although specific courses of action are prescribed for specific operating emergencies, the objective of this document is not to try and define every possible emergency situation. This keeps the plan dynamic and allows the Balancing Authority Operator the ability to respond to any emergency situation that may arise.

Personnel receiving copies of this plan need to become familiar with its content; furthermore, all employees who would be involved in the various procedures need to have sufficient training to perform the intended tasks. It is intended that the procedures set forth in this plan will be followed sequentially for defined conditions, and for the reasons listed. However, due to the dynamic nature of power system operations, it may be necessary at times to deviate from the plan herein.

### 4.2 Related Documents

SPP Balancing Authority Governing Document  
SPP Criteria  
SPP Integrated Marketplace Protocols  
SPP Regional Black Start Capability Plan  
SPP Loss of Critical Applications (includes loss of Control Center)  
SPP Pandemic Process  
SPP Tariff

## 5 Emergency Plan Overview

### 5.1 Authority and Responsibility

The SPP Reliability Coordinator and the SPP Balancing Authority operator have the responsibility and clear decision-making authority to take whatever actions are determined necessary to ensure the reliability of the Balancing Authority Area. This includes taking specific action to **alleviate emergencies that may jeopardize the integrity of the SPP Balancing Authority Area.** In order to implement the required mitigating actions in the necessary time frame, the SPP Reliability Coordinator and the SPP Balancing Authority operator have the authority to take or direct timely and appropriate real-time actions up to and including **shedding firm load** without approval from higher level personnel within SPP. The SPP Reliability Coordinator and the SPP Balancing Authority operator have the authority to direct plant and field personnel to maintain the reliable operation of the Bulk Electric System.

The SPP Balancing Authority operator will work in coordination with the SPP Reliability Coordinator to ensure that the integrity of the Eastern Interconnect is not jeopardized as a result of actions taken in response to an emergency. This includes following all directives given by the SPP Reliability Coordinator.

**Comment [JA1]:** Is this plan specific to the SPP BA? If so looking at the NERC definition of a BA, what types of emergencies can a BA experience? Capacity Emergency (Load/Generation mismatch), Loss of Control Center functionality, anything else? This might help to limit the scope of the plan, unless it is the intention of the EOPTF to go beyond the NERC definition?

**Comment [JA2]:** Based on how I read EOP-002 R7.2, if a BA gets to a certain point in mitigating the Emergency it is required to request the RC to declare an EEA and then the RC can direct the TOP and/or LSE to shed load. Is this procedure appropriate for the plan?

### 5.2 Annual Review of Emergency Operating Plan

SPP, as the Balancing Authority, will, at minimum, review the Emergency Operating Plan annually. Any internal processes and procedures will be updated in accordance to changes as a result of the review.

SPP will specifically review the operating agreements with neighboring entities in the annual review to ensure that they are still capable of being used in emergency conditions. If existing agreements are deemed insufficient, SPP Balancing Authority will arrange for new interchange agreements to ensure emergency assistance is available in the event of an emergency.

### 5.3 Coordination of Emergency Operating Plan

SPP Balancing Authority will coordinate the Emergency Operating Plan with all applicable Market Participants and neighboring entities. SPP Balancing Authority will also provide the SPP Reliability Coordinator with the most recent version of the plan.

SPP will supply the Emergency Operating Plan to neighboring entities upon written request to the Vice President, Operations. **Information that is designated as FERC Critical Energy Infrastructure Information will be removed from the plan before being distributed said neighboring entities.**

**Comment [GLM3]:** Why would this information be removed if it is relevant to the EOP? Aren't neighboring entities entitled to review this information based upon whatever NERC registrations they hold?



### 5.3.1 Communications for EOP

The SPP Balancing Authority will coordinate communications and activities between SPP member entities, neighboring BAs and SPP Balancing Authority. Tasks to coordinate include, among others: generation maintenance, transmission maintenance, interchange transaction implementation, interchange transaction curtailment, emergency declarations, emergency requests, emergency notifications, and load curtailment.

**Comment [GLM4]:** The SPP BA will coordinate with itself? Did you mean to say SPP BA will coordinate with the SPP RC? And Should be include a reference to the mechanisms used for coordination (i.e. CROW, telephone, RTOSS, etc.)?

### 5.3.2 Planning ahead

SPP BA operator and member entities will review forecasted load and resources the day before the operating day if not sooner. The BA operator will order generation on and schedule interchange transactions to enable (load plus operating reserves) covering the loss of the largest SPP generator while covering load and maintaining required reserves. If possible, SPP Operations reviews BA resource plans and forecast load for reliability.

**Comment [SB5]:** SPP will need someone at the legacy BA (TOP) to consult with for data and information on a regular basis ( SPS and CJ discussion) SPP is working on enhancing the automated systems in an attempt to get more granular information besides having regular calls

**Comment [SB6]:** BA Operator has the right (maybe use the word ensure) to work with market operator to exhaust all market options). Add this type of language

**Comment [SB7]:** Would this wording work here instead of the covering loss of largest plus

**Comment [SB8]:** Will delete this part of the sentence

**Comment [SB9]:** Will we have a margin built in to determine when to start emergency proceeding. Need to make sure the wording here matches the open market procedures and .

**Comment [SB10]:** Need to say something about having the seams agreements already in place ensure the market will dispatch against forecast

**Comment [GLM11]:** Why consult with the TOP? Information only? What can TOP do about generation deficiencies? Is the expectation that the TOP will then consult with the various GOPs to resolve the issue?

**Comment [JG12]:** List these out in Appendix, specifically where to find and with who.

**Comment [SB13]:** Actually we need to be careful. The RSG agreement is specific to the period for the RSG event. The CBA will need additional agreements for emergency energy after the first 60 minute RSG period

**Comment [JA14]:** There was an interpretation of this NERC requirement (EOP-001 R1.) released that allows for the RSG to satisfy this obligation. It states; A Reserve Sharing Group agreement that contains provisions for emergency assistance may be used to meet Requirement R1 of EOP-001-0.

If the resources available for the next operating day are forecasted to be less than that needed to cover the load plus required reserves plus the loss of the largest SPP generator, the SPP Balancing Authority will consult with the member TOP regarding the next day's situation.

The SPP BA Operator will verify member entities generation availability and review generation and transmission maintenance schedules for impact on generation or transmission capacity. If in their judgment cancellation or postponement of maintenance activity is advisable, they will contact the applicable member GOP, member TOP and SPP Reliability Coordinator for coordination.

## 5.4 Operating Agreements with Neighboring Entities

SPP Balancing Authority shall have operating agreements with all adjacent Balancing Authorities that will, at minimum, contain:

- Provisions for emergency assistance, including provisions to obtain emergency assistance from remote Balancing Authorities.
- Arrangements for emergency interchange transactions
- Communication protocols to be used during emergency conditions.
- Provisions for coordination of transmission and generator maintenance schedules to maximize capacity or conserve the fuel if it is in short supply.
  - Including water for hydro generators.
- Tasks to be coordinated with adjacent Balancing Authorities under emergency conditions.
  - Including, but not limited to:
    - Emergency declarations
    - Emergency requests,
    - Emergency notifications
    - Load curtailment

These operating agreements shall be reviewed by the SPP Balancing Authority annually, at minimum, to ensure they are still viable.

**Comment [SB16]:** added by WR

Need to add triggers, timing, and responsibilities. Examples SPS Cap and Energy plan progresses step by step. Process as a subset need to include how to tag the transactions

**Comment [GLM17]:** Agree

## 5.5 Staffing Levels Staffing Levels

**Comment [JG18]:** Reference on-call list

### 5.6

Staffing levels are not automatically increased or decreased as a result of an emergency situation. The SPP on-shift supervisor will determine if additional resources are required on a case-by-case basis and these resources are highly available by means of the SPP On-Call Process. SPP has a multi-tier 24/7 support system in place that is fully capable of responding to any emergency and can be called on to provide additional resources if deemed necessary.

**Comment [SB19]:** WR would delete this statement

## 5.7 Communication Protocols Communication Protocols

**Comment [JG20]:** Reference specific plan for loss of communications. Check to make sure we don't get nailed on versions.

All communications made in implementing this plan will be conducted in English.

SPP Balancing Authorities will periodically test all means of communication that are identified as necessary to implement this plan. This will ensure that reliable forms of communication with the necessary parties are in working order should an emergency situation arise.

During an emergency situation, the SPP Balancing Authority will communicate current and expected future conditions to the SPP Reliability Coordinator and neighboring Balancing Authorities. The following outlines the manner in which communications will flow from the Federal Government to the SPP Balancing Authority, SPP Reliability Coordinators, and member entities. Timely and clear communications between SPP and its member entities, in both directions, is a key to the successful management of any suspected or actual crisis.

- The Electric Sector – Information Sharing and Analysis Center (ES-ISAC) receives information from a US or Canadian Federal Agency, a Reliability Coordinator, an ES Entity (e.g. Region, Control Area, Purchasing Selling Entity, other), another Sector ISAC, or – potentially - outside the Sector. The ES-ISAC will review the information (which may be classified).
- If the information is specific and has any credibility at all, the ES-ISAC will contact the involved Entity directly (this may be the Reliability Coordinator of the Entity, depending upon contact information). If a SPP member entity has been contacted by the NIPC or ES-ISAC and the information is releasable immediately, the member will contact the SPP Reliability Coordinator.
- If the information is of any use to the any Reliability Coordinators, it will be communicated to the other Reliability Coordinators via RCIS.

**Comment [GLM21]:** Need to spell out modes of communication and test methodologies/periodicity. Refer to COM-001 R2. (or...point to another document that does so)

Example:

VOICE - Testing of the backup communications facilities are completed as follows:

- Land-Line Telephone – This device is regularly used by on-shift Operators, no additional testing is performed.
- Satellite Telephone – SPP performs a weekly test of its phone and member phones via a “blast call”. Test results are retained by the Supervisor of Operations.

DATA

- Email/SCADA-EMS/Internet services are regularly used by on-shift operators. No additional testing is performed.
- The ATM network is alarmed and is monitored by the Network Operations Center as specified in procedure ‘xyz’ (probably one of the CIP documents).

**Comment [SB22]:** WR would delete

**Comment [GLM23]:** What criteria will be used to determine whether or not the information is of use to other RCs?

- If the information is urgent or time sensitive, the information will be passed to the member entities on the call, and a Reliability Coordinator conference call will be requested. SPP will rapidly assess the information and pass the information to its members via the All Call for urgent/time sensitive information or via a conference calls or e-mail if the information is of a general/non-actionable nature.
- The ES-ISAC will notify other Electricity Sector Entities as appropriate; no information shared by Reliability Coordinators will be passed on without approval.
- Any information shared in this manner will be noted as to any restrictions on further distribution. No information shared is to be delivered to the public media.

**Comment [GLM24]:** Approval from whom?

### 5.7.1 Requests of Government

When needed, SPP will transmit a request to appropriate government agencies to implement programs to achieve necessary energy reduction.

**Comment [GLM25]:** Should probably add some criteria to this. When might it be needed?

### 5.7.2 Notifications of government agencies

The proper authorities at NERC, DOE and FERC and other governmental bodies are notified of any major changes in the status of the SPP transmission system. When the potential exists for a SPP bulk power emergency SPP advises SPP market participants as far in advance as possible. This permits market participants and SPP the maximum lead-time in determining the appropriate steps to take, including governmental and public notification. Depending on the situation, Transmission Owners and SPP may each have responsibilities in notifying local, state or federal agencies. Generation owners may have separate reporting obligations related to plant restrictions / operating conditions. Due to the wide variety of conditions and the potential for the conditions to change rapidly, it is difficult to provide precise criteria that fit all situations to trigger the issuance of an early alert to the governmental agencies and the public. Each situation is evaluated to determine if any early alert to governmental agencies is required, and if an early alert to the public is appropriate. It is the ultimate responsibility of each Transmission and Generation Owner to adjust their guidelines to respond to any escalated concerns from governmental agencies. It is also essential that the Transmission and Generation Owners and SPP are informed of any owners' unilateral actions or anticipated restrictions.

**Comment [GLM26]:** How will this happen? Using what mechanism?

When Maximum Emergency Generation is added to the schedule, a severe weather notification is issued, or a transmission system limitation affecting area supply is anticipated, SPP performs a situation analysis and prepares a capacity/load/reserve projection for the appropriate area and future time periods, including the effect of possible imports due to the supply situation of various neighbors. The analysis indicates expected emergency conditions.

**Comment [GLM27]:** Need to put some bounds on this. How significant to the unilateral actions or restrictions need to be for them to be reportable. How many TOs and GOs need to be informed for such significant events? All in the SPP? Neighboring?

**Comment [SB28]:** Per CJ, should identify the fact that SPP will contact legacy BA prior to initiating any contact with state regulators

#### Notification of Operating Entities

All member entities noted in the coordinated functions list (*SPP will include a list of member entities to include in notifications.*) of this document are notified of any major changes in the status of the SPP transmission system that might affect them, using member notification tool when appropriate

**Comment [GLM29]:** Is this analysis and subsequent reporting already developed? What does this look like?

**Comment [GLM30]:** What is the "member notification tool"?

### 5.7.3 Public Appeals

Public Appeals to reduce load are made during periods when load reduction is deemed to be beneficial, but the Balancing Authority has not reached emergency status. These appeals are generated by SPP Communications at the request of the SPP Balancing Authority.

Effective communications are critical to ensure reliability during emergency operations. Generally, SPP conducts regular conference calls during peak load operations. *(SPP will create an attachment for something like Teleconference Protocol Guidelines)*

*SPP Corporate Communications is working on a draft of Communications protocols to be provided to the CBASC for review. This formal procedure will be vetted through the CBASC and will include specific timely touchpoints and steps for SPP operators and member entities.*

**Comment [GLM31]:** Would it be better to include the idea that the issuance of Public Appeals occurs as part of a sequenced approach in preventing system emergencies? I think I understand the point made here...just a suggestion on how to structure the idea differently.

**Comment [SB32]:** Per CJ this section will be based upon a formal procedure that SPP will vet with the members and will have specific timely touchpoints.

