Integrated Marketplace: Reversion Plan

October 10, 2013

Southwest Power Pool
# Revision History

<table>
<thead>
<tr>
<th>Date or Version Number</th>
<th>Author</th>
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<tbody>
<tr>
<td>8/22/2012 Version 1.0</td>
<td>Carl Stelly</td>
<td>Initial Creation of Draft</td>
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<td>12/20/2012 Version 1.1</td>
<td>Kim Gorter</td>
<td>Updated Assumption #3 to clarify that unless all pre-defined decision points have been reached, SPP can continue to operate a measure of the Marketplace and CBA without a reversion.</td>
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<td>Kim Gorter</td>
<td>Removed Assumption #3</td>
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3 Glossary

**Decision Committee** - A group of SPP staff and member participants responsible for reviewing performance metrics and other data required to make the determination to trigger the Reversion Plan.

**Member Operating Areas** - Those entities responsible for Balancing Authority functions prior to implementation to the Integrated Marketplace which will become part of the SPP Balancing Authority.

**Reversion Transition** - The period of time between the decision to revert and that time at which the Member Operating Areas will once again be responsible for their own Balancing Authority functions and SPP will manage to the Energy Imbalance Service (EIS) market.

**Reversion Window** - The period of time in which SPP and its participating members will be obligated to operate under the terms of the Reversion Plan. At the conclusion of this period, the Reversion Plan will no longer be in effect.
4 Introduction

4.1 Policy and Guideline Statements

In its role as SPP Balancing Authority Operator, Southwest Power Pool (SPP) will maintain, at all times, the continued integrity of the SPP Balancing Authority Area by maintaining interchange and balancing Resources and load in accordance with all applicable NERC Reliability Standards and Good Utility Practice.

SPP will provide to its Market Participants quality services as prescribed in the Integrated Marketplace protocols and the Open Access Transmission Tariff.

This Reversion Plan is to provide the information to all affected parties needed to take the steps necessary to manage a smooth transition from the Integrated Marketplace functionality back to the pre-determined state identified in this document. This plan will also describe, as much as practicable, the steps required to transition from Integrated Marketplace back to the pre-determined state. The objective of this document is not to define every possible situation that might result in the ultimate decision to revert.

This document also assumes that all appropriate steps have been taken to mitigate any systems, data, or procedural abnormalities prior to triggering any reversion action prescribed herein.

This document uses the term Integrated Marketplace to encompass all market functions including the Consolidated Balancing Authority (CBA) functions. Therefore, any reference in this document to Integrated Marketplace includes the CBA as well.

4.2 Related Documents

SPP Balancing Authority Agreement (Attachment AN to SPP Tariff)
SPP Integrated Marketplace Protocols
SPP Energy Imbalance Services Protocols
SPP Tariff (EIS)
SPP Tariff (Integrated Marketplace)
SPP Communication Process
5 Plan Overview

5.1 Authority and Responsibility

SPP as the Reliability Coordinator for the SPP footprint has the responsibility and clear decision-making authority to take whatever actions are determined necessary to ensure the reliability of the SPP Balancing Authority Area (“Consolidated Balancing Authority” or “CBA”). This includes, but is not limited to, taking specific actions to alleviate emergencies that may jeopardize the integrity of the Consolidated Balancing Authority. The SPP Reliability Coordinator has the authority to issue directives to the Consolidated Balancing Authority, and other entities responsible for implementing this plan, to maintain the reliable operation of the Bulk Electric System located within the Consolidated Balancing Authority. Pursuant to the NERC Reliability Standards, the Consolidated Balancing Authority must comply with directives of the SPP Reliability Coordinator unless doing such actions cannot be physically implemented or would violate safety, equipment, regulatory, or statutory requirements.

The Consolidated Balancing Authority operator will work in coordination with the SPP Reliability Coordinator to ensure that the integrity of the Eastern Interconnect of the Bulk Electric System is not jeopardized as a result of actions taken in response to an emergency, including the implementation of this Reversion Plan. SPP, as the RC and the BA, will continue to hold authority to take any action necessary to maintain the reliability of the Bulk Electric System. The Decision Committee will own the business decision to revert, not the operational decisions to maintain reliability or compliance.

Upon the triggering of this Reversion Plan, the Participants in the Consolidated Balancing Authority will resume Balancing Authority functions and reassume the responsibilities identified in Attachment AN of SPP’s Open Access Transmission Tariff in effect during pre-implementation of the Integrated Marketplace; and SPP will relinquish the responsibilities set forth in the Consolidated Balancing Authority Agreement.

SPP will develop a cutover plan that will detail the steps leading up to and including Go-Live. The cutover plan should include details about the commitment of generation resources just prior to Go-Live, during the cutover, and during the reversion period.

