

SPP Reserve Sharing Group Operating Process
0820EXT00002

Business Owner: Charles Cates
Effective: 06/01/2022
Revised: 06/01/2022
Version: 1.1

Approved By:	
SME Signature (Temper Williams)	Date

Approved By:	
Document Owner Signature	Date

Revision History

Modifications will be documented in the following chart. There are no exceptions.

Version	Revised By	Description of Modifications	Effective Date	Revision Date
1.0	SPP Staff	Document ported into new template with version tracking.	03/04/2021	03/04/2021
1.1	SPP Staff	Replaced BAOC with ORWG. Reviewed the references to the SPP RC and updated with the SPP RSG administrator where appropriate.	06/01/2022	06/01/2022

Table of Contents

REVISION HISTORY	2
TABLE OF CONTENTS	3
1. BACKGROUND.....	4
2. ANNUAL MAINTENANCE OF THIS OPERATING PROCESS.....	5
3. DEFINITIONS	6
4. PROCEDURES FOR CALCULATING CONTINGENCY RESERVE REQUIREMENTS.....	10
4.1 IDENTIFICATION OF POTENTIAL MOST SEVERE SINGLE CONTINGENCY	10
4.1.1 Annual Review of Balancing Authority MSSC.....	10
4.1.2 Operating Horizon Updates to Balancing Authority MSSC.....	10
4.2 IDENTIFICATION OF A POTENTIAL SPECIAL MULTIPLE CONTINGENCY EVENT	11
4.2.1 Annual Review of Balancing Authority Potential SMCEs.....	11
4.2.2 Operating Horizon Updates to Balancing Authority Potential SMCEs	11
4.3 INTERMITTENT RESOURCES IN THE MINIMUM HOURLY CONTINGENCY RESERVE REQUIREMENT	11
4.4 MINIMUM HOURLY CONTINGENCY RESERVE REQUIREMENT.....	11
4.5 MINIMUM ANNUAL BALANCING AUTHORITY CONTINGENCY RESERVE REQUIREMENT RATIO CALCULATION	12
4.6 MINIMUM ANNUAL CONTINGENCY RESERVE REQUIREMENT RATIO REVIEW PROCESS	12
5. PROCEDURES FOR REAL-TIME OPERATIONS.....	13
5.1 NORMAL DAILY OPERATION	13
5.2 CONTINGENCY OPERATION	13
5.3 SUBSEQUENT CONTINGENCIES	15
5.4 ASSISTANCE REPORTS	15
5.5 OTHER EXTREME CONDITIONS EVENTS.....	16
6. COMPENSATION FOR ASSISTANCE.....	17
6.1 ENERGY CHARGE	17
6.2 ACCOUNTING.....	17
6.3 TRANSMISSION SERVICE	17
7. RESPONSIBILITIES.....	18
7.1 BALANCING AUTHORITIES	18
7.2 OPERATING RELIABILITY WORKING GROUP	18

1. Background

In the continuous operation of the Bulk Electric System, Operating Capacity is required to meet forecasted load, which includes allowances for uncertainty, to provide protection against equipment failure, ensure adequate regulation of frequency, and to maintain Balancing Authority Area tie line power flows. Operating Reserves are needed to regulate load changes and to support an Operating Reserve Contingency without shedding firm load or curtailing Firm Power Sales.

This Operating Process establishes standard terminology and minimum requirements governing the amount and availability of Contingency Reserves to be maintained by the distribution of Operating Reserve responsibility among members of the SPP Reserve Sharing Group (RSG).

The primary purpose of this Operating Process is to ensure a high level of reliability in the SPP Reserve Sharing Group to assure that there are capacity resources available at all times that can be used quickly to relieve stress placed on the interconnected electric system during an Operating Reserve Contingency. Another purpose of this Operating Process is to efficiently utilize the Operating Reserve resources of the members of the SPP Reserve Sharing Group.