### 5.7.4 Loss of Communications

Electronic communications and data quality are also critical. Interruptions to electronic communications can result in inaccurate analysis, inefficient dispatch and potential unreliable operations. Effective operator/operator or operator/support staff communications is essential to ensure reliable operations and quickly restore data communications.

*For a more information on how to handle loss or failure of communications, refer to SPP Loss of Communications Process and Procedure.*

**Comment [GLM33]:** This is good. Need more references such as this.

### 5.7.5 Planned Database/ICCP Maintenance

SPP EMS Advanced Applications solves a single State Estimator solution, which serves as the basis for the SPP Unit Dispatch System (UDS) and Network Applications Package. Interruptions to data or processing of inaccurate data may result in non-convergence to the state estimator, which adversely impacts the efficiency of generation dispatch and could result in the inability of SPP to monitor the transmission system. Since the SPP Balancing Authority operates a single state estimator, unnecessary ICCP link outages or database maintenance should be avoided.

Multiple company ICCP data link outages can result in SPP EMS Security Analysis and potential system reliability issues if permitted to occur simultaneously, even during moderate load levels.

SPP support staff and member TOP company staff should adhere to the following rules when scheduling link outages:

- Attempt to schedule planned outages 24 hours in advance
- Only one company planned outage should be scheduled in any time period

SPP BA operator has the authority to:

- Reschedule or cancel a member TOP company's scheduled planned outage based on system conditions, or based on existing ICCP data link outages

**Comment [GLM34]:** This section is more along the lines that Paul Johnson is recommending. If the entire plan goes that direction, this should stay. If not, perhaps consider removing and making a reference to it as a separate procedure.

- Deny a request for a member TOP company's planned outage, if requested time has been previously scheduled

Further restrictions may be enforced when peak load operations are projected in any Reserve Zone. However, SPP recognizes that at times database/ICCP maintenance is required during projected peak load conditions. To the extent possible, emergency changes should occur prior to 11:00 CPT. Weekly routine maintenance should be canceled or rescheduled to days when emergency procedures are not anticipated.

In the case of a Generator Owner loss of EMS Database or ICCP Link Outage, the GOP should:

- Contact the SPP Generation Dispatch desk to discuss the communication issue, fully describing the extent of communication problems to ensure SPP understands the magnitude of the problem
- Recognize previous dispatch signals are stale while ICCP link problems exist
- Contact member entity to resolve communication issue *(member entities will be asked to provide consistent contact personnel to SPP to enhance efficiency of communications avoiding potential reliability issues).*
- Verbally communicate manual dispatch directions to plants, if communication problems are not resolved within 10 minutes
- Log any manual dispatch directions
- Contact SPP Balancing Authority desk regarding Transmission Constraints
- Where necessary, staff critical substations to support transfer of critical data to SPP
- Verbally communicate critical data to SPP Balancing Authority desk as requested

**Comment [GLM35]:** The GOP should do this?

**Comment [GLM36]:** Not sure how this relates to Generator Owner loss of EMS Database or ICCP link. Does this mean that the GO should contact SPP BA to see if there ARE any transmission constraints?

SPP Balancing Authority will:

- Contact SPP Market Operations to discuss communications issue fully describing extent of communication problems to ensure the Market understands the magnitude of the problem
- Recognize previous dispatch signals are stale while ICCP link problems exist
- Contact SPP support staff to resolve communication issue
- Communicate LMP to Generation Operator if communication problems are not resolved within 10 minutes.
- Communicate targeted generation dispatch to Generation Operator if transmission constraints arise.
- Log manual dispatch actions.
- Reassign regulation as necessary
- Elevate SPP BA communication to SPP RC if reliability issues arise.
- Communicate impact on ability to monitor transmission system
- Update EMS with the critical data provided by the Transmission Owner
- Manually re-dispatch, as necessary, to control transmission constraints based analysis.

**Comment [GLM37]:** Formatting comment: The above is focused on Generator Owner/Operator, but the section title doesn't recognize that. Consider an overall ICCP Outage section with GOP and TOP sections, perhaps?

**Comment [GLM38]:** Is real-time transmission information just as critical as real-time generator data? If so, we should consider a fully developed section to address.

#### Transmission Owner EMS/EMS Database/ICCP Outage

*Do we need to include specific steps for member entity issues?*

## 5.8 **Elements included in Development of Emergency Operating Plan**

SPP Balancing Authority shall include all applicable elements found in NERC Reliability Standard 1-EOP-001-0b.

For a more detailed breakdown refer to [Appendix A: Elements in Development of Emergency Plan](#).

### **Rendering Assistance to adjacent BA** *(SPP may want to put this in another section TBD)*

The SPP Balancing Authority will render all available emergency assistance to others as requested, provided that the requested entity has implemented its comparable emergency procedures, unless such actions would violate safety, equipment, or regulatory or statutory requirements.

#### SPP Actions:

- SPP BA Operator notifies SPP Shift Supervisor, SPP public information personnel, and Local Control Center Operators. SPP BA Operator notifies outside Control Areas using the RCIS, and the NERC hotline if necessary.
- SPP BA Operator orders, as required, increased generation, including Maximum Emergency Generation (with the exception of fuel limited and environmentally restricted capacity). SPP Operator also implements a \_\_% Voltage Reduction to provide the required assistance provided that the power system requesting assistance is already in a \_\_% Voltage Reduction.

#### SPP Members Actions:

- The Local Transmission / Generation Operators notify management.
- The Local Transmission Operators notify state and local governmental agencies, as applicable.
- The Local Transmission / Generation Operators implement all emergency procedure requests issued by SPP BA Operator and notify appropriate Local Control Center personnel.

If SPP is requested to purchase energy from another Balancing Authority in order to alleviate an actual or threatened Excess Generation Emergency in the other control area, SPP may purchase energy if SPP determines that the purchases can be made without adversely affecting the safe or reliable operation of generators within the SPP CBA and without unduly increasing the cost of energy of the SPP TOP.



## 6 Capacity and/or Energy Emergencies

### 6.1 Responsibility

The SPP Balancing Authority is responsible for declaring the existence of emergencies related to energy and capacity shortages, and for directing the operations of the appropriate entities within the SPP Balancing Authority as necessary to manage, alleviate, or end an energy or capacity emergency. SPP is responsible for transferring Energy to resolve a capacity emergency. SPP administers the RSG process and any executed agreements with neighboring Balancing Authorities for the mutual provision of service to meet a capacity and/or energy emergency.

**Comment [JA39]:** RSG? Addressed

Returning to normal operation procedures (EEA 0) is performed in a controlled, deliberate manner so as to not adversely affect system reliability, while minimizing the impact of these emergency actions. The SPP Balancing Authority operator has the authority to implement the emergency procedures in whatever order is required to ensure overall system reliability. SPP Balancing Authority operator has the authority to return to normal operating procedures in a different order than they were implemented when conditions necessitate.

**Comment [SB40]:** Should be moved down later in the document

SPP strives to meet customer energy demands either through the use of available generating resources, power purchases, or through the use of planned load management programs. If customer demand cannot be met, emergency actions, as a last resort, manual load shedding will be used.

**Comment [SB41]:** Remember not all TOP have the ability to do voltage reductions.

If all SPP Balancing Authority is deficient as a whole - delete>During unconstrained operations<delete (will remove the words before after addressing the comment), SPP entities will jointly implement emergency procedures up to the point of a manual load shed. Prior to the implementation of a manual load shed, SPP Balancing Authority will review each SPP Reserve Zone Energy and reserves calculation to determine their relative level of capacity and/or energy deficiency (reserves evaluated via SPP Energy Management System). If all SPP Reserve Zones are capacity deficient, The SPP Balancing Authority will determine how much each entity will shed and communicate to the entities, to the manual load shed will be implemented proportionally, based on the level of shortage, otherwise only the capacity and/or energy deficient Reserve Zones will be required to shed load. *(Determination needs to be made about expected levels for activation of this activity)* *We (SPP) need to change this section to say that we will implement our load shed section of this document and not worry in this section who does the calling just because it is a capacity or energy situation.*

**Comment [SB42]:** It is an energy deficiency for the whole region in a reserve zone. If you can't balance in the reserve zone SOL or IROL then you would call and EEA even if it weren't for the whole Balancing need to CJ needs to talk to Jason

**Comment [SB43]:**

**Comment [SH44]:** Is this the actual name of the EMS display that you use calculate your reserve? If it is, the we feel the language is appropriate. If not, we need to understand the intent and revise the language accordingly

**Comment [JA45]:** Can the SPP BA request the SPP RC to declare a EEA and then the RC can direct the TOP and/or LSE to shed load? Is this procedure appropriate for the plan?

**Comment [SB46]:** Be sure to do a wholesale look to make sure that capacity and energy both are noted.

**Comment [SB47]:** per CJ specifics need to be identified for the levels accomplished by each entity.

**Comment [SB48]:** The committee is o.k. with SPP determining if we stay with the TOP for our phone calls that is o.k. we don't have to start calling the LSE ourselves.

If the SPP Balancing Authority is deficient it will only use the assistance provided by the Eastern Interconnection frequency bias for the time needed to implement corrective actions. SPP 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 Transaction changes as such unilateral adjustment may overload transmission facilities.

## 6.2 Capacity and Energy Emergency Mitigations & Alerts

**Comment [JG49]:** Color code for system condition. Broadcast to everyone, maybe reserve zone specific. We will have this. Decide later where to actually put it.

SPP commits generation on an economic basis, considering Resource characteristics (i.e. start-up, min run, starts per day) and anticipated system changes (i.e. load forecast, interchange, must-run generation) while honoring system constraints and to ensure that Energy and Operating Reserve obligations are met on both a Balancing Authority and Reserve Zone basis.

SPP operates to ensure Operating Reserves are satisfied on both the Balancing Authority and Reserve Zone basis. SPP operates to ensure that all reliability requirements specified in SPP Criteria 6 relating to Operating Reserves are adhered to at all times. SPP procures Operating Reserves as a single market, recognizing transmission constraints while scheduling sufficient localized reserves on a Reserve Zone basis to satisfy reserve requirement under SPP Criteria and Marketplace Protocols.

If the SPP Balancing Authority determines that a Capacity or Energy emergency exists or is expected to exist, the SPP Balancing Authority will follow the course of action described in the Energy and Emergency Alerts attachment in NERC Standards. (EOP-002 Attachment 1)

The SPP Balancing Authority Operator will:

- Notify the SPP Reliability Coordinator and neighboring Balancing Authorities and SPP TOP, GOP and LSE of current and forecasted conditions
- Request EEA alert from SPP Reliability Coordinator.
- Ensure the steps listed below are followed to mitigate the current Emergency Condition

### 6.2.1 Level One Energy Emergency Alerts & Actions

The SPP Balancing Authority will request an EEA1 if it foresees or is experiencing conditions where all available resources are committed to meet firm load, firm transactions, and reserve commitments, and is concerned about meeting required operating reserves. Before requesting EEA1, the SPP Balancing Authority will have already provided the appropriate internal notifications to its TOP, GOP and LSE, using the member notification tool.

**Comment [SB50]:** Need to address that CBM is not applicable to SPP currently

As part of requesting EEA1, the SPP Balancing Authority will take (or have already completed) the following actions:

- Coordinating with the SPP Scheduling desk to identify non-firm external energy sales (other than those that are recallable to meet reserve requirements) that may eventually need to be curtailed. *note: this is in the req for EEA1*
- Starting up resources that are needed to meet capacity requirements. *This is in req for EEA1*
- Identifying generation outages that can be postponed, verifying postponement times with generation owners, and *directing* impacted generation operators to postpone outages via CROW.
- Identifying the pertinent transmission outages that can be recalled, verifying recall times with transmission owners, and directing transmission operators to recall outages via CROW.
- If required, arranging external energy purchases in advance (not yet executing purchases).

**Comment [SB51]:** Need to use the words in req for EEA1 may make it clearer and Auditors would like it. Also add the words for the req as follows, but this is for EEA2 - Make sure the words about regardless of cost.

**Comment [SB52]:** Does this need to be included in the EEA 2 section?

**Comment [SB53]:** The actual wording of requirements indicates that the RC will not direct until EEA2. May want to mention that it is only trans that affect ATC.

**Comment [SB54]:** The BA would identify and verify but the RC is actually the one who directs the Transmission operators. Not the BA operator

**Comment [SB55]:** Much discussion about necessity of this sentence. May just need to include in the EOP the directing to recall part. The rest can be left for the desk procedures.



- As per the Integrated Marketplace Market Protocols, **BA** operator will notify Market Participants of the hours in which the emergency ranges of any Resources are expected to be required, the hours in which Resources with a Commit Status of Reliability are expected to be committed, and the hours in which non-firm fixed Export Interchange Transactions are expected to be curtailed

**Comment [SB56]:** Who will really make the calls, this is just for the procedures

### 6.2.2 Level Two Energy Emergency Alerts & Actions

The SPP Balancing Authority will request EEA2 in the event that it is no longer capable of providing its customers' expected Energy requirements and is now an Energy Deficient Entity or the SPP Balancing Authority foresees or has implemented procedures up to, but excluding, interruption of firm load commitments. SPP Balancing Authority is utilizing Operating Reserves such that it is carrying reserves below the required minimum and has initiated assistance through the Reserve Sharing Group. Timely communications to the TOP, GOP and LSE will be made when requesting an **EEA2**

If the SPP Balancing Authority has entered EEA2 without issuing an EEA1 for this scenario, the SPP Balancing Authority ensures that the actions prescribed under EEA1 (with the exception of issuing EEA1) were completed.

**Comment [SB57]:** Just a note for communications. Will SPP hold a call or something daily for normal operations. Identify any challenges, etc. Would it be the SPP BA or the RC that initiates. May only need them seasonally.