5.2 Assumptions

This Reversion Plan was compiled based on the following assumptions:

- This Plan will be triggered only after all efforts have been made to mitigate circumstances according to other contingency plans or procedures
- The sunset date for the Reversion Window for implementation of the Reversion Plan will be less than, or equal to, 30 Operating Days following the start of the Integrated Marketplace due to SPP modeling activities necessary to maintain reliable planning and forecast capabilities
SPP could re-settle if the market systems are unavailable, even for a prolonged period of time
SPP has successfully measured necessary readiness metrics to provide confidence in the viability of the new market functions and the reliable operation of the SPP Balancing Authority
Market Participants and Member Operating Areas will maintain all necessary metering, scheduling, generation control capabilities, along with appropriate transmission reservations to allow for reversion to the individual Balancing Authority environment that existed prior to the implementation of the SPP Balancing Authority until such time that the sunset date is reached
Member Operating Areas will continue to submit necessary data for the EIS market for a minimum 10 days following the start of the Integrated Marketplace to help facilitate reversion, unless extended by the Decision Committee as described under Section 5.5. If, during the 10 day period, there is information to indicate an extension is imminent, SPP could request additional data.
There will be a period of time between the decision to revert and the eventual transfer of Balancing Authority responsibility in order to facilitate the transition to the Member Operating Areas
Once the reversion is implemented, it is expected the reverted state will need to be maintained for a significant period, perhaps several months
IT systems and staff for SPP, Members, and external vendors will be capable and prepared to support the transition and reversion as described in this document

These assumptions will be updated as SPP completes testing and readiness efforts and nears the start of the implementation of the SPP Balancing Authority.

5.3 Decision Drivers

The SPP Decision Committee will be updated regularly on the status of the SPP BA and Marketplace functions during the Reversion Window. In addition, the Decision Committee will also be apprised, as quickly as possible, if SPP Operations reaches pre-defined decision points.

5.3.1 Reliability

Due to the requirements placed on a Balancing Authority by NERC and based on its prominent role in ensuring the SPP BA has the accurate and appropriate data and generation control instructions exchanged between the member systems and SPP, the viability of the Automatic Generation Control (AGC) functionality is critical to the reliable function of SPP as a Balancing Authority. The need to provide accurate, timely, and effective generation control to maintain the frequency of the SPP Balancing Authority Area as well as the reliability of the Bulk Electric System on a continuous basis is the primary driver behind the ultimate decision to revert.

If SPP determines that it poses no significant risk to reliable operations to continue to function as a Balancing Authority and to provide market functionality under a variety of system degradations or
failures, SPP will continue its operation as the Balancing Authority while striving to mitigate any abnormal situations as quickly as possible.

However, without the AGC functionality, the determination could be made that SPP should not continue to act as the operator of the SPP Balancing Authority for a prolonged period of time. At such time, Operations staff may notify the Decision Committee through its established communications process, provide updates and other pertinent materials, and ultimately recommend reversion as the mitigation mechanism.

### 5.3.2 Settlements

Failure of the Settlement Systems alone will not trigger a reversion. Provided all upstream systems are functioning as planned, the market will continue to operate with the expectation that any delay in the financial activities of posting settlement statements or invoices will be resolved in an expeditious manner. It would be impractical to cease market operations and implement reversion activities, when none of the real time systems have been impaired.

In the event of sole failure of the Settlement Systems, SPP would notify all market participants once the resolution has been implemented. The notification would also include a plan and timeline for all delayed settlement statement and invoice postings to be made current.

SPP believes that Settlements, after go-live, will remain under the Marketplace Tariff, including any buffer period. The point at which the actual reversion occurs will trigger the Settlements Systems back to the EIS market and the former SPP Tariff.

### 5.4 Coordination of Reversion Plan

SPP will coordinate the implementation of the Reversion Plan with Member Operating Areas, Transmission Operators within the SPP Balancing Authority Area, and neighboring Transmission Operators and Balancing Authorities. SPP will also notify the neighboring Reliability Coordinators of the implementation of the Reversion Plan.

#### 5.4.1 Notification of Decision to Trigger Reversion Plan

The Decision Committee will coordinate notifications to impacted parties via their pre-described notifications plan. SPP Operations staff will coordinate notifications between Real-Time Operations and all impacted operational entities.