This Operating Process describes practices to be followed by all SPP Reserve Sharing Group members to ensure prompt response to Operating Reserve Contingencies. The methods prescribed by this Operating Process to jointly activate Contingency Reserve are intended to ensure that the combined Area Control Error (ACE) of the SPP Reserve Sharing Group is quickly recovered by the Reserve Sharing Group while simultaneously scheduling assistance soon after an Operating Reserve Contingency.

The SPP Reserve Sharing Group is not a “Frequency Response Sharing Group” or a “Regulation Reserve Sharing Group” as defined in the NERC Glossary of Terms.

2. Annual Maintenance of this Operating Process

Prior to June 1 of each year, SPP, as the RSG administrator, will review this Operating Process. This annual review will consist of assessing the current RSG Operating Process with respect to the requirements of current and future enforceable NERC Reliability Standards. SPP shall provide a report of the results of this review to all Balancing Authorities participating in the SPP RSG by June 1. The results of this review shall consist of either proposed changes or confirmation that this Operating Process is meeting the requirements of current and future enforceable NERC Reliability Standards. On or before June 1 of each year, SPP shall issue an annually effective dated version of this Operating Process to all participating Balancing Authorities.

SPP, as the RSG administrator, may propose changes to this Operating Process as a part of its annual review. Additionally, SPP or any participating Balancing Authority may propose changes to this Operating Process at any time. Proposed changes to this Operating Process by a participating Balancing Authority must be provided in writing to SPP. The SPP Operating Reliability Working Group (ORWG) will propose changes and review and approve any proposed changes by other parties on behalf of the SPP Balancing Authority. The normal process for review and approval of changes to this Operating Process shall be for SPP, as the RSG administrator, and each participating Balancing Authority to approve a change prior to the implementation of the change.

The following shall be an exception to the normal process for review and approval of changes to this Operating Process. SPP, as the RSG administrator, may implement changes determined by SPP to be necessary to mitigate any actual or perceived conflict with current and future enforceable NERC Reliability Standards. SPP may also decline to incorporate proposed changes by a participating Balancing Authority if those changes are determined by SPP to be in conflict with current and future enforceable NERC Reliability Standards. SPP will provide a report at the time either of the above described actions is taken to all participating Balancing Authorities.

3. Definitions

Capitalized terms not otherwise defined in this section of the SPP RSG Operating Process shall have the definitions assigned by the NERC Glossary of Terms.

Assistance Period: Assistance Period is that time frame when any SPP Reserve Sharing Group member receives Contingency Reserve assistance from other SPP Reserve Sharing Group members. The Assistance Period will normally not exceed 60 minutes. The SPP Operating Reliability Working Group will set the ending time for Assistance Period and may change the length of the Assistance Period.

Assisting Areas: The Assisting Areas are defined as the other Balancing Authority Areas in the SPP Reserve Sharing Group, which are called upon to supply Contingency Reserves to the Contingency Area.

Balancing Authority Annual Contingency Reserve Requirement Ratio: A Balancing Authority member's share of the total SPP Reserve Sharing Group Previous Calendar Year System Peak Responsibility. The Balancing Authority's Annual Contingency Reserve Requirement Ratio shall be determined by dividing the Balancing Authority's Previous Calendar Year System Peak Responsibility by the sum of all of the RSG member Balancing Authority's Previous Calendar Year System Peak Responsibility.

Balancing Authority Minimum Hourly Contingency Reserve Requirement: A Balancing Authority member's Annual Contingency Reserve Requirement Ratio multiplied by the Reserve Sharing Group Total Hourly Contingency Reserve Requirement. Each Balancing Authority's Hourly Contingency Reserve Requirement shall be rounded up to the next nearest whole MW and shall be no less than two (2) MW.

Balancing Contingency Event: Any single event described in Subsections (A), (B), or (C) below, or any series of such otherwise single events, with each separated from the next by one minute or less.