**Comment [SB58]:** Discuss this with Jason and Terry to make sure this goes along with the discussion on EEA in ORWG

As time permits, the SPP Balancing Authority will take actions including, but are not limited to:

- Coordinating** with SPP Reliability Unit Commitment desk to commit all quick-start resources, regardless of cost.
- Coordinating with SPP Real-Time Market Operations to maximize all available online generation in the time frame of the emergency, in accordance with the Integrated Marketplace Market Protocols.
- Coordinating with SPP Scheduling desk to make all available external emergency purchases, regardless of cost, which may include; invoking assistance from neighboring entities in accordance with standing seems agreements
- Investigating block load transfers with adjacent interconnections according to the most recent emergency operating **agreements**.
- Coordinating with SPP Communications and Transmission Operators to issue Public Appeals to reduce demand (please reference section on [Public Appeals](#) for additional **details**).
- Coordinating with Transmission Operators to implement Voltage Reduction (please reference section on [Voltage Reduction](#) for additional details).
- Coordinating with SPP Scheduling desk to curtail (or recall) all non-firm external sales transactions.
- Coordinating with Transmission Operators for the interruption of non-firm end use loads, in accordance with applicable contracts (please reference section on [Interruptible Load](#) for additional details).
- Coordinating with Transmission Operators to implement Demand-side management.
- Implementing Utility load conservation measures (please reference section on [Utility Load Conservation Measures](#) for additional details).
- Coordinating with Transmission Operators to cancel any transmission outages adversely impacting the situation.

**Comment [SB59]:** Consider rewording every time we use the word coordinating. It is too vague. The word coordinating doesn't say what the entity is really going to do.

**Comment [SB60]:** What did we mean when we added the block load shed. Do we have arrangements or are we working on arrangements. Does the block load discussion actually need to be in the EOP?

**Comment [SB61]:** We will need a specific script for each time we mention something like "public appeals". The list of the communiqués

**Comment [SB62]:** D o

**Comment [SB63]:** Include the details for the elements in each of the sections.

The SPP Balancing Authority will also take the following actions as part of EEA2:

- As per the Integrated Marketplace Protocols, notifying Market Participants of the hours in which the emergency ranges of any Resources are expected to be required, the hours in which Resources with a Commit Status of Reliability are expected to be committed, and the hours in which non-firm fixed Export Interchange Transactions are expected to be curtailed
- Filing an OEC, as needed
- Preparing for potential load shedding, and notifying Transmission Operators to prepare accordingly.

While in EEA2, the SPP Balancing Authority will communicate its condition and forecasted condition to the SPP Reliability Coordinator no less than every hour.

As part of EEA2, SPP Market Participants may be asked to be involved in the following actions:

- Issuing Public Appeals to reduce demand (please reference section on [Public Appeals](#) for additional details).
- Implement Voltage Reduction (please reference section on [Voltage Reduction](#) for additional details).
- Interrupting non-firm end use loads, in accordance with applicable contracts (please reference section on [Interruptible Load](#) for additional details).
- Implementing Demand-side management.
- Implementing Utility Load Conservation Measures (please reference section on [Utility Load Conservation Measures](#) for additional details).
- Cancelling any transmission outages adversely impacting the situation.
- Preparing for potential load shedding (please reference section on [Load Management/Load Shedding](#) for additional details).

### 6.2.3 Level Three Energy Emergency Alerts & Actions

*All previous steps in previous alert levels have been exhausted before proceeding to this level.*

The SPP Balancing Authority will declare EEA3 when it foresees or has implemented firm load obligation interruption. Before declaring EEA3, the SPP Balancing Authority will have already provided the appropriate internal notifications to its market participants, using the member notification tool.

The SPP Balancing Authority will notify the SPP Reliability Coordinator to issue the alert for EEA3.

As part of EEA3, the SPP Balancing Authority will:

- Continue all actions listed in previous alert levels and will update SPP Reliability Coordinator of its condition every hour at minimum.
- Provide updates to Transmission Operators regarding load shedding preparation.
- Issue directives to shed load if/when needed.
- Upon notification from SPP Reliability Coordinator, take whatever actions are necessary to mitigate any undue risk to the Interconnection. These actions may include load shedding.

As part of EEA3, SPP Market Participants may be asked to be involved in load shedding (please reference section on [Load Management/Load Shedding](#) for additional details).

#### **6.2.4 Monitoring Energy Emergency Alert Level**

The SPP Balancing Authority will review the status of an EEA situation at least every 60 minutes, to determine whether the issue is resolving based on load, generation, or other changes and the reserves are sufficient.

When the SPP Balancing Authority believes it will be able to supply its customers' Energy requirements, it shall request SPP Reliability Coordinator that the EEA be terminated (EEA0).

### **6.3 Member Entity Alerts for Capacity and Energy Emergencies**

The SPP Balancing Authority is responsible for issuing capacity and Energy emergency notifications in order to alert the appropriate Market Participants that emergency conditions have been forecasted. Notifications may be issued on a system-wide or Reserve Zone basis and will include the appropriate time period, and will be sent via the member notification tool.

These alerts generally have associated actions that SPP and its members will take at the time of, or leading up to, the alert being issued.

#### **6.3.1 System-Wide Reserve Shortage Alert**

Market clearing requires a minimum amount of reserves for the SPP Balancing Authority area. The purpose of the System-Wide Reserve Shortage Alert is to alert members of the anticipated system-wide shortage of operating reserve capacity for a future critical period. It is implemented when estimated operating reserve capacity for the SPP Balancing Authority is less than the forecast primary reserve requirement.

SPP Actions:

- SPP Reliability Unit Commitment desk notifies SPP management.
- SPP Balancing Authority issues alert to impacted members using member notification tool, stating the amount of estimated operating reserve capacity and the requirement.
- SPP Reliability Coordinator issues a NERC Energy Emergency Alert Level 1 via the Reliability Coordinator Information System (RCIS) to ensure all Reliability Authorities clearly understand potential and actual SPP system energy emergencies.
- SPP Balancing Authority reports significant changes in the estimated operating reserve capacity.
- SPP Balancing Authority cancels the alert, when appropriate.

SPP Member Actions:

- Transmission / Generation Operators notify management of the alert.
- Transmission / Generation Operators advise all stations and key personnel.
- Transmission / Generation Operators review plans to determine if any maintenance or testing, scheduled or being performed, on any generating equipment or critical monitoring, control, or bulk power transmission facility can be deferred or cancelled.

### 6.3.2 Reserve Zone Shortage Alert

Market clearing requires a minimum amount of reserves in each reserve zone. The purpose of the Reserve Zone Shortage Alert is to alert members of a particular reserve zone's shortage of operating reserve capacity for a future critical period. It is implemented when estimated operating reserve capacity for the impacted zone is less than the forecast zonal operating reserve requirement.

#### SPP Actions:

- SPP Balancing Authority notifies SPP management
- SPP Balancing Authority issues alert to impacted members using member notification tool, stating the reserve zone impacted, estimated operating reserve capacity for impacted zone, and operating reserve requirement for impacted zone.
- SPP Reliability Coordinator will watch for congestion in the area of the reserve shortage, including transmission overload and/or potential voltage issues.
- SPP Balancing Authority reports significant changes in the estimated operating reserve capacity for the impacted reserve zone.
- SPP Balancing Authority will determine if there are there recallable units in the zone
- Includes public appeals and some other items in the EEA checklists that would be used for a whole CBA item. *Would use a variation of the steps we have in the EEA procedure, but only for the zone with a shortage*
- RCIS postings: Some areas do postings for specific areas, may need to be included in this part. Same procedure - needs discussion. *Internal threat notification process would be used for this*
- RUC would review the ID RUC runs for possible issues 4 hours out. *Note: check MISO documentation section 3.3 of Energy and Operating Reserves Market Business Practice Manual. It discussed reconfiguration of reserve zones.*
- The BA will recall 1 units from maintenance, if available

#### Member Actions:

- Transmission / Generation Operators notify management of the alert.
- Transmission / Generation Operators advise all stations and key personnel.
- Transmission / Generation Operators review plans to determine if any maintenance or testing, scheduled or being performed, on any generating equipment or critical monitoring, control, or bulk power transmission facility can be deferred or cancelled.

### 6.3.3 Emergency Capacity Shortage Notification

This notification alerts the appropriate Market Participants that SPP has, or foresees possible need to, utilized emergency capacity in order to maintain system reliability for the Operating Day in question. Emergency capacity may come in the form of committing Resources currently offline or utilizing the Maximum Emergency Capacity Operating Limits of Resources currently online. No immediate action is required by the Market Participants, but they should take notice that during the notification time period, SPP may call on emergency capacity to ensure the reliability of the Bulk Electric System.

**SPP Actions:**

- SPP Reliability Unit Commitment desk notifies SPP management.
- SPP Operations Engineering performs a situation analysis and prepares capacity/load/interchange/reserve projections for that day and appropriate future operating periods considering potential bottled generation based on location of transmission constraints.
- SPP Balancing Authority issues Emergency Capacity Shortage Notification to members via member notification tool, stating the amount of estimated operating reserve capacity and the operating reserve requirement. Alert can be issued for entire SPP Balancing Authority Area or for specific Reserve Zones
- SPP Reliability Coordinator issues the appropriate NERC Energy Emergency Alert (1/2/3) via the Reliability Coordinator Information System (RCIS) to ensure all Reliability Authorities clearly understand potential and actual SPP system energy emergencies.
- SPP Balancing Authority reports significant changes in the estimated operating reserve capacity.
- SPP Operator determines whether a “Status Report” is required and notifies SPP Members via the member notification system. SPP Dispatch may elect not to request an SSR until the operating day for which the Alert is in effect.

SPP Balancing Authority cancels the alert, when appropriate.

**SPP Member Actions:**

- TOP/GOP operators notify management of the alert.
- TOP/GOP operators advise all stations and key personnel.
- TOP/GOP operators review plans to determine if any maintenance or testing, scheduled or being performed, on any monitoring, control, transmission, or generating equipment can be deferred or cancelled. Generation Operators report to SPP Operator any and all fuel limited facilities as they occur and update SPP Operator as appropriate.
- TOP/GOP Operators suspend any high risk testing of generating or transmission equipment

**6.3.4 Forecast Minimum Generation Alert**

Each Balancing Authority has a commitment to control its generation in a manner so as not to burden the interconnected systems. Failure to provide adequate control can result in deviations in frequency and inadvertent power flow, stability issues or transmission constraints. For the SPP BA to meet its commitment during light load periods, it may be necessary to deviate appreciably from normal operating procedures.

SPP Balancing Authority is responsible for determining and declaring that an excess generation or light load, condition exists or is forecasted to exist. The SPP Balancing Authority will coordinate with appropriate Market Participants, SPP Reliability Coordinator and SPP Market Operators to alleviate the condition while maintaining the stability of the Eastern Interconnect.

The Forecast Minimum Generation Alert informs the appropriate Market Participants that SPP foresees a possible need to reduce capacity in order to maintain system reliability for the Operating Day in question. No immediate action is required by the Market Participants, but they should take notice that during the notification time period, SPP may reduce capacity to ensure the reliability of the Bulk Electric System.

Possible actions SPP Balancing Authority will take include, but are not limited to:

- Resources not cleared for Regulation-Down in the Integrated Marketplace that do not have a Dispatch Status of Fixed will be dispatched down to their Minimum Emergency Capacity Operating Limits.
- Any remaining Resources that were Self-Committed following the Day-Ahead Reliability Unit Commitment process will be de-committed.
- Curtail any remaining fixed Import Interchange Transactions that were submitted and approved following the Day-Ahead Reliability Unit Commitment process.
- Reduce Resources with a Dispatch Status of Fixed and Variable Energy Resources pro-rata down to their Minimum Emergency Capacity Operating Limit
- Curtail any remaining fixed Import Interchange Transactions pro-rata

### 6.3.5 Real-Time Minimum Generation Notification

Each Balancing Authority has a commitment to control its generation in a manner so as not to burden the interconnected systems. Failure to provide adequate control can result in deviations in frequency and inadvertent power flow, stability issues or transmission constraints. For the SPP Balancing Authority to meet its commitment during light load periods, it may be necessary to deviate appreciably from normal operating procedures.

The Real-Time Minimum Generation Notifications informs the appropriate Market Participants that SPP needs to reduce capacity in order to maintain system reliability. In accordance with the Integrated Marketplace Market Protocols, capacity may be reduced by means of utilizing the Minimum Emergency Capacity Operating Limits of Resources currently online or de-commitment of Resources. No immediate action is required by the Market Participants, but they should take notice that during the notification time period, SPP may reduce capacity to ensure the reliability of the Bulk Electric System.

Actions the SPP Balancing Authority will take include, but are not limited to:

- Resources not cleared for Regulation-Down in the Integrated Marketplace that do not have a Dispatch Status of Fixed will be dispatched down to their Minimum Emergency Capacity Operating Limits. In accordance with IM protocols.
- Any remaining Resources that were Self-Committed following the Day-Ahead Reliability Unit Commitment process will be de-committed.
- Curtail any remaining fixed Import Interchange Transactions that were submitted and approved following the Day-Ahead Reliability Unit Commitment process, coordinating with Reliability Coordinator
- Reduce Resources with a Dispatch Status of Fixed and Variable Energy Resources pro-rata down to their Minimum Emergency Capacity Operating Limit
- Curtail any remaining fixed Import Interchange Transactions pro-rata, coordinating with Reliability Coordinator to avoid adversely impact the transmission system

As needed, the SPP Balancing Authority may also take the following actions:

- Curtail any remaining fixed firm Import Interchange Transactions pro-rata, coordinating with Reliability Coordinator to avoid adversely impacting the transmission system

- Curtail resources identified through coordination with RUC Operator, using a directive if needed
- Request that the Reliability Coordinator issue a directive to cap resources
- Contact a Market Participant or PSE in order to arrange a sale.

#### 6.4 **BAAL and Disturbance Control Standard Deviation**

If SPP Balancing Authority cannot comply with the BAAL and Disturbance Control Standards as described in the NERC Reliability Standards, then it shall immediately implement remedies to do so.

**Comment [SH64]:** Is BAAL not in draft version? If so, why are we referencing this not yet effective standard instead of CPS1 and CPS2?

These remedies include, but are not limited to:

- Loading all available generating capacity.
- Deploying all available operating reserve.
- Interrupting interruptible load and exports.
- Requesting emergency assistance from other Balancing Authorities.
- Declaring an Energy Emergency Alert through the SPP Reliability Coordinator.
- Reducing load through means of load management including, but not limited to:
  - Public appeals
  - Voltage reduction
  - Curtailing firm load

**Comment [JA65]:** RSG?

Once the SPP Balancing Authority has exhausted the steps listed above, or if these steps cannot be completed in sufficient time to resolve the emergency condition, the SPP Reliability Coordinator shall:

- Manually shed firm load without delay to return its ACE to zero
- Request SPP Reliability Coordinator to declare an Energy Emergency Alert level 3 as defined in NERC Reliability Standards.

