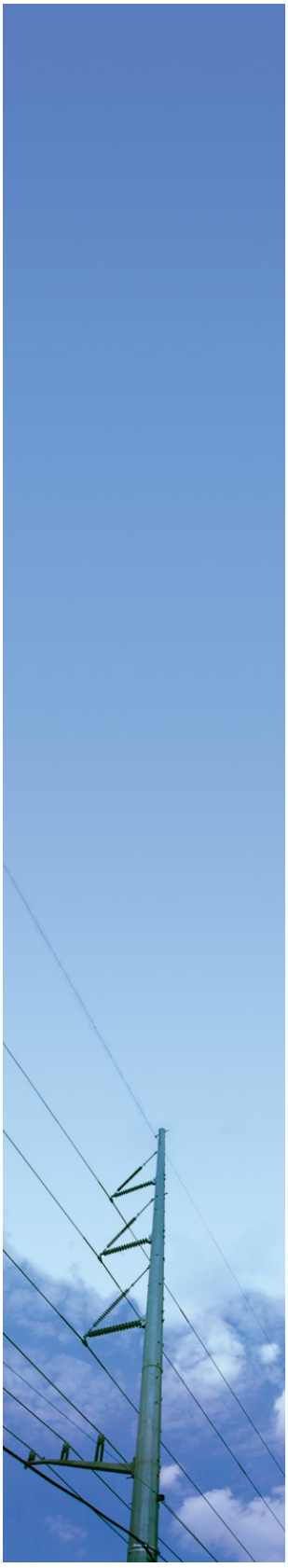

Integrated Marketplace TCR Member Impacting Project Overview

Table of Contents

Table of Contents 2
Version Control 2
Document Purpose 2
Executive Summary 3
Business Impact 7
Technical Impact 8
Member Requirements 8
Implementation/Back-out Plan 10
Summary of Timeline 10
Assumptions 10
Risks 10
Additional Documentation 10
Communication Plan 10
Next Steps 11
FAQs 11

Version Control

Version	Date	Author	Change Description
1.0	5/19/2011	Brett Crane	Initial Draft
2.1	5/24/2011	Brett Crane	Updated based on changes suggested by M.Nagle
2.2	7/7/2011	Brett Crane	Updated based with Design, Build and Test phase changes.
2.3	8/23/2011	Brett Crane	Updated based on discussion during the August CWG meeting
2.4	9/13/2011	Brett Crane	Updated with updated training dates and communication plan.
2.5	1/19/11	Brett Crane	Updated Training section and general update for Janurary CWG
2.6	9/17/12	Brett Crane	Update Market Trails Start Date and Browser Requirements