- A. Sudden loss of generation
 - a. Due to
 - i. unit tripping, or
 - ii. loss of generator Facility resulting in isolation of the generator from the Bulk Electric System or from the responsible entity's System, or
 - iii. sudden unplanned outage of transmission Facility;
 - b. And, that causes an unexpected change to the responsible entity's ACE;
- B. Sudden loss of an Import, due to forced outage of transmission equipment that causes an unexpected imbalance between generation and Demand on the Interconnection.
- C. Sudden restoration of a Demand that was used as a resource that causes an unexpected change to the responsible entity's ACE.

Contingency Area: The Contingency Area is defined as the Balancing Authority Area suffering an Operating Reserve Contingency.

Contingency Reserve: The provision of capacity that may be deployed by the Balancing Authority to respond to a Balancing Contingency Event and other contingency requirements (such as Energy Emergency Alerts as specified in the associated EOP standard). A Balancing Authority may include in its restoration of Contingency Reserve readiness to reduce Firm Demand and include it if, and only if, the Balancing Authority:

- A. is experiencing a Reliability Coordinator declared Energy Emergency Alert level, and is utilizing its Contingency Reserve to mitigate an operating emergency in accordance with its emergency Operating Plan.
- B. is utilizing its Contingency Reserve to mitigate an operating emergency in accordance with its emergency Operating Plan.

In addition to the NERC Glossary of Terms definition, Contingency Reserve will be defined as follows within the SPP RSG. Contingency Reserve is the sum of Operating Reserve - Spinning and Operating Reserve - Supplemental. At least half of the Contingency Reserve shall be Operating Reserve - Spinning.

Facility: A set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)

Firm Power: Firm Power shall mean electric power which is intended to be continuously available to the buyer even under adverse conditions; i.e., power for which the seller assumes the obligation to provide capacity (including SPP defined capacity margin) and energy. Such power shall meet standards of reliability and availability as that delivered to native load customers. Power purchased shall only be considered to be Firm Power if firm transmission service is in place to the load serving member for delivery of such power. Firm Power does not include “financially firm” power.

Most Severe Single Contingency: The Balancing Contingency Event, due to a single contingency identified using system models maintained within the Reserve Sharing Group or a Balancing Authority’s area that is not part of a Reserve Sharing Group, that would result in the greatest loss (measured in MW) of resource output used by the RSG or a Balancing Authority that is not participating as a member of a RSG at the time of the event to meet Firm Demand and export obligation (excluding export obligation for which Contingency Reserve obligations are being met by the Sink Balancing Authority).

Operating Capacity: Operating Capacity is the dispatchable capability claimed for any generating source, which will be used for supplying Operating Reserves. Operating Capacity shall include capacity purchases that can be used to supply the buyer’s Operating Reserves minus capacity sales that cannot be used to supply the seller’s Operating Reserves. Operating Capacity shall recognize any temporary de-ratings, proven loading rates, starting times and equipment limitations including System Operating Limits. This capacity is not intended to be the tested seasonal net capability; instead it is the normal operating rating of a generator on a given day.

Operating Reserve: That capability above firm system demand required to provide for regulation, load forecasting error, equipment forced and scheduled outages and local area protection. It consists of spinning and non-spinning reserve.

In addition to the NERC Glossary of Terms definition, Operating Reserve will be defined, for purposes of the SPP RSG, as the sum of Regulating Reserve and Contingency Reserve.

Operating Reserve – Spinning: The portion of Operating Reserve consisting of:

- A. Generation synchronized to the system and fully available to serve load within the Disturbance Recovery Period following the contingency event; or
- B. Load fully removable from the system within the Disturbance Recovery Period following the contingency event.

Operating Reserve – Supplemental: The portion of Operating Reserve consisting of either:

- A. Generation (synchronized or capable of being synchronized to the system) that is fully available to serve load within the Disturbance Recovery Period following the contingency event; or
- B. Load fully removable from the system within the Disturbance Recovery Period following the contingency event.