##### 6.4.1 Request emergency assistance from RC – need to add information

##### 6.4.2 Use of System Frequency Bias

If the SPP CBA is deficient it will only use the assistance provided by the Interconnection's frequency bias for the time needed to implement corrective actions. SPP CBA 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 as such unilateral adjustment may overload transmission facilities.

#### 6.5 **System Energy use Plan**

SPP uses the fuel data in conjunction with the other data reported in CROW (or a similar tool) to evaluate system conditions and compile reports. The reports are posted electronically via the internet or faxed to members so all members can assess the severity of the impending situation and available generation capacity. Additionally reports derived from this information are used to lead strategy

discussions among members about the criticality of the situation and to determine the timing of various emergency procedures that may be used.

An invitation may also be posted to other members to attend a SPP conference call to discuss the meaning of this data and how it may result in various emergency procedures.

SPP will treat as confidential the information on individual units or company data in accordance with the SPP OATT and Operating Agreement. Discussions on individual units or company's fuel status will only occur between SPP and the generation owners who provided the data. During group discussions, SPP will only discuss what possible emergency actions are foreseen or what aggregate fuel crisis exists.

Unit specific Fuel Limitation Information is considered proprietary and confidential, and will not be distributed amongst participants. Only aggregate information will be discussed for the sole purpose of developing reliable operating strategies during projected capacity deficient conditions.



## 7 Fuel Limitation Emergencies

### 7.1 Background

SPP requires data regarding Resource fuel supply and inventory in order to reliably operate the SPP Balancing Authority. In addition to the current and forecasted fuel supply conditions, SPP also requires data related to secondary fuel supplies for Resources that are capable to switch between fuel types.

**Comment [JG66]:** If there is time, use the offer change. If not, we need to issue an OOME or verbal directive.

SPP requires that seasonal fuel data be submitted for all Resources in the Balancing Authority. Although some of this information will undoubtedly be based on projections, this data will greatly assist SPP in providing a control to compare potential fuel related emergencies to. Without an accurate control to baseline from it would be difficult to determine the severity of the potential fuel-related emergency.

**Comment [SB67]:** WR would delete this wording

On a forecasted and real-time basis, GOPs within the SPP Balancing Authority Area and those external Resources pseudo-tied into the SPP Balancing Authority Area will be required to alert SPP Balancing Authority of any fuel related limitations via the outage scheduler, CROW. Please refer to the section of this plan on [Operation of Fuel Limited Resources](#), for additional information on notification requirements for entities that have, or expect to have, fuel strapped resources.

SPP will use any data related to fuel supply in conjunction with other operational data to evaluate system conditions. In the event that an Energy or capacity emergency exists or is expected to exist, SPP Balancing Authority will take whatever actions are necessary and initiate applicable communications.

*A list of applicable communications can be found in [Capacity and Energy Emergencies](#).*

SPP will treat all fuel related data as confidential and discussion on individual Resources or company's fuel statuses will only occur between SPP and the generator owners that provided the data. During group discussion, SPP will only discuss what possible emergency actions are foreseen or what aggregate fuel crisis exists.

### 7.2 Forecasted Fuel Limitation

In the event that a Generation Operator has concerns regarding a fuel limitation for some future point in time, the following actions will be taken. Please refer to the section of this plan on [Operation of Fuel Limited Resources](#), for additional information on notification requirements for entities that have, or expect to have, fuel strapped resources.

SPP Member Actions:

1. GOP contacts SPP Generation Dispatch desk with the status of units and fuel. This discussion includes the max generation levels and needs or requirements.

2. Generation Operator updates CROW for the unit(s) in question, with the outage reason of “fuel supply limitations”.

SPP Actions:

3. SPP Generation Dispatch desk notifies SPP Real-Time Balancing Market desk.
4. SPP Real-Time Balancing Market takes necessary action
5. *SPP Generation Dispatch monitors the gen-to-load conditions. If overrides are needed, Gen Dispatch notifies RUC and the BA, with what information?*
6. If appropriate SPP Balancing Authority will request an EEA
7. Notify member entities

### 7.3 **Real-Time Fuel Limitation**

*In the event that a Generation Operator has concerns regarding a fuel limitation with real-time impact, the following actions will be taken. Please refer to the section of this plan on [Operation of Fuel Limited Resources](#), for additional information on notification requirements for entities that have, or expect to have, fuel strapped resources.*

SPP Member Actions:

1. GOP contacts Gen Dispatch to inform that a unit can no longer provide regulation, due to fuel limitations.
2. CROW should be updated with the outage reason of “fuel supply limitations”. This step should be performed by the GOP.

SPP Actions:

3. Disqualify unit for regulation
4. Gen Dispatch notifies RTBM (double check, may be RUC). With what information and why? Note: We need to assign a certain Operator who is responsible for determining whether the unit is fuel-strapped. (Whoever that is), one of first considerations is whether the unit is qualified for regulation.
5. RTBM (or RUC) goes through checklist
6. It is possible that the fuel shortage/outage can cause an EEA? This would go through the EEA procedure.
7. *Maximize Resource Output, per section below?*
8. *Send Notification to Optimize Fuel Supply, per section below?*
9. *Send Notification to IPPs, per section below?*

SPP Operations will consider the following checklist:

- Is the fuel limitation real-time, or for a future time period?
- Does unit need to be disqualified?
- Has SPP BA reached level of fuel limitation (need to determine percentage) to be considered in emergency status?
- If emergency, move to Capacity Emergency procedure. If not . . . *(fill in later)*

**Notes:**

- Need one set of steps for physical fuel limitation (usually real-time, not common). Not concerned about limitations on purchasing fuel

- Need to keep in mind steps etc. for fuel switching

## 7.4 Operation of Fuel Limited Resources

SPP Balancing Authority requires that entities that have or are expected to have Fuel-limited Resources notify SPP of the status of said Resources and submit that appropriate fuel information via CROW as soon as possible.

The SPP Balancing Authority will coordinate with the appropriate GOPs to ensure that the Resource is bid in such a way as to adequately reflect its status as a Fuel-limited Resource.

Resources bid to the SPP Integrated Marketplace that are classified as a Fuel-limited Resource are to adhere to the following guidelines if requested by SPP Balancing Authority:

- Combustion Turbines are removed from economic dispatch and reserved for emergency conditions when their fuel supply is less than 16 hours at rated output
  - The concept of 16 hours is equal to four four-hour peak load periods over a two-day period. In general, two days is sufficient to alert governmental agencies of the situation and to receive assistance. Depending on the situation, Resources may be forced out of service (full or partial) prior to these guidelines in order to protect plant equipment or for future system needs.
- Oil-fired steam units are removed from economic dispatch and reserved for emergency conditions when their fuel inventory is less than 32 hours at rated output.
  - The concept is that 32 hours at rated output equals to 16-hour periods over a two-day period. In general, two days is sufficient to alert governmental agencies of the situation and to receive assistance. Depending on the situation, Resources may be forced out of service (full or partial) prior to these guidelines in order to protect plant equipment or for future system needs.
- As coal-fired steam units generally have considerable fuel reserves on site, removal of these resources from economic dispatch and reserving for emergency conditions will be handled on a case-by-case basis based on system conditions and appropriate GOP recommendations.
- Hydro-powered units are removed from economic dispatch and reserved for emergency conditions based on system and environmental conditions.

Although a Resource may fulfill the requirement of being fuel-limited, the SPP Balancing Authority operator may elect not to operate the Resource as a Fuel-limited Resource if it is determined to not impact the reliability of either the Balancing Authority Area or Bulk Energy System. This will be handled on a case-by-case basis.

SPP Actions:

Member Actions:

**Comment [JG68]:** Check with MMU, is this going to break code of conduct?

**Comment [SH69]:** We are struggling to understand the applicability of this rule if CTs do not have on-site gas storage and completely depended on drawing directly from pipelines? And how do SPP BA Operator verify the 16 hour rule? And when will SPP remove these resources from Economic Dispatch?

**Comment [JG70]:** Have ORWG and GWG verify hours.

**Comment [SH71]:** Is this meant to capture only oil-fired units? Typically, oil fired units tend to be intermediate or peaking in nature. Therefore, the 32 hour rule may be overly restrictive. Please solicit GWG feedback.

## 7.5 Maximizing Resource Output

The SPP Balancing Authority operates in such a way so to maximize Resource capacity for times when the system demand is expected to require additional capacity. For example, SPP will coordinate maintenance outages in the Balancing Authority Area in such a way that the maximum amount of capacity and transfer is available during peak-demand portions of the year while still ensuring that adequate capacity and transfer capability is available during off-peak seasons. SPP Balancing Authority will also make use of Minimum and Maximum Emergency Capacity Operating Limits on Resources when necessary to maximize generation on a more immediate basis.

In times of fuel shortages or scarcity, SPP will optimize the generation mix to ensure the greatest amount of capacity will be available in the future while still ensuring system reliability in the present.

## 7.6 Notification to Maximize Independent Power Producer Resource Output

SPP will coordinate with Independent Power Producers as necessary to ensure that during times of need there is adequate Resource capacity available in the Balancing Authority.

## 7.7 Notification to Optimize Fuel Supply

SPP operation of all generating sources optimizes fuel supply on utilizing the primary fuel as much as possible. SPP shall coordinate transmission and generator maintenance schedules to maximize capacity or conserve fuel in short supply.

In the event of a fuel shortage that could potentially impact the ability of the Balancing Authority to meet the forecasted demand, SPP will initiate a fuel optimization conference call (who all needs to be on the call). This is where we might use the new “mission mode” calling system. This call will address possible solutions to the problem at hand. These solutions will include, but are not limited to:

- Conserve fuel in short supply by coordinating equipment outages
- Appeals to customers to use alternative fuels

## 7.8 Fuel Supply and Inventory plan

The purpose of this plan is to provide information on fuel limitations so that decisions can be made to manage fuel inventories in the event of a fuel shortage, such as might result from a general strike, or severe weather. In addition, fuel switching is considered for certain operating conditions. In the event that a report needs to be filed with the Department of Energy (DOE), NERC, or a Reliability Authority, the SPP Transmission Operations Engineering group will prepare those reports.

### 7.8.1 SPP Member Reporting Procedures

A unit is considered fuel limited when it is not capable at running at its maximum capacity for the next \_ hours. If a unit has an alternate fuel which would allow it to run at its maximum capacity for more than \_ hours, it does not need to be reported. However, if switching fuels involves a shut down

**Comment [JG72]:** Get with Reliability on EPA limitations and how to coordinate violating them.

**Comment [SB73]:** each GOP may have different policy/procedures for EPA violations per SH

**Comment [SH74]:** What is this targeting only IPPs and not all Resources within SPP?

**Comment [SB75]:** This is a specific reference added for elements that must be included in EOP per nerc req.

**Comment [SH76]:** How will SPP manage to hold these calls and still preserve confidentiality of each GOP operator's confidential fuel supply issues?

**Comment [SH77]:** Retail customers or GOPs?

and introduces the risk of the unit not being able to re-start after the switch, the unit should be reported if its primary fuel supply would produce less than \_ hours of runtime at maximum capacity. Besides fuel, the limitation of other resources, such as water, may also restrict the amount of time a unit will be able to operate. If a unit has less than \_ hours of run time at maximum capacity due to any resource limitation, it along with any fuel limited units should be reported.

The following information should be included:

Unit Name - The name of the unit(s) (units with shared resource supplies should be listed together) that are considered resource limited.

- Fuel type
- Maximum Capacity - The current maximum capacity of the unit(s).
- Emergency Minimum - If a unit cannot cycle due to uncertainty of starting up again,
- Emergency Minimum must be included with a note in the Comments section.
- Current Energy - Current MW output.
- Total Burn Hours Remaining - Total burn hours remaining with unit at max capacity.
- Comments - If a unit is limited for a resource other than fuel, this should be noted in this column as well as any other pertinent information on the unit.
- In addition, Market Operations should also monitor fuel inventories for the following minimum levels:
  - CT's or Diesels - Less than or equal to \_\_\_\_ hours at maximum capacity
  - Coal - Less than or equal to \_\_\_\_ hours at maximum capacity

### 7.8.2 Inter-RTO Fuel Coordination Procedure

To facilitate this process, each Balancing Authority will develop a:

1. Database of natural gas-fired generation on its system, including its interstate pipeline supplier or LDC, connection point on the gas pipeline system, and contract arrangements for gas supply and transmission.
2. Complete set of maps of the interstate gas pipelines serving units on its system
3. Contact list for people at the gas pipelines or LDC. This information will be shared among the ?? RTOs and combined such that each RTO has a complete set of information for facilities in the combined area.

SPP Actions:

- The RTOs will jointly communicate with the interstate pipelines. The communication will include:
  - High level summary of the expected electrical demand and capacity conditions in the RTOs during the forecasted weather event
  - Expected need for the natural gas-fired generation
  - Contact information in each RTO for the interstate pipelines to obtain additional information.
  - Each RTO will follow up individually with each of its interstate pipeline suppliers its respective area, requesting:
    1. The operational status of the pipeline
    2. The presence or anticipation of any Operational Flow Orders (OFOs) or other emergency procedures

3. An assessment of the pipeline's ability to serve contracts for gas-fired generation through the expected duration of the weather event.
- After the data collection effort with the pipelines, the RTOs will share the information with each other, reconvene, and determine actions to be taken, based on the collective assessment. Actions could include: (1) modification of the generation dispatch day-ahead to account for expected unavailability of gas-fired generation; (2) limitation of the granting of outages to maximize availability of generation resources; (3) adoption of conservative operations actions intended to mitigate risks associated with gas system contingencies or gas-fired generation unavailability.
  - After a course of action has been determined, it will be communicated to the SPP members

#### SPP Members Actions:

- Prior to the winter season, the gas-fired generation owners will be requested to provide information on their facilities, above that requested of other generation owners. That information will be considered confidential and only shared with the other RTOs for the purpose of facilitating this process and communications with the pipeline companies.
- The gas-fired generation owners will be requested to provide any information that they have relative to delivery limitations to their gas supply that they may have received from their gas supplier or gas transmission provider.
- The gas-fired generation owners will be expected to comply with any special instructions or emergency procedures that may be requested by SPP either via an SOS conference call or All-call message during a severe weather event.