#### 5.4.2 Determination of Reversion Date/Time

The Decision Committee will determine the date and time upon which the Reversion Transition will end and the reverted state will begin. This buffer period, the length of the transition period between the decision and the reversion to the reverted state, will be determined based on a variety of factors which will include the state of systems, the ability of SPP to adequately perform the Balancing Authority functions, and the ultimate impact on reliability of the Bulk Electric System. If time
allows a more controlled reversion, and reliability is not adversely impacted, the buffer could be
determined to be remainder of current day, or remainder of current day plus 24 or 48 hours. If,
however, reliability concerns demand a much quicker reversion, the Decision Committee will have
the ability to declare the buffer period not less than 4 hours. The ultimate decision to revert and the
buffer between the decision and reversion shall be dependent upon on the state of the Consolidated
Balancing Authority and Participant readiness. This will mark the date and time at which the
Member Operating Areas will resume acting as their own Balancing Authorities.

5.4.3 Implementation of Reversion Plan
SPP will coordinate communications and activities between SPP Member Operating Areas and with
neighboring Balancing Authorities and Reliability Coordinators. SPP will utilize a detailed
communication process for notifying appropriate parties.

5.5 End of Reversion Plan
SPP, as the Balancing Authority, will, at a minimum, maintain this Reversion Plan in effect for 10
Operating Days from implementation of the Integrated Marketplace. In the event circumstances
warrant, the Decision Committee can invoke the extension of the Reversion Plan effective end date
to 30 days from the implementation of the Integrated Marketplace.

After the conclusion of the Reversion Plan, SPP will continue to operate under the auspices of the
applicable procedures for abnormal situations.

5.6 Post Reversion
After the triggering of this plan and once the desired reverted state has been achieved, SPP will
begin the process of reviewing the cause(s) that led to reversion. As part of this review process, SPP
will gather metrics and additional data to allow for a subsequent recovery plan to be developed. This
recovery plan would encompass, among other items, a plan for any additional trials, tests, parallel
operations, processes/procedures, audits, etc., that would be necessary to attempt another
implementation of the Integrated Marketplace.

SPP staff anticipates that this document will be applicable only to the original implementation of the
Integrated Marketplace. However, should a reversion occur, this Reversion Plan would be re-
implemented, as written and with the same timeframes identified herein, upon any subsequent restart
of the Integrated Marketplace.
6 Revert to EIS Markets Environment

In the event SPP experiences conditions (noticeably, the loss of RTGEN for a prolonged period of time) that trigger the reliability risks associated with the operation of the SPP Balancing Authority, the Reversion Plan will trigger the reversion to the production environment in place with all the requisite responsibilities, actions, and relationships during the SPP Energy Imbalance Service (EIS) Market, with the Member Operating Areas acting as their own Balancing Authorities.

This section does not reflect all actions that might possibly have preceded the decision to revert, such as the implementation of specific mitigation plans or contingency scenarios. The assumption is that all such actions have not provided the necessary relief or adequate confidence that SPP can continue to operate as the SPP Balancing Authority. It also assumes the decision has been made separate from the subsequent actions identified below.

6.1 Notification

Member Operating Areas will be notified and given a target date and time for reverting. The decision on the effective transition time and date will primarily be driven by the need for a period in which Member Operating Areas can make adjustments to schedules, EIS Offers, unit commitments, and prepare staff and systems to take over the Balancing Authority responsibilities as they existed before the Integrated Marketplace implementation.

6.2 Transitory Actions

6.2.1 Scheduling Systems

SPP will work with the Member Operating Areas to facilitate the adjustment of interchange transactions, as needed, to help each of the individual Member Operating Areas to a position of relative sufficiency. Since the adjustment period will be very active and the need for multiple transaction requests might be significant, it is expected there will need to be a period in which the Member Operating Areas will have sufficient time to adjust, submit, and have approved the interchange transactions necessary to supplement their generation resources to reliably serve their load demand within their respective areas.
6.2.2 Unit Commitments

After the decision has been made to revert, and until such time the Member Operating Areas accept responsibility for their individual areas, SPP will continue to study the necessary generation commitments and load forecasts and assist the individual balancing areas in determining their generation needs relative to their expected load demands and interchange transactions. This period will be sufficient to allow the respective areas, within reason, the ability to commit or de-commit generation resources and the time needed to arrange for those resources to be made available to provide adequate load-following capability. It is imperative that each individual balancing area be allowed sufficient time to prepare for the reversion to minimize the risk inherent in the resumption of Balancing Authority responsibility. The Decision Committee will weigh the readiness of the Member Operating Areas in determining the reversion point, as much as possible.

6.2.3 Frequency Control

Due to the nature of this reversion, SPP expects there may be a need for some systems (Resources or combinations of Member Operating Area Resources) to be called upon to provide a measure of frequency control, assuming the RTGEN application is the primary driver behind reversion. SPP will direct those systems during the transition period, as needed, to maintain the balancing function and meet all balancing requirements.