In addition to the NERC Glossary of Terms definition, Operating Reserve – Supplemental may consist of any or a combination of the following that is fully able to serve load within the Disturbance Recovery Period following the contingency event:

- 1) The amount of Operating Capacity connected to the bus that will not be realized by prime-mover governor action. The realization of this capacity may require the governor speed level to be reset.
- 2) That portion of fast starting generating capacity at rest, such as hydroelectric, combustion turbines, and internal combustion engines as prime movers that can be started and synchronized.
- 3) Operating Capacity that can be realized by increasing boiler steam pressure, by removing feedwater heaters from service, and/or by decreasing station power use.
- 4) Operating Capacity and Contingency Reserve, provided firm transmission has been purchased, being held available under contract by another Balancing Authority above its own Operating Reserve requirements and available on call.
- 5) Interruptible or curtailment of loads under contract.
- 6) Power deliveries that can be recovered provided a clear understanding exists between the transacting parties to avoid both parties crediting their respective Operating Reserves by this transaction.
- 7) Generating units operating in a synchronous condenser mode.
- 8) Interruptible pumping load on pumped hydro units.
- 9) Operating Capacity made available by voltage reduction. The voltage reduction shall be made on the distribution system and not on the transmission system.
- 10) Operating Capacity that can be fully applied from a change in the output of a High Voltage Direct Current terminal.

Operating Reserve Contingency: An Operating Reserve Contingency is defined as a Balancing Contingency Event or Other Extreme Conditions.

Other Extreme Conditions: Other Extreme Conditions include:

- 1) Interruption of firm transmission service, or
- 2) An inability to use prescheduled firm transmission service due to any type of congestion management, or
- 3) When an RSG member Balancing Authority requires assistance to prevent shedding firm load or Firm Power sales, or
- 4) When an RSG member Balancing Authority is unable to maintain its Operating Reserves.
- 5) Other events, not described by #1 - #4 above, that cause a significant sudden downward change in a Balancing Authority's ACE.

Previous Calendar Year System Peak Responsibility: The sum of a Balancing Authority's load and firm interchange at the time of the SPP Reserve Sharing Group coincident peak from the previous calendar year as determined by SPP.

Regulating Reserve: An amount of reserve responsive to Automatic Generation Control, which is sufficient to provide normal regulating margin.

Reserve Sharing Group: A group whose members consist of two or more Balancing Authorities that collectively maintain, allocate, and supply Operating Reserve required for each Balancing Authority's use in recovering from contingencies within the group. Scheduling energy from an Adjacent Balancing Authority to aid recovery need not constitute reserve sharing provided the transaction is ramped in over a period the supplying party could reasonably be expected to load generation in (e.g., ten minutes). If the transaction is ramped in quicker (e.g., between zero and ten minutes) then, for the purposes of disturbance control performance, the areas become a Reserve Sharing Group.

Reserve Sharing Group Hourly Contingency Reserve Requirement: The minimum amount of Contingency Reserve that must be collectively carried by the Balancing Authorities participating in the SPP Reserve Sharing Group at a given time.

4. Procedures for Calculating Contingency Reserve Requirements

4.1 Identification of Potential Most Severe Single Contingency

The Most Severe Single Contingency (MSSC) for the SPP RSG shall be determined by assessing the largest potential Balancing Contingency Event due to a single contingency on an hourly basis within the SPP RSG area. The MSSC for the SPP RSG shall be modified in real-time (intra-hour) should a larger MSSC be identified.

The following events shall be considered a potential MSSC for the SPP RSG.

- A. Loss of the MW output of a single generating unit or multiple intermittent resources using a common interconnection point
- B. Loss of any single Bulk Electric System Facility resulting in the isolation or loss of output of multiple generation sources. The SPP RSG administrator shall validate all such potential events prior to inclusion in SPP RSG obligation calculations.

4.1.1 Annual Review of Balancing Authority MSSC

Balancing Authorities shall provide to SPP and update annually by April 1 a list of the nameplate maximum capacities of all generation sources 600 MW or greater. For intermittent resources, the total nameplate capacity at a common interconnection point or bus of 600 MW or greater shall be provided.

Balancing Authorities shall provide to the SPP RSG administrator and update annually by April 1 a list, including a description and total of all nameplate maximum capacity at risk, of all instances of events described by 4.1.B 600 MW or greater that exist under normal operating conditions.