## 7.9 **Fuel Switching Plan**

Many of SPP member GOPs' gas-fired generating units have the ability to burn fuel oil as an alternate fuel. SPP member GOPs maintain a limited quantity of fuel oil inventory at its gas-fired generating stations that are capable of burning fuel oil as an emergency back-up fuel supply. In the event of a potential severe natural gas shortage, such as one resulting from extreme winter weather conditions, pipeline curtailments or other emergencies, the following steps will be implemented:

1. SPP GOPs' gas and fuel oil buyers will monitor national and local weather conditions and maintain constant communication with gas and fuel oil suppliers and transporters.
2. The web sites of interstate pipelines will be accessed routinely to determine if an Operational Alerts have been issued.
3. Constant communication and coordination will be maintained between fuel procurement, plant generation and market operations personnel to determine when to switch generation from natural gas and fuel oil to insure reliability of the SPP System.
4. Additional fuel oil supplies will be purchased to supplement currently available fuel oil inventories at the respective generating stations for the duration of the fuel oil burning period.
5. Appeals to large industrial and commercial customers, as well as, government agencies to reduce non-essential energy use and maximize the use of customer-owned generation that rely on fuels other than the one in short supply.
6. Fuel oil inventories will be replenished once the emergency burning period has ceased to ensure a back-up emergency supply is always available.

Southwest Power Pool, Inc.

Fuel Limitation Emergencies

SPP Actions;

Member actions:





## 8 Transmission Emergencies and System Restoration

### 8.1 Day-Ahead Transmission Security Emergency Alerts

#### 8.1.1 Maximum Emergency Generation Alert (for Transmission Security)

##### 8.1.2

The purpose of the Maximum Emergency Generation Alert (for Transmission Security) is to provide an early alert that security analysis projections indicate the need for emergency capacity to ensure transmission reliability. It is implemented when Resources that are not intended for economic commitment are needed, or may be needed, in SPP Balancing Authority Area to ensure transmission reliability.

SPP Day-ahead Study Analysis identifies transmission reliability issues that cannot be resolved by means of economic generation adjustments.

#### 8.1.3 Voltage Reduction Alert (For Transmission Security)

The purpose of the Voltage Reduction Alert (for Transmission Security) is to provide an early alert that voltage reduction may be required during a future critical period to ensure transmission reliability. It is implemented when the projected loading of Resources to their Maximum Emergency Operating Capacity Limit is insufficient to ensure transmission reliability.

SPP Day-ahead Study Analysis identifies Transmission Reliability issues that cannot be resolved by means of economic generation adjustments and Resource emergency ranges.

### 8.2 Real-Time Transmission Security Emergency Actions

#### 8.2.1 Active Load Management Action

*Short time frame to implement*

Real-time analysis results and/or projection studies identify Transmission Reliability issues that cannot be resolved via economic generation adjustments and utilization of Resources Maximum Emergency Operating Capacity Limit.

*There are multiple load management options available to SPP Balancing Authority. For a detailed breakdown, see the [Load Management section](#).*

#### 8.2.2 Voltage Reduction and Curtailment of Non-Critical Plant Load

The purpose of Voltage Reduction and Curtailment of Non-Critical Plant Load is to warn members that the real-time operation conditions have deteriorated such that a voltage reduction may be required to ensure transmission reliability.

Real-time analysis results identify transmission reliability issues that cannot be resolved by means of economic re-dispatch or utilization of Maximum Emergency Operating Capacity Limit or commitment of non-economic Resources, SPP shall implement the Active Load Management and

**Comment [JA78]:** Based on the comment below, if transmission isn't the BA's responsibility, can you remove the whole section?

**Comment [SB79]:** No, SPP Balancing Authority is required to explain in its EOP what the plan is regardless of who actually performs the tasks.

**Comment [SH80]:** Propose a more applicable name such as "Transmission Support Generation Commitment Alert." Does the RUC not mitigate this issue?

**Comment [JBG81]:** Environmental placeholder. SPP should let them know in advance or it won't happen.

**Comment [SH82]:** Consider replacing security with "support". This varies greatly by TOP. Some TOPs do not have the capability to reduce voltage – voltage reduction needs to happen at distribution voltage levels. Therefore, should this been an LSE instruction?

**Comment [SH83]:** Consider replacing security with "Support."

Emergency Load Response Programs. Voltage Reduction should be implemented when the above actions are implemented and Security Analysis still indicates multiple post-contingent voltage violations below emergency low limits but prior to simulated non-convergence.

### 8.2.3 Manual Load Shed Warning

The purpose of Manual Load Shed Warning is to warn SPP entities of the increasingly critical condition of present operations that may require manually shedding load to ensure Transmission Reliability. It is issued when the loss of a transmission facility jeopardizes reliable operations after all other possible measures are taken to increase reserve. The amount of load and the location of area(s) are specified by the SPP Balancing Authority and/or SPP Reliability Coordinator.

Real-time analysis results identify Transmission Reliability issues that cannot be resolved via economic or Maximum Emergency generation adjustments, SPP shall implement the effective Active Load Management, Emergency Load Response Programs and a voltage reduction as applicable.

### 8.2.4 Post Contingency Local Load Relief Warning

The purpose of the Post Contingency Local Load Relief Warning is to provide advance notice to a TOPs of the potential for manual load shed in their area(s). It is issued after all other means of transmission constraint control have been exhausted or until sufficient generation is on-line to control the constraint within designated limits and timelines.

### 8.3 Interconnection Reliability Operating Limits (IROL) Facilities

SPP Identifies specific facilities that if loaded above a designated limit could significantly impact system reliability. SPP Balancing Authority must quickly act to mitigate IROL facilities in coordination with SPP Reliability Coordinator.

*Refer to SPP IROL Relief Procedure document for specific mitigation techniques.*

### 8.4 System Restoration

SPP Balancing Authority will rely on the individual SPP TOP system restoration plans and the Regional Black Start Capability Plan in the event of a partial or total system black out.

SPP Balancing Authority will assist SPP Reliability Coordinator in coordinating information exchange between the SPP Market Participants and will adhere to SPP Criteria and NERC Reliability Standards dealing with system restoration.

**Comment [JBG84]:** Loading of transmission is not the BA's responsibility. Investigate with compliance/regulatory if we can remove this.

**Comment [SH85]:** This is a TOP function rather than a BA function

**Comment [JBG86]:** previous comment, someone will have to tell BA what to do.

**Comment [SH87]:** Where is this document?

**Comment [SB88]:** When EOP-005 becomes effective should we remove references to Restoration

## 9 Manual Load Shedding

### 9.1 Plan Requirements

If SPP Balancing Authority is operating with insufficient generation or or transmission capacity SPP Balancing Authority will coordinate with the SPP Reliability Coordinator who, if determined appropriate, shall direct the shedding of customer load rather than risk the integrity of SPP Balancing Authority Area or the Bulk Electric System.

Every effort is made to avoid interrupting system load. However, under certain operating conditions, it is necessary to curtail or interrupt customer load. SPP will only direct the interruption of customer load as necessary to preserve system reliability in accordance with NERC Reliability Standards and the SPP Operating agreement.

### 9.2 Automatic Load Shed

SPP Balancing Authority will utilize the individual member entity plans for automatic load shedding for under-frequency and under-voltage protection. As these protection schemes are automated, SPP Balancing Authority will only require the Transmission Operators within the SPP Balancing Authority Area to alert SPP Balancing Authority if the protection schemes have either been disabled/re-enabled or if the automatic protection schemes have acted.

In the event that automatic load shedding occurs as a result of under-frequency or under-voltage, the Transmission Operator shall immediately assess the system situation to determine whether or not separation has occurred from the Eastern Interconnect. This status should be communicated to SPP Balancing Authority as soon as possible.

### 9.3 Manual Load Shed

The purpose of the Manual Load Shed is to provide load relief when all other possible means of supplying internal SPP Balancing Authority load have been used to address an emergency within the SPP Balancing Authority Area or to maintain ACE so as to not jeopardize the reliability of the Bulk Electric System. Examples of such conditions are, but not limited to:

- The SPP Balancing Authority cannot provide adequate capacity to meet the SPP Balancing Authority load
- Overloaded transmission Facilities cannot be relieved in any other way
- Under-frequency during an islanding event

Transmission Operators and Load Serving Entities within the SPP Balancing Authority Area shall have plans for operator-controlled manual load shedding to respond to real-time emergencies. These entities shall be capable of implementing the load shedding within a timeframe adequate for responding to the emergency.

SPP Balancing Authority will direct the impacted Transmission Operator(s) the amount of MW load shed a specific the required amount of load. SPP will specify a location if applicable.

**Comment [SB89]:** Just a note for later we need to address OEC in the Emergency plan. Goes with the section on EEA

**Comment [SB90]:** Load Management is actually interruptible and curtailable loads in EEA2 need to address the term in that section for the reqs to be clear

**Comment [JA91]:** Is this necessary if the BA isn't responsible for transmission reliability?

**Comment [JA92]:** Request an EEA from the RC?

**Comment [SB93]:** Expound on 9.2 someplace else. Make it's own section 10 also make a reference to the Criteria that is about Automatic load shed

**Comment [JA94]:** Request an EEA from the RC?

**Comment [JBG95]:** the standards do not allow the BA to direct the TOP. This is a problem as we have that in the plan.

Ask Shari.

possibly change to SPP BA will work with RC to direct. Or will coordinate with TOP.

## 9.4 Load Management (section 11)

SPP Balancing Authority is made up of a multitude of different Market Participants each with unique systems that make load management within the SPP Balancing Authority Area complex. SPP Balancing Authority understands that while some methods of load management work for one area, it may not work for all areas within the SPP Balancing Authority Area. That being said it is the responsibility of the individual Market Participants to know what the capabilities of their individual systems are and be able to provide SPP Balancing Authority with an overview within a reasonable timeframe to respond to real time emergencies.

### 9.4.1 Voltage Reduction

SPP will coordinate with the appropriate Market Participants that are capable of providing Load Management by means of voltage reduction in a time-frame adequate to allow the respective Market Participants to perform the field work necessary to accomplish the desired relief. Any Market Participant capable of reducing load by means of voltage reduction should be capable of providing a realistic estimated lead time necessary to implement voltage reduction on their respective systems.

Will need to revise. Some members do not do voltage reduction. SPP will need to have the list available for operators. Need steps

### 9.4.2 Public Appeals

The purpose of Public Appeals is to request end-use customers to reduce load during emergency conditions. Each appropriate Market Participant within the SPP Balancing Authority Area shall have means to communicate the Public Appeals to their end-use customers at the request of SPP Balancing Authority. SPP will be making public appeals for the BA Region/BAA.

This came from cold weather alerts, but the language needs to be in the plan also for Capacity plans SPP will:

- Notify (who in SPP) management, (who in SPP) Public information personnel, and all appropriate Market Participants
- Issue an Alert and provide the following information:
  - Reserve Zone
  - Forecasted low temperature
  - Forecasted duration of the condition
  - Amount of estimated operating reserve and reserve requirement
- Cancel the alert, when appropriate.

### 9.4.3 Interruptible Load

Various Market Participants within the SPP Balancing Authority Area have contracts in place with large industrial customers where load may be interrupted at the Market Participant's request. Since these contracts are unique and have specific notification requirements and conditions associated with them, SPP Balancing Authority will rely on the individual Market Participants to maintain awareness

**Comment [JA96]:** I think according to EOP-002 Attachment 1 this is a LSE responsibility. For sure it's the TOPs.

**Comment [JA97]:** Is the SPP BA going to do this? According to EOP-002 Attachment 1 this is a LSE responsibility.

**Comment [JA98]:** According to EOP-002 Attachment 1 this is a LSE responsibility.

of what interruptible load is available within their system and what conditions are necessary to interrupt said load.

The Market Participants should be capable of providing SPP Balancing Authority with an overview of what interruptible load is available for interruption in an area within a reasonable timeframe to respond to real-time emergencies.

#### 9.4.4 Utility Load Conservation Measures

Market Participants shall be capable of reducing their load requirements during times when system demand begins to exceed the available Resources available supply.

**Comment [SB99]:** from JA EOP-002 states this is a LSE responsibility

#### 9.4.5 Load Management Notification

This notification alerts the members that SPP has, or foresees a time period where SPP Balancing Authority will coordinate with SPP Reliability Coordination and as a result of that coordination; SPP may direct the use of load management. This includes, but is not limited to:

- Interrupt interruptible load and exports
- Reducing load through use of public appeals
- Voltage Reduction
- Manual Load Shed

The notification will be issues via the member notification tool. SPP Market Participants should use the lead time provided by the notification to prepare for the possible need for load management.

---

## 10 Other System Emergencies

---

### 10.1 Conservative Operations

The need to operate the SPP Balancing Authority Area more conservatively can be triggered by any number of weather, environmental, operational, terrorist, or computer events, including, but not limited to:

- Forest fires/brush fires that threaten major transmission circuits
- Weather-related events such as ice/snow/wind storms, hurricanes, tornadoes, severe thunderstorms, excessive heat, and floods.
- Terrorist Attacks
- Solar magnetic disturbance events
- Failure of Energy Management System (EMS)
- Widespread fuel related emergencies

During Conservative Operations, SPP Balancing Authority, in coordination with SPP Reliability Coordinator, may take actions including, but not limited to:

- Reflect conservative transfer limit values
- Select double-contingencies for review
- Increase Reliability Headroom
- Increase operating reserve requirements for the SPP Balancing Authority
- Evaluate maximum credible disturbances

SPP Member Actions:

- Transmission / Generation Operators and SPP Marketers respond, as required, to specific requests and directions of SPP Operator

Details of Conservative Operations will be posted to the SPP Market Participants via the member notification tool. Please refer to the sections below for additional details on specific actions taken when Conservative Operations are triggered by a Weather Related Emergency, Thunderstorm/Tornado, or Solar Magnetic Disturbance event

### 10.2 Weather Related Emergencies

#### 10.2.1 Overview

To maximize the SPP Balancing Authority's ability to operate reliably during periods of extreme and/or prolonged severe weather conditions, procedures are necessary to keep all affected system personnel aware of the forecast and/or actual status of the system and to ensure that maximum levels of Resource availability are attained.

The purpose of this section is to explain how severe weather conditions are identified and to describe when it is necessary to provide additional capacity and to staff the necessary generating sites for a future critical period. For example, Combustion turbine start up reliability may be adversely affected by extreme cold temperatures.

SPP analysis of system conditions considers higher levels of Resource unavailability during severe weather conditions. SPP uses its best judgment about the magnitude of the projected unavailability of equipment, considering the length of the forecasted and actual weather conditions.

Participants monitor their fuel supplies and inventories and keep SPP updated about station/units that are experiencing or projected to experience fuel limitations. Conference calls are scheduled to review the operating situations, as appropriate.

For more on Fuel-Related Emergencies, see the [Fuel Limitations Emergency Section](#).

### 10.2.2 Cold Weather Alert

The purpose of the Cold Weather Alert is to prepare personnel and facilities for expected extreme cold weather conditions. As a general guide when the forecasted weather condition approaches minimum or actual temperatures for the Reserve Zone fall near or below ten degrees Fahrenheit. SPP can initiate a Cold Weather Alert at higher temperatures if SPP anticipates increased winds or if SPP projects a portion of gas fired capacity is unable to obtain spot market gas during load pick-up periods. SPP will generally initiate a Cold Weather Alert on a Reserve Zone basis.

SPP will:

- Notify SPP management, SPP Public information personnel, and all appropriate Market Participants
- Issue an Alert, using the member notification tool, including the following information:
  - Reserve Zone
  - Forecasted low temperature
  - Forecasted duration of the condition
  - Amount of estimated operating reserve and reserve requirement
- Cancel the alert, when appropriate.

### 10.2.3 Hot Weather Alert

The purpose of the Hot Weather Alert is to prepare personnel and facilities for extreme hot and/or humid weather conditions which may cause capacity requirements/unit availability to be substantially higher than forecast are expected to persist for an extended period. In general, a Hot Weather Alert can be issued on a Reserve Zone basis, if projected temperatures are to exceed 90 degrees Fahrenheit with high humidity for multiple days.

SPP will:

- Notify SPP management and all appropriate Market Participants
- Issue an Alert, using the member notification tool, stating the amount of estimated operating reserve capacity and the reserve requirement.
- Report significant changes in the estimated operating reserve capacity.
- Cancel the alert, when appropriate.

## 10.3 Thunderstorms and Tornadoes

If automatic reclosing schemes are not in service and a severe thunderstorm(s) exist in the vicinity of a critical bulk power transmission facility, it is necessary to take action. When thunderstorms are in the vicinity of the SPP Balancing Authority, automatic reclosing capability should be in service for

all \_\_\_\_ kV and critical \_\_\_\_ kV and above circuits. If tornadoes are reported in an area, the failure of automatic reclosing to restore a transmission facility to service should be interpreted as a more serious failure existing. The transmission owner will generally dispatch a patrol of the line to ensure that the line can be safely returned to service or that additional maintenance or repair activity needs to be done.

SPP actions:

- SPP Balancing Authority requests that automatic reclosing capability be put in service on those critical transmission facilities. The Local Control Center at either end of a tie line or SPP Operator can request that the reclosers be restored.
- Where practical, SPP Balancing Authority requests that any maintenance and testing being performed on any critical transmission generating, control, or monitoring equipment be deferred or cancelled.
- SPP Balancing Authority informs affected Members of any storms moving in their direction.

SPP TOP Actions:

- Transmission Operators inform SPP Operator of any storms in their systems.
- Transmission Operators determine when reclosers are to be restored to service and report this information to SPP Operator.
- Transmission Operators place reclosers in service.

#### **10.4 Solar Magnetic Disturbances**

Geomagnetically-induced currents (GIC) caused by the solar magnetic disturbance (SMD) flow through the power system equipment and facilities may result in major increases in system reactive requirements, equipment damage, and disruption of interconnected system operation. To implement the procedure, a geomagnetic storm is detected that produces a DC measurement at \_\_\_\_\_ and/or \_\_\_\_\_ at a magnitude greater than 10 amperes and SPP Operator confirms that this measurement is a result of a severe geomagnetic storm by checking additional sources of information. Additional data sources include:

- SPP Operator contacts \_\_\_\_\_ Transmission Operator to determine if excess transformer MVAR requirements exist.
- SPP Operator contacts \_\_\_\_\_ Transmission Operator to determine if excess transformer neutral current exists.
- SPP Operator also checks with \_\_\_\_\_ Transmission Operator to see if similar high DC measurements are being observed. A confirmation of a geomagnetic storm by the National Oceanic and Atmospheric Administration (NOAA), which is generally received via notification from the RCIS, is not required to initiate this procedure. Upon identification of a geomagnetic disturbance, SPP CBA Operator operates the system to geomagnetic disturbance transfer limits.

SPP actions:



- SPP Reliability Coordinator notifies members (Generation and Transmission) via the member notification tool of SMD warnings/alerts received from the National Oceanic and Atmospheric Administration (NOAA) via the RCIS.
- SPP Balancing Authority notifies members via the member notification system and postings on selected SPP web-sites upon initiation of Conservative Operations due to SMD upon confirmation of activity on the SPP system. SPP Balancing Authority begins to operate the system to the geomagnetic disturbance transfer limits.
- When the limit is approached or exceeded:
  - Generation Dispatcher will make appropriate assignments in the most effective areas to control this limit.
  - SPP Operator also evaluates the impact of the existing inter-area transfers and modifies the schedules that adversely affect the \_\_\_\_ transfer limit.
    - If insufficient generation is available to control this limit, the emergency procedures contained in the [Capacity and Energy Emergencies](#) Section of this Plan are implemented. If it appears that these emergency procedures are required, an operations engineer is requested to validate the \_\_\_\_ transfer limit and develop a voltage drop curve for the \_\_\_\_ transfer limit contingency.
    - Pre-contingency load dumping will not be used to control transfers to the \_\_\_\_ transfer limit.
- After the measurement value at \_\_\_\_ has fallen below the initial trigger point of 10 amperes, SPP Balancing Authority continues to operate the system to the geomagnetic disturbance transfer limits for a period of three hours. SPP Balancing Authority must again confirm this measurement by checking the other sources of information. If the measurement value remains below 10 amperes for three hours:
  - SPP Balancing Authority notified members that Conservative Operations due to SMD is cancelled, using the member notification tool.
  - SPP Balancing Authority restores the appropriate transfer limits for operation of the system.

#### SPP member actions:

- Transmission/Generation Operators provide confirmation of measurement values as requested by SPP Operator.
- Generation Operators provide as much advance notification as possible regarding details of more restrictive plant procedures that may result in plant reductions to protect equipment.
- Upon notification of the implementation of this procedure, members that operate facilities with instrumentation installed to record DC neutral measurements at remote locations dispatch personnel to ensure that strip chart recorders are working properly. Members employing a MVAR summing algorithm method also initiate data collection at this time. It is requested that any data collected during a geomagnetic storm be forwarded to SPP for further analysis.
- Report all actions to SPP Balancing Authority.

## 10.5 Loss of Energy Management System (EMS)

The loss of the Energy Management System (EMS) can occur either at the SPP Balancing Authority or any of the Market Participants in the Balancing Authority Area. For further information on

actions to be taken for the loss of EMS, or other critical systems, refer to SPP Loss of Critical System Procedure.

---

## 11 Reporting and Data Retention

---

### 11.1 Sabotage/Terrorism Reporting

Sabotage reporting should be conducted in accordance with NERC CIP standards. In this section you will find the following information:

- A description of the conditions that warrant conservative operation.
- Understanding of actions that SPP may take in the event of these potential and/or realized manmade threats.
- Centralized information related to preparing and responding to man-made threats/attacks.

General Conditions:

As a result of man-made threats, the need may exist to operate the SPP Balancing Authority more conservatively than normal conditions.

Examples of conditions warranting possible conservative operations include:

- Terrorist threats and /or attacks upon the transmission system and related infrastructures
  - Telecom
  - Fuel
  - Transportation
- Intelligence from the Federal Government or other credible sources
  - DOE
  - NIPC
  - Reliability Authority
  - SPP Member
- Suspicious events on either SPP or neighboring systems. The significant triggers for SPP action during crisis will be the Homeland Security Threat Levels and NIPC Threat Advisories. However, if SPP become aware of a possible threat before any one of these triggers (e.g., SPP sees a significant terrorist attack on CNN) SPP may decide to act before any such alerts. Each of these alert conditions is further explained in the attached appendices.

The tailored response to any of these triggers will include a multi-faceted plan to safeguard personnel and maintain reliable operations. The facets of this response include power system operations, communications, cyber security, and physical security. The emphasis of this section is upon the Operations and Communications measures that may be taken based upon the threat and intelligence.

SPP Balancing Authority will act as a central point of contact for receiving and distributing Sabotage/Terrorism events within the SPP Balancing Authority Area. SPP Balancing Authority will relay Sabotage/Terrorism event details to the SPP Reliability Coordinator and neighboring Balancing Authorities.

Promptly analyze Bulk Electric System disturbances on its system or facilities.

If SPP BA is experiencing a reportable incident it shall provide a preliminary written report to its Regional Reliability Organization and NERC.

And submit within 24 hours of the disturbance or unusual occurrence either a copy of the report submitted to DOE, or, if no DOE report is required, a copy of the NERC Interconnection

Reliability Operating Limit and Preliminary Disturbance Report form. Events that are not identified until some time after they occur shall be reported within 24 hours of being recognized.

Under certain adverse conditions, e.g., severe weather, it may not be possible to assess the damage caused by a disturbance and issue a written Interconnection Reliability Operating Limit and Preliminary Disturbance Report within 24 hours. In such cases, the affected Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, or Load Serving Entity shall promptly notify its Regional Reliability Organization(s) and NERC, and verbally provide as much information as is available at that time. The affected Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, or Load Serving Entity shall then provide timely, periodic verbal updates until adequate information is available to issue a written Preliminary Disturbance Report.

If, in the judgment of the Regional Reliability Organization, after consultation with the Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, or Load Serving Entity in which a disturbance occurred, a final report is required, the affected Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, or Load Serving Entity shall prepare this report within 60 days. As a minimum, the final report shall have a discussion of the events and its cause, the conclusions reached, and recommendations to prevent recurrence of this type of event. The report shall be subject to Regional Reliability Organization approval.

## **11.2 Reporting System Disturbances to the Department of Energy**

Under certain defined conditions, SPP and/or its members are required to report the details of system disturbances to the Department of Energy. The reporting criteria and instructions for filing Form OE-417 are contained in Attachment J (see link below).

Steps:

1. *TBD* recognizes that a reportable disturbance or unusual occurrence has occurred, which requires reporting to the DOE (Form OE-417). *TBD* may review NERC Table 1-EOP-004-0 to determine whether the disturbance is reportable to the DOE.
2. *TBD* gathers information required to complete Form OE-417 Schedule 1, coordinating with other *TBD* individuals as needed
3. *TBD* completes Form OE-417 schedule 1, per requirements on <http://www.oe.netl.doe.gov/oe417.aspx>
4. *TBD* submits Form OE-417 Schedule 1 to DOE Operations Center, within 60 minutes of disturbance. *Form OE-417 states that for certain "normal alert" disturbances OE-417*

*Schedule 1 is due 6 hours after the disturbance, instead of 60 minutes after the disturbance. NERC EOP-004 indicates that OE-417 Schedule 1 is always due 60 minutes after the reportable disturbance.*

- a. If the incident is having a critical impact on operations, a telephone notification to the DOE Operations Center (202-586-8100) is acceptable, pending submission of the completed form OE-417. Electronic submission via an on-line web-based form is the preferred method of notification. However, electronic submission by facsimile or email is acceptable. *Will SPP submit using web-based form, telephone, fax, or email?*
5. *TBD submits Form OE-417 Schedule 1 to NERC, simultaneously with DOE submission. Are all disturbances required to be reported to the DOE, also required to be reported to NERC?*
6. *TBD submits Form OE-417 Schedule 1 to SPP RE. What is the deadline?*
7. *TBD gathers latest information for updating Form OE-417 Schedule 1 and the information required to complete Form OE-417 Schedule 2, coordinating with other TBD individuals as needed*
8. *TBD updates Form OE-417 Schedule 1 to include any missing information, and completes Form OE-417 Schedule 2, per requirements on <http://www.oe.netl.doe.gov/oe417.aspx>*
9. *TBD submits updated Form OE-417 (Schedules 1 & 2) to DOE Operations Center to provide complete disruption information, within 48 hours of the event. NERC EOP-004 says DOE deadline is 48 hours, but the form itself says 72 hours – should we stick with 48 hours?*
10. *TBD submits Form OE-417 Schedule 2 to NERC, simultaneously with DOE submission. NERC EOP-004 states “All entities required to file a DOE OE-417 report (Schedule 1 & 2) shall send a copy of these reports to NERC simultaneously, but no later than 24 hours after the start of the incident or disturbance” Should Form OE-417 Schedule 2 be submitted to both DOE and NERC within 24 hours, within 48 hours, or is okay to submit at different times?*
11. *TBD submits Form OE-417 Schedule 1 to SPP RE. What is the deadline?*

### **11.3 Reporting System Disturbances to NERC**

Under certain defined conditions, SPP is required to report the details of system disturbances to NERC. Normally, SPP will file the necessary report to NERC on behalf of the SPP member. The reporting criteria and instructions for filing the report to NERC are contained in NERC Standard EOP-004, which can be accessed at the NERC website, [www.nerc.com](http://www.nerc.com). The reporting criteria and instructions for filing a disturbance report to notify NERC and RFC of the disturbance is the NERC Interconnection Reliability Operating Limit and Preliminary Disturbance Report forms are presented in Attachment K. Reports can be sent to NERC via e-mail ([esisac@nerc.com](mailto:esisac@nerc.com)) or by facsimile (609-452-9550). If a disturbance is to be reported to the U.S. Department of Energy also, SPP and/or the LCC may use the DOE reporting form when reporting to NERC.

1. *TBD recognizes that a reportable disturbance or unusual occurrence has occurred, which requires reporting to NERC. TBD may review NERC Table 1-EOP-004-0 to determine whether the disturbance is reportable to NERC (but not the DOE).*

2. *TBD* gathers information required to complete NERC Interconnection Reliability Operating Limit (IROL) and Preliminary Disturbance Report, coordinating with other *TBD* individuals as needed
3. *TBD* completes NERC IROL and Preliminary Disturbance Report
4. *TBD* submits NERC IROL and Preliminary Disturbance Report to NERC via email ([esisac@nerc.com](mailto:esisac@nerc.com)) or fax (609-452-9550), no later than 24 hours after disturbance (72 hours for IROL violation)
  - a. If it is not possible to assess the damage caused by the disturbance and issue a written Interconnection Reliability Operating Limit and Preliminary Disturbance Report within 24 hours, *TBD* promptly notifies NERC, and verbally provides as much information as is available. *TBD* then provide timely, periodic verbal updates until adequate information is available to issue a written Preliminary Disturbance Report.
5. *TBD* submits NERC IROL and Preliminary Disturbance Report to SPP RE, no later than 24 hours after disturbance (72 hours for IROL violation). *Is the SPP RE deadline same as NERC's. how is report submitted to SPP RE?*
  - a. If it is not possible to assess the damage caused by the disturbance and issue a written Interconnection Reliability Operating Limit and Preliminary Disturbance Report within 24 hours, *TBD* promptly notifies SPP RE, and verbally provides as much information as is available. *TBD* then provides timely, periodic verbal updates until adequate information is available to issue a written Preliminary Disturbance Report.
6. If requested by the SPP RE, *TBD* provides final report including discussion of the events and its cause, the conclusions reached, and recommendations to prevent recurrence of this type of event. This report must be submitted within 60 days. *Is final report due within 60 days of request by SPP RE, or 60 days of disturbance?*
  - a. SPP RE's representatives on the NERC Operating Committee and Disturbance Analysis Working Group will be available to *TBD* for the purpose of providing any needed assistance in the investigation and to assist in the preparation of a final report
  - b. The final report is subject to SPP RE's approval.

#### **11.4 Reporting Capacity or Energy Shortages to FERC**

Whenever SPP anticipates a shortage of capacity or energy which could affect deliveries to members' wholesale customers within the SPP Control Area, SPP is required to report such shortages to FERC. The report is to be submitted electronically to FERC via the FERC Division of Reliability's electronic pager system.

The report is to include the following information, at a minimum:

- Nature and projected duration of the anticipated shortage
- List of firm wholesale customers likely to be affected by the shortage
- Procedures for responding to the shortage
- Contact person at SPP for further information [Shift Supervisor and the Chief System Operator(s)]

The trigger for the report to FERC is the initiation of a Manual Load Dump Warning or Action in accordance with this Manual.

1. *TBD* anticipates a shortage of capacity or energy which could affect deliveries to members' wholesale customers within the SPP Balancing Area. *What should trigger this procedure? Is it the initiation or notification of manual load shedding?*
2. *TBD* creates report including the following information, at a minimum:
  - a. Nature and projected duration of the anticipated shortage
  - b. List of firm wholesale customers likely to be affected by the shortage
  - c. Procedures for responding to the shortage
  - d. Contact person at SPP for further information
3. *TBD* submits report to FERC electronically, via the FERC Division of Reliability's electronic pager system.

## **11.5 Fuel Limitation Reporting**

### Background and Intent

SPP needs data concerning unit fuel reserves for it to reliably operate the SPPCBA and its associated markets. This is especially true during periods of severe weather and/or times when there are external fuel constraints (i.e., coal strike, oil embargo). During SPP last capacity driven load dump situation \_\_\_\_ the fuels data provided by SPP members reduced the severity and duration of actual load curtailments.

It is the intent of this procedure to require all capacity resources to report fuel data so that in severe situations, SPP can continue to make the calls that are in the best interest of all its members. In contrast with past procedures, where SPP could have used this data to restrict the output of various generators based upon their fuel limitations without financial compensation, SPP will now use the information to assist the market in providing solutions to emergency situations.

SPP has the authority to require all capacity resource owners to provide these reliability based reports is found in the SPP Operating Agreement

## **11.6 Seasonal Reporting**

Prior to going into the winter season, SPP will notify and request from all members with capacity resources, a by unit report of fuel information. Additionally this information may be requested at other intervals as deemed necessary such as a fuel crisis (i.e., embargo, strike) or forecasted period of severe cold weather.

An electronic spreadsheet will be sent to participants indicating required data.

The required data will include information such as each unit's:

- Available primary fuel

- Available secondary fuel
- Projected fuel inventory (in terms of MWh)
- Typical fuel inventory (in terms of MWh)
- Average amounts of fuel per delivery
- Delivery frequency
- Amount of firm gas schedules

While some of this data may represent broad projections, it will assist in providing a baseline that can be compared to data submitted in the real-time reporting process to assist in determining the severity of specific emergency conditions.

## 11.7 **Real-Time Reporting**

When SPP receives a severe cold weather forecast or foresees a potential fuel crisis (i.e. embargo, strike), real-time updates of fuel limited units will be requested of members via Part G of the Supplementary Status Report. (Attachment \_\_\_\_). This data will also be reported in other situations when a Supplementary Status Reports is requested, such as Capacity Shortage emergencies.

A unit is considered fuel limited when it is not capable at running at its maximum capacity for the next \_\_hours. If a unit has an alternate fuel which would allow it to run at its maximum capacity for more than \_\_ hours, it does not need to be reported. However, if switching fuels involves a shut down and introduces the risk of the unit not being able to re-start after the switch, the unit should be reported if its primary fuel supply would produce less than \_\_ hours of runtime at maximum capacity. Besides fuel, the limitation of other resources, such as water, may also restrict the amount of time a unit will be able to operate. If a unit has less than \_\_ hours of run time at maximum capacity due to any resource limitation, it along with any fuel limited units should be reported in Part G, "Resource Limited Units", of the Supplementary Status Report (See Attachment \_\_\_\_). The following information should be included:

- Unit Name -The name of the unit(s) (units with shared resource supplies should be listed together) that are considered resource limited.
- Fuel type
- Maximum Capacity - The current maximum capacity of the unit(s).
- Emergency Minimum -If a unit cannot cycle due to uncertainty of starting up again, Emergency Minimum must be included with a note in the Comments section.
- Current Energy -Current MW output.
- Total Burn Hours Remaining -Total burn hours remaining with unit at max capacity.
- Comments -If a unit is limited for a resource other the fuel, this should be noted in this column as well as any other pertinent information on the unit.
- In addition to unit information submitted to SPP via Part G of the SSR, members should also monitor fuel inventories for the following minimum levels:
  - CT's or Diesels -Less then or equal to \_\_ hours at maximum capacity
  - Steam -Less then or equal to \_\_ hours at maximum capacity

In the event the above levels are reached, generation owners must immediately report this to the SPP Scheduling Coordinator .

SPP uses the fuel data in conjunction with the other data reported in the SSR to evaluate system conditions. Reports such as the SPP System Status Report (Attachment \_\_\_\_ ) are compiled. Some portions



of the reports are posted electronically via the internet or faxed to members so all members can assess the severity of the impending weather and available generation capacity. Additionally reports derived from this information are used to lead strategy discussions among members about the criticality of the situation and to determine the timing of various emergency procedures that may be used.

An invitation may also be posted to other members to attend a SPP conference call to discuss the meaning of this data and how it may result in various emergency procedures.

SPP will treat as confidential the information on individual units or company data in accordance with the SPP OATT and Operating Agreement. Discussions on individual units or company's fuel status will only occur between SPP and the generation owners who provided the data. During group discussions, SPP will only discuss what possible emergency actions are foreseen or what aggregate fuel crisis exists.

Unit specific Fuel Limitation Information is considered proprietary and confidential, and will not be distributed amongst participants. Only aggregate information will be discussed for the sole purpose of developing reliable operating strategies during projected capacity deficient conditions.

### **11.8 Operation of Fuel Limited Units**

SPP requests companies that have units classified as fuel or resource limited units to bid these units in the Max Emergency category. This will serve to preserve these resources for the times when they are needed most. If a unit bid into SPP has resources of less than 32 hours (at maximum capacity) for a steam unit or 16 hours (at maximum capacity) for a CT or Diesel, and SPP has issued Conservative Operations, a Cold or Hot Weather Alert, then the unit must be bid in the Max Emergency category.

SPP will continue to schedule system generation based upon the Two Pass methodology and generator owner's individual bids. If SPP has particular concerns over units deemed critical to current or future system conditions, then SPP will initiate individual communications with the members responsible for those units.

If SPP asks a unit to operate differently than what was accepted in the day ahead market (in order to conserve the unit's current fuel), then this unit would be paid its lost opportunity cost for the accepted hours that it was not run.

### **11.9 Analysis of System Events and Disturbances**

The SPP is committed to preserving the reliability of SPP BA monitored transmission facilities. Part of that commitment is to analyze system events or problems for the purpose of implementing corrective actions and sharing knowledge to improving operations at SPP and Transmission Owning companies.

SPP is committed to implementing a process to investigate events or near-miss events that resulted in reliability problems and to providing the resources necessary for robust process.

Features of the event investigation process should include:

1. Starting with everything on the table at the beginning of the investigation, nothing should be initially ruled out or excluded from the investigation process.
2. Performing a thorough analysis of all systems, human performance, work processes, materials, environmental conditions, physical plant and management systems both individually and collectively, that contributed to the event.

3. Learning as much about the event as possible with the goal of improving the operation of the transmission system, not punishing the involved parties.
4. Accurate and thorough determination of root causes, contributing factors and corrective actions using a recognized and structured Root Cause methodology.
5. Investigation of —near missl events. Learning captured from —near missl events can be just as valuable as those of actual events.
6. The parties most involved in the event should lead the investigation, if possible.
7. Allowance for timely delivery of initial/preliminary findings to implement interim corrective actions, if necessary.
8. A challenge or critical review of findings and recommended corrective actions before finalization of the investigation.
9. Assurance that corrective actions are completed.
10. Dissemination of learning to all Transmission Owners.

SPP and the member entities are not formally bound to participate in the Event Investigation Process and by participating are not prevented from taking any action they determine necessary in the course of event investigation activities. The Event Investigation Process should be suspended where investigation of an event by the North American Electric Reliability Council (NERC) or other organizations would cause duplication of effort or confusion.

## 12 Appendix A: Elements in Development of the Emergency Plan

- Fuel Supply and Inventory SPP BA plans for an adequate fuel supply and inventory that recognizes reasonable delays or problems in the delivery or production of fuel – see section for Fuel Limitations
- Fuel Switching – SPP BA fuel switching plans for those generating units for which fuel supply shortages may occur, e.g. gas and light oil. – See section for Fuel Limitations
- Environmental Constraints – Plans to seek removal of environmental constraints for generating units and plants. SPP will coordinate with the TOP to work on environmental relief as soon as possible, if relief is available. Any release of capacity has to be tied back into the market. Need to research if there is anything in the Market protocols. We don't think so. – needs to be included in main part of plan
- System Energy Use – The reduction of the system's own energy use to a minimum – see section Capacity and Energy
- Public Appeals – Appeals to the public through all media for voluntary load reductions and energy conservation including educational messages on how to accomplish such load reduction and conservation – see section Communications Protocols and Load Management
- Load Management – plan for implementation of load curtailments and voltage reductions if appropriate. – see section Load Management
- Optimize Fuel Supply – The operation of all generating sources to optimize the availability of fuel in short supply or expected to be in short supply. – see section Fuel Limitations
- Appeals to Customers to Use Alternate Fuels – In a fuel emergency, appeals to large industrial and commercial customers to reduce non-essential energy use and maximize the use of customer-owned generation that rely on fuels other than the one in short supply. – needs to be added in plan
- Interruptible and Curtailable Loads – Use of interruptible and curtailable customer load to reduce capacity requirements or to conserve the fuel in short supply – see section Load Management. Demand side Management – SPP BA will need to be knowledgeable about DSM participants. SPP would issue directive to TOP to begin curtailment of these customers
- Maximizing Generator Output and Availability – The operation of all generating sources to maximize output and availability. This should include plans to winterize units and plants during extreme cold weather - .see section Fuel Limitations
- Notifying Independent Power Producers – Notification of cogeneration and independent power producers to maximize output and availability .- see section Fuel Limitations
- Request of Government – When needed, SPP will transmit a request to appropriate government agencies to implement programs to achieve necessary energy reductions. See Appendix – load reduction to facilities within footprint. TOP would reach out to local governments. SPP BA will tell LSE, TOPs, and they will contact states. – see section Communications Protocols – needs to be moved
- Load Curtailment – A mandatory load curtailment plan to use as a last resort. This plan should address the needs of critical loads essential to the health, safety, and welfare of the community. The plan should address firm load curtailment. – see section Load Shedding

- Notification of Government Agencies – Notifications of appropriate government agencies as the various steps of the emergency plan are implemented.- see section communications protocols
- Notification of Operating Entities -

---

## 13 Appendix B: Emergency Notification Scripts

---

Samples of messages to be broadcast in affected areas and procedures for communicating transmission emergencies are included. Messages will be modified as necessary to convey the nature of the problem and the extent of the area affected.

This is an Emergency Message from Southwest Power Pool:

Location, Date –A serious electric transmission constraint is anticipated today/tomorrow, Day, Date as a result of the extremely hot weather.

To help ease this problem SPP urges all its customers in homes, factories, stores and everywhere in Districts Affected, to reduce their usage of electric power in every possible way, during the hours of 7AM through 9PM on Day, Date. Please avoid using such appliances as clothes washers, dishwashers, clothes dryers and ranges; turn off unnecessary lighting; and turn up the thermostat for air conditioning or turn off the air conditioning.

Cooperation in reducing the demand for electricity during daylight hours all day will help prevent interruption of electric service.

SPP will keep customers informed with public announcements until this transmission constraint eases.

Energy Conservation Tips:

- Set the thermostat between 78 and 80 degrees and operate ceiling fans for additional comfort with raised temperatures.
- Draw drapes and close blinds to help cool the home.
- Turn off unnecessary lights.
- Turn off all non-essential equipment and appliances.
- Reduce hot water consumption
- Limit opening refrigerators and freezers.
- Limit water consumption if you are on well water.
- Limit use of kitchen appliances, dishwashers, ranges, etc.
- Avoid using washers and dryers

SPP appreciates the patience and cooperation of our customers during this extreme heat wave. Please cooperate now by reducing your use of electricity. By doing this, you can help prevent possible interruptions in your electric service. SPP will continue to keep you informed with public announcements until this problem eases and we thank you for your cooperation.

Voluntary Load Curtailment Initiation Announcement to the Public:

This is an Emergency Message from \_\_\_\_\_

A serious electric transmission constraint has developed as a result of (unprecedented cold weather, unprecedented hot weather).

To avoid uncontrolled blackouts it has become necessary to interrupt electric service to customers for periods ranging from ten minutes to two hours. To minimize inconvenience, the interruptions will take place on a rotating basis; while some areas will be off, others will be on. Later, the areas of outages will be reversed, so that no group of customers will have to bear all of the inconvenience.

When service is restored in your house, you can help SPP hasten the job by turning off all appliances, lights, radios, stereos, and television sets that were in use at the time the electricity went off. We recommend that you leave one low-watt electric light in the "on" position so that you'll know when the power has been restored.

SPP thanks you for your cooperation in helping us to get through this critical time.

Mandatory Load Curtailment Initiation Announcement to the Public:

This is an Emergency Message from \_\_\_\_\_

The power curtailment to SPP's customers is continuing. In an effort to make this situation as easy as possible for all customers, the company is alternating the power cutoff among groups of customers for periods ranging from ten minutes to two hours. Make sure that all appliances are turned off so that, when the power is restored, it will not cause an overload and create further problems. If you are receiving power, please keep your usage to a bare minimum. With everyone cooperating, the company hopes to be able to restore full service as soon as conditions permit.

SPP regrets that the critical problem it now faces has made these drastic steps necessary, and thanks all of its customers for their cooperation and understanding.

Further announcements will follow as the situation continues to develop.

Mandatory Load Curtailment Information Statement to the Public:

This is a Message from \_\_\_\_\_

SPP reports that the serious electric transmission constraint has now eased, and full-time electric service to its customers is being restored as quickly as possible.

While the power situation has improved enough to permit us to restore service, we ask you to continue to be careful in your power use. With your cooperation, we have come through this emergency in good shape, and we are grateful.

SPP thanks you.

DOE report forms  
NERC report forms  
FERC report forms  
List of TOP  
List of 1<sup>st</sup> tier Interconnect neighbors

---

## 14 Appendix C: SPP BA Contact List

---

*<This section will have all the important SPP BA contact information needed for emergency operations.>*

### **1 Introduction**

Policy and Guideline Statements  
Agreements with adjacent Balancing Authorities  
Plans include  
Implementation of plan  
Related Documents

### **2 SPP Emergency Operating Plan Overview**

Coordinate emergency plans  
Reliable Communications  
New Interchange Agreements  
Maintaining Emergency Plans  
Review Plan Annually  
Responsibility and Authority  
Testing and simulation  
Training and Staffing levels  
System Operator Training  
Staffing

### **3 Mitigating Emergencies**

Take action to restore real time and Reactive power balance  
Communicate current and future conditions with RC  
Anticipate taking necessary actions  
Request emergency assistance from RC  
Use of System Frequency Bias

### **4 Capacity and Energy Emergencies**

Plan Requirements  
Reserve Requirements  
Capacity Shortage  
Authority  
Energy and Emergency Alerts  
Light Load procedures

### **Attachment 1-EOP-001-0**

Fuel Supply and Inventory  
Fuel Switching  
Environmental constraints  
System Energy use  
Public Appeals  
Load Management  
Optimize fuel supply  
Appeals to customers to use alternate fuels  
Interruptible and curtailable loads

Maximize generator output and availability  
Notifying IPP  
Request of government  
Load Curtailment  
Notification of government agencies  
Notifications to operating entities.

#### **5 Energy and Fuel Limitation Emergencies**

System Energy use Plan  
Operation of Fuel Limited Units  
Maximize generator Output  
IPP notification to maximize  
Optimization of Fuel Supply  
Appeals to Customers to Use alternate Fuels  
Fuel Supply and Inventory plan  
Fuel Switching Plan

#### **6 Load Shedding**

Plan Requirements  
Interruptible Loads  
Load Curtailment  
Load Management  
Governing Standards  
Governing Concepts  
Regional Standards and Coordination  
UFLS coordination with other relay action  
Generation Tripping and Load Tripping  
HVDC Under-frequency Coordination  
SPP Tie-Line under Frequency Coordination  
Out of Step Relay Coordination  
UFLS Load Lockout  
System Operator Information  
Reporting  
Under frequency Load Shed (UFLS) Procedure  
Distribution Under-Frequency Relay Resetting  
Interruptible Load Shed Plan  
Interruptible Load Shed Normal Procedure  
Interruptible Load Shed Emergency Procedure  
Firm Load Shed Plan  
Notifications

#### **7 Transmission System Emergencies**

Plan Requirements  
Voltage Reduction Guidelines  
Heavy Load Voltage Schedule Warning  
Day-Ahead Transmission Security Emergency Procedures  
Real-Time Transmission Security Emergency Procedures  
Termination of Scarcity Conditions  
Post Contingency Local Load Relief Warning  
Special Protection Systems  
Interconnection Reliability Operating Limits Facilities  
Transmission Loading Relief



## **8 Other System Emergencies**

Weather

Environmental Emergencies

- Anticipated wind related emergencies

Conservative Operation

Transmission Emergency Termination Statement to the Public

Thunderstorms and Tornadoes

Solar Magnetic Disturbances

Loss of primary facility

Loss of EMS

Sabotage/Terrorism Emergencies

## **9 System Restoration**

Comply with RC

Provide Copy of Plan to RC

Render Assistance to adjacent BA

Coordination with neighboring BA

Blackstart

Criteria

Testing

## **10 Communication**

Requests of Government

Notifications of government agencies

Notification of Operating Entities

Public Appeals

## **11 Reporting Requirements**

Reporting System Disturbances to the Department of Energy

Reporting System Disturbances to NERC

Reporting Capacity or Energy Shortages to FERC

Fuel Limitation Reporting

Seasonal Reporting

Real-Time Reporting

Operation of Fuel Limited Units

Analysis of System Events and Disturbances

Other

Concerns about Islanding

Failure of the Market

# CONSOLIDATED BALANCING AUTHORITY STEERING COMMITTEE

Current Action Item list as of: April 12, 2012

Date	Action Item	Assignment	Status	Comments
	<b>ACTION ITEMS FROM CBA MEETING MINUTES</b>			
<b>Open Action Items transferred from 2011 - (these items transferred to other workstreams)</b>				
14-Apr	Determine recommendation for Grandfathered agreement handling	SPP staff	in progress	included Regulatory Workplan
14-Apr	Determine settlement/inad/reg costs caused by testing ramifications - discuss w/OWRG/MWG	Joint Working Group	in progress	included in JWG Workplan
14-Apr	Use of backup AGC settlement process - discuss with ORWG/MWG	Joint Working Group	in progress	included in JWG Workplan
14-Apr	Determine additional system needs for the TOP to restore islands - discuss with ORWG/MWG	Joint Working Group	in progress	included in JWG Workplan
14-Apr	Determine CBA member testing plans (more detailed project timeline) - being developed by CWG	Members	in progress	included in 2012 CWG Workplan
<b>Open Action Items transferred from 2011 for CBASC</b>				
19-Nov	Research issues related to HVDC tie coordination and bring information back to the CBASC	SPP staff	in progress	included in 2012 CBASC Workplan
12-Jan	Provide SPS "Mission Mode" paging system recommendation to group	SPP staff	in progress	transferred to ODT workplan
7-Feb	Identify behind the meter generation for CBASC review for completeness of list.	SPP staff	in progress	included in 2012 CBA Workplan
14-Apr	Coordinate CBA registration for MRO with Regulatory	SPP staff	complete	see March 15 coord mtg
14-Apr	Put together a list of all items affected in various situations of backup/REVERSION PLAN	SPP staff	not started	included in 2012 CBASC Workplan
14-Apr	Discuss and clarify reversion plan(s) with Regulatory	SPP staff	not started	included in 2012 CBASC Workplan
14-Apr	RTGEN workshop for interested parties	SPP staff	not started	included in 2012 CBASC Workplan
13-Oct	Prepare a draft of MPRR for Ramp Reservation System validation for TSR	Jessica Collins/Shah Hossain	NA	will be worked through CWG
3-Nov	Members to provide legal agreement to their organization/legal for review and return comments	members	on hold	included in 2012 CBASC Workplan
<b>New Actions Items for 2012</b>				
19-Jan	Prepare SPP Emergency Desk Procedures to be reviewed by CBASC - before April	Shari Brown	in progress	
19-Jan	Schedule meeting with CBASC and MRO	Philip Propes	complete	see March 15 coord mtg
19-Jan	Schedule face-to-face meeting with SPP RE (Ron Ciesel)	Philip Propes	complete	see March 15 coord mtg
19-Jan	Create a draft CFR example - need to have this for discussions with MOPC	Shari Brown	on hold	see Apr 21 minutes
19-Jan	Shari to email workplan to CBASC exploder	Shari Brown	complete	provided on Feb 7 meeting
19-Jan	Provide update on upcoming SPP Operations Day-in-the-Life activity at next meeting	Shari Brown	complete	provided on Feb 7 meeting
7-Feb	Provide expanded CBASC workplan with dates	Shari Brown	on hold	TBDetermined by Program
7-Feb	Compliance create a draft CFR example - need to have this for discussions with MOPC	Philip Propes	in progress	
7-Feb	Schedule meeting with CBASC and MRO - face to face - schedule for 2nd week of march (12th)	Stacy Duckett/Philip Propes	complete	
7-Feb	Hold necessary meetings to discuss Compliance issues with 32 NERC requirements	Bill Grant	complete	
7-Feb	Bring back recommendations to CBASC on Compliance issues	Bill Grant	complete	
7-Feb	Schedule additional CBASC teleconferences and face-to-face meetings	Shari Brown	complete	
7-Feb	Prepare SPP IEO draft desk procedures to be reviewed by CBASC	Shari Brown	in progress	
7-Feb	Add concern about section 5.2 table for frequency meters to agenda for Feb 24 mtg	Shari Brown	TBD	see feb 24 actions items
7-Feb	Email the CWG announcement for the RTGEN/ICCP Deep Dive to the CBASC exploder	Shari Brown	complete	
7-Feb	Prepare SPP Emergency Desk Procedures to be reviewed by CBASC	Shari Brown	in progress	
24-Feb	Hold add't small group meeting to discuss Compliance issues with 32 NERC requirements	Bill Grant	NA	not able to schedule add't mtgs
24-Feb	Add concern about section 5.2 table for frequency meters to a later agenda	Shari Brown	TBD	

## CONSOLIDATED BALANCING AUTHORITY STEERING COMMITTEE

Current Action Item list as of: April 12, 2012

Date	Action Item	Assignment	Status	Comments
	<b>ACTION ITEMS FROM CBA MEETING MINUTES</b>			
<b>Open Action Items transferred from 2011 - (these items transferred to other workstreams)</b>				
24-Feb	Review previous Technical Task Force Roster and request new representatives as needed	Shari Brown	complete	sent out for verification Apr 6
15-Mar	Review results of Regional Entity coordination meeting at face-to-face mtg Mar 20/21	Members	complete	
15-Mar	Determine next steps and need for additional meetings with Regional Entities	Members	complete	
21-Mar	Add Procedural steps to EOP and publish Updated draft by March 23, 2012	Shari Brown	complete	
21-Mar	Publish Additional updates to EOP by March 26, 2012	Shari Brown	NA	no steps avail for addition
21-Mar	Complete presentation for MOPC - CBASC status update	Paul Johnson	complete	
21-Mar	Deliver MOPC CBASC status update presentation for posting by March 30	Shari Brown	complete	
21-Mar	Feedback to provided by EOB April 4, 2012	Members	complete	2 BA responses received
21-Mar	Publish EOP updated with members comments by April 6, 2012	Shari Brown	complete	emailed Apr 8, TBPosted Apr 9
21-Mar	Present status of CBASC to MOPC - April 11, 2012	Paul Johnson	complete	
21-Mar	Review EOP with updated comments in face-to-face meeting April 12, 2012	Members	complete	
21-Mar	Final review of EOP - WebEx/teleconference on or before April 30, 2012 - TBD on Apr 12	Members	complete	
21-Mar	Post known (universal) issues by April 16, 2012	Shari Brown		
21-Mar	Request additional critic of EOP issues by April 20, 2012	Shari Brown		
21-Mar	Schedule Joint CBASC/MCG meeting for face-to-face meeting on May 9/10, 2012	Shari Brown, Stacy Duckett	complete	TBPosted Apr 9
21-Mar	Send out meeting materials for RE review by April 14, 2012	Shari Brown	postponed	
21-Mar	Send out information to Regional Entities about possibility of meeting week of May 21	Shari Brown	postponed	
21-Mar	Schedule CBASC and Regional Entities meeting for week of May 21, 2012	Shari Brown, Stacy Duckett	postponed	
21-Mar	Request special MOPC meeting depending upon outcome of CBASC status update on April 11	Paul Johnson	NA	not needed
21-Mar	Complete IEO procedures and publish to CBASC by May 23, 2012	Shari Brown	complete	
12-Apr	Revise and update Emergency Operations Plan for review at April 18 teleconference	Shari Brown		
12-Apr	Stacy to draft a letter to the CEA for CIP discussion documentation	Stacy Duckett		
12-Apr	Shari to find the owner of Criteria section 7.9	Shari Brown		