4.1.2 Operating Horizon Updates to Balancing Authority MSSC

Balancing Authorities shall provide the information required by Section 4.1.A in the Operating Horizon by reporting generation outages to their respective Reliability Coordinator (RC). Units not on outage will be considered online for the purposes of determining potential MSSCs.

For events described by Section 4.1.B that are created by forced outages or other unforeseen events, Balancing Authorities shall immediately inform the SPP RSG administrator and SPP RC of potential events identified. For identified potential events created by maintenance or other planned activity, Balancing Authorities are asked to inform the SPP RSG administrator and SPP RC no fewer than 14 days in advance or upon identification of the potential event. Balancing Authorities shall include in the notification to the SPP RSG administrator and SPP RC the total nameplate capacity at risk, a description of the system configuration creating such risk, and the anticipated duration. Balancing Authorities shall inform the SPP RSG administrator and SPP RC of any status change in information provided in a previous report when such a change is identified.

The participating Balancing Authorities and their respective RCs shall monitor in the operating horizon for any unidentified potential MSSCs in the SPP RSG area.

4.2 Identification of a Potential Special Multiple Contingency Event

The following events shall be considered a Special Multiple Contingency Event (SMCE) for the SPP RSG. SMCEs are not considered a MSSC as defined by NERC Reliability Standards.

- A. The loss of MW output of multiple generating units at the same plant due to the sudden interruption of a common fuel supply. Intermittent resources are excluded.
- B. The loss of MW output of multiple generating units due to protection system action in response to the Fault of a single Bulk Electric System Facility. The SPP RSG administrator shall validate all such potential events prior to inclusion in SPP RSG obligation calculations.

4.2.1 Annual Review of Balancing Authority Potential SMCEs

Balancing Authorities shall provide to the SPP RSG administrator and update annually by April 1 a list of the potential SMCEs of 600 MW or greater that exist under normal operating conditions. For annual reporting of potential SMCEs, the sum of full nameplate capacity of all generating units at risk is used.

4.2.2 Operating Horizon Updates to Balancing Authority Potential SMCEs

Balancing Authorities shall immediately inform the SPP RSG administrator and SPP RC of any previously unreported potential SMCEs that have been identified. Balancing Authorities shall include in the notification the total nameplate capacity at risk, a description of the system configuration creating such risk, and the anticipated duration. Balancing Authorities shall inform the SPP RSG administrator of any status change in information provided in a previous report when such a change is identified.

The participating Balancing Authorities and their respective RCs shall monitor in the operating horizon for any unidentified potential SMCEs in the SPP RSG area.

4.3 Intermittent Resources in the Minimum Hourly Contingency Reserve Requirement

When used in the Minimum Hourly Contingency Reserve Requirement calculation, a potential MSSC or SMCE that involves an intermittent resource(s) is calculated using the BA's hourly intermittent resource forecast instead of the intermittent resource's maximum nameplate capacity.

4.4 Minimum Hourly Contingency Reserve Requirement

The ORWG is responsible for setting the methodology for the calculation of the Minimum Hourly Contingency Reserve Requirement for the SPP RSG. The SPP RSG will set a Minimum Hourly Contingency Reserve, over and above any Regulating Reserves, equal to the greater of hourly potential MSSC times a scaling factor or potential SMCE times a separate scaling factor within

the metered boundaries of any RSG member Balancing Authority. The hourly scaling factor is set by the SPP RSG administrator to ensure reserves are adequate to meet NERC Reliability Standards. The minimum scaling factor for each hour, as reviewed and approved by the ORWG, is to be 1.2 for the MSSC and 1.0 for the SMCE. Generation capacity is considered to be added at the first injection of test power of the generator, regardless of commercial status.

If the SPP RSG administrator foresees an operating condition in which Operating Reserves are inadequate to cover the larger of the MSSC or SMCE, the SPP RSG administrator has the authority to increase the total SPP Reserve Sharing Group Minimum Hourly Contingency Reserve Requirement to the level necessary to cover the MSSC or SMCE for the duration of the operating condition.

Any increased reserves that are based on non-compliance with the NERC Disturbance Control Standard will raise the total SPP Reserve Sharing Group Minimum Hourly Contingency Reserve Requirement for the SPP Reserve Sharing Group on a quarterly basis. The ORWG will determine the method by which the increased reserves will be allocated among the members of the SPP Reserve Sharing Group.

Each day by 6:00 AM CPT, the SPP RSG administrator will notify each member Balancing Authority of its Minimum Hourly Contingency Reserve Requirement for each hour of the following operating day.

4.5 Minimum Annual Balancing Authority Contingency Reserve Requirement Ratio Calculation

An RSG member Balancing Authority's Minimum Hourly Contingency Reserve Requirement is equal to a prorated amount of the total SPP Reserve Sharing Group Minimum Hourly Contingency Reserve Requirement. The Balancing Authority Annual Contingency Reserve Requirement Ratio shall be determined by dividing the Balancing Authority's Previous Calendar Year System Peak Responsibility by the sum of all of the RSG member Balancing Authority's Previous Calendar Year System Peak Responsibility and multiplying the result by the Reserve Sharing Group Hourly Contingency Reserve Requirement.

A member Balancing Authority whose historical information used as the basis of the Minimum Hourly Contingency Reserve Requirement has changed significantly due to extreme circumstances may apply to the ORWG for a temporary waiver of all or a portion of its Minimum Hourly Contingency Reserve Requirement. For example, the BA may request such a waiver due to (i) the shifting of load from one BA to another or (ii) drought conditions for Balancing Authorities whose system Capacity is comprised of more than 75% hydro based generation resources. ORWG will review such requests and make a recommendation to be considered by the MOPC at its next regularly scheduled meeting.

4.6 Minimum Annual Contingency Reserve Requirement Ratio Review Process

By April 1 each year, each RSG member Balancing Authority will submit to the SPP RSG administrator its Previous Calendar Year System Peak Responsibility. SPP will calculate the Reserve Sharing Group's Total Previous Calendar Year System Peak Responsibility and each

member Balancing Authority's Annual Contingency Reserve Requirement Ratio. The results of these calculations will be presented for review and approval by the ORWG to be made effective June 1 of each year.

5. Procedures for Real-Time Operations

All SPP Reserve Sharing Group members shall participate in this procedure to jointly activate Contingency Reserve.

5.1 Normal Daily Operation

- 1) Each RSG Member Balancing Authority's Operating Reserve shall be distributed so as to ensure that it can be utilized without exceeding individual element ratings, transfer limitations, or a unit's capability to apply the reserve to meet currently applicable NERC Reliability Standards.
- 2) Each RSG member Balancing Authority shall schedule Operating Capacity and firm obligations so its requirements for Operating Reserve are met at all times.
- 3) Energy associated with Operating Reserve - Supplemental, except Assistance Schedules, may be sold with the understanding that it is recallable to meet currently applicable NERC Reliability Standards. The buyer shall therefore maintain resources to support the withdrawal of this energy in addition to meeting its Operating Reserve Requirement.
- 4) Generating capacity associated with the required Operating Reserve - Spinning shall not be sold unless allocated during an Assistance Period.
- 5) Each RSG member Balancing Authority may contract with another Balancing Authority to provide part or its entire Operating Reserve obligation, provided the Balancing Authority accepting this additional Operating Reserve obligation maintains the Operating Reserve obligation of both Balancing Authorities and the firm transmission service required to deliver Operating Reserve energy is obtained.
- 6) When a RSG member Balancing Authority foresees it will be unable to provide its Balancing Authority Minimum Hourly Contingency Reserve Requirement with available resources because load is greater than anticipated, forced outages or other limitations, it shall obtain Operating Capacity and firm transmission service. Such capacity shall not be from another Balancing Authority's Balancing Authority Minimum Hourly Contingency Reserve Requirement.

5.2 Contingency Operation

These procedures may be implemented immediately following the occurrence of an Operating Reserve Contingency of any type and magnitude, but are required to be implemented for Operating Reserve Contingencies as specified below.

- 1) A complete or partial loss (of 200 MW magnitude or greater) of a resource within any 60 second period,
- 2) A loss of Operating Capacity resulting in the BA possessing less than its Balancing Authority Minimum Hourly Contingency Reserve Requirement, or
- 3) Any "Other Extreme Conditions" event.

These procedures are to be implemented in a non-discriminatory manner.

- 1) Immediately following an Operating Reserve Contingency, the Contingency Area shall report the occurrence via the SPP Reserve Sharing System. This report shall contain a description of the contingency; the net MW output lost due to the contingency and any MW amount of Contingency Reserve being carried on the contingency unit. For those generating units whose station auxiliaries do not decrease to essentially zero or increase after a unit trip, gross MWs lost shall be used instead of net MWs lost. Each Contingency Area of jointly owned generating units shall be responsible for reporting outages and the MW amount lost for their respective Contingency Area.
- 2) Within the constraints described in this Operating Process, allocation magnitudes shall be determined and notices distributed to the members of the Reserve Sharing Group.
- 3) The Assistance Schedule becomes part of each Assisting Area's scheduled net interchange and shall therefore be reflected in its ACE. The schedule shall be implemented at a zero time ramp rate immediately following allocation notification. If obvious and significant errors exist in assistance schedules, the Contingency Area system operator shall dictate appropriate corrective action during the Contingency Period, and notify the SPP RC.
- 4) Assisting Areas shall immediately acknowledge receipt of the allocation notice via the SPP Reserve Sharing System. If a Contingency Area fails to receive acknowledgment from an Assisting Area, the SPP Reliability Coordinator shall notify the Assisting Area of the assistance schedule.
- 5) The Contingency Area(s) and Assisting Areas shall provide the requested assistance within the requirements established in the NERC Reliability Standards.
- 6) The Contingency Reserve Requirement of each Balancing Authority involved in the Assistance Period shall be updated to reflect the reduction of responsibility until the end of the Assistance Period.
- 7) All allocations shall be rounded to the nearest whole MW with a minimum of 2 MW and the smallest amount of energy to be allocated shall be one MWH.
- 8) After the contingency notification has been completed, the Contingency Area shall promptly make arrangements to replace the energy requirement created by the Operating Reserve Contingency (including its Contingency Reserve Allocation) prior to

- the end of the Assistance Period. The Contingency Area shall make a reasonable effort to purchase capacity and firm transmission service after utilization of its own resources.
- 9) If assistance is needed by the Contingency Area for a period of time longer than the initial Assistance Period, this becomes an Other Extreme Condition and shall be reported as a separate contingency.
 - 10) For each Operating Reserve Contingency 600 MW or greater, the Contingency Area and Assisting Areas will send to the SPP RC upon request, an electronic data file in the SPP RC specified format that records ACE, Frequency Deviation, Net Tie Deviation, and Net Interchange for 10 minutes prior to until 30 minutes after the contingency within two days of the SPP RC request for this data.
 - 11) If assistance is needed by the Contingency Area for a period of time longer than the initial Assistance Period, this becomes an Other Extreme Condition and shall be reported as a separate contingency.
 - 12) Each transmission provider shall immediately notify the SPP RC of the loss of transmission interconnection capability affecting its interchange transfer capability. The SPP RC shall update Reserve Sharing Group assignments for use during subsequent Assistance Periods. Each transmission provider is responsible for notifying the SPP RC once the contingency loss in the interchange transfer capability has been restored so that Reserve Sharing Group assignments can be updated.
 - 13) For each reportable contingency (as defined by the Operating Reliability Working Group), the Contingency Area and Assisting Areas will send to the SPP RC an electronic data file in a SPP specified format that records ACE, Frequency Deviation, Net Tie Deviation, and Net Interchange for 10 minutes prior to the contingency until 30 minutes after the contingency within two days of the SPP RC request for this data. If electronic data is not available, this data will be supplied on the NERC required charts.

5.3 Subsequent Contingencies

In the event that a subsequent Operating Reserve Contingency occurs during a period when assistance is already in progress, the same procedures shall be followed to allocate responsibility for the additional Operating Reserve Contingency. Response to multiple Operating Reserve Contingencies may be limited if the combined MW loss exceeds the MSSC or SMCE.

5.4 Assistance Reports

Energy and transmission service reports shall be issued following the Assistance Period. These reports shall be used as verification of associated energy schedules and transmission service reservations. The Operating Reliability Working Group shall distribute monthly summary reports of Other Extreme Conditions activity for use.

SPP Staff will report to NERC quarterly the performance of the SPP Reserve Sharing Group. Performance will be calculated based on the data that Balancing Authorities provide and any additional data required for each reportable contingency. At a minimum, reportable

contingencies will be of a magnitude between 80% and 100% of the capacity of the largest generating unit scheduled to be on-line within the SPP RSG each day. The Operating Reliability Working Group may lower the 80% factor in order to better monitor the performance of the SPP Reserve Sharing Group.

5.5 Other Extreme Conditions Events

Other Extreme Conditions (OEC) events may be requested by any Balancing Authority member of the SPP Reserve Sharing Group. OECs may be utilized for any of the following reasons, but shall be implemented when the requesting Balancing Authority has used all or a portion of its reserve obligation due to the event:

- 1) Loss of a Capacity Import Schedule;
- 2) Loss of Contingency Reserves;
- 3) Initial or additional assistance is required and no other mechanism is available within the confines of the SPP computer communication system.

Any SPP Reserve Sharing Group member not carrying their Balancing Authority Minimum Hourly Contingency Reserve Requirement shall request an Other Extreme Conditions for the amount of the deficiency. A NERC Energy Emergency Alert (EEA) may or may not be required. If the Balancing Authority determines an EEA must be issued, the Balancing Authority shall notify the Reliability Coordinator. If the OEC is requested along with an EEA, the Balancing Authority shall be prepared to demonstrate the emergency condition by taking the steps required by the EEA.

The SPP Reserve Sharing Group member submitting an Other Extreme Conditions event shall submit a written report to OECEEReports@spp.org within 2 business days of the event. The written report will describe the operating conditions that precipitated the event. Other Extreme Conditions shall be investigated as required by the SPP Operating Reliability Working Group to ensure compliance with the SPP Reserve Sharing Group Operating Process and NERC Reliability Standards.

6. Compensation for Assistance

6.1 Energy Charge

The charge for energy assistance delivered by Assisting Areas under the application of this Operating Process shall be determined by interchange agreements between the members involved in the Reserve Sharing Group.

6.2 Accounting

All compensation for energy associated with the application of this Operating Process shall be handled by contractual agreements and standard accounting procedures being utilized by the SPP Reserve Sharing Group members.

6.3 Transmission Service

All compensation for transmission service shall be in accordance with the appropriate transmission service tariffs. The SPP staff shall be responsible for all billings for transmission service provided under the SPP Open Access Transmission Tariff. The individual transmission provider shall be responsible for all billings under the transmission provider's transmission tariff. It shall be the SPP staff's responsibility to provide the required transmission service information to the transmission provider for all transmission service under an individual transmission provider's transmission tariff.

7. Responsibilities

7.1 Balancing Authorities

It shall be the responsibility of each Balancing Authority to observe the policies and procedures contained herein; maintaining Operating Reserve, ensuring connectivity to the SPP Reserve Sharing System, reporting required information, identifying and reporting an Operating Reserve Contingency within its Balancing Authority Area, acknowledging schedules and supplying assistance to members of the SPP Reserve Sharing Group.

7.2 Operating Reliability Working Group

In order to review the adequacy in SPP Reserve Sharing Group, reports shall be compiled and distributed by SPP for review by SPP Reserve Sharing Group members and the Operating Reliability Working Group. These reports shall contain compliance information and a summary of Assistance Period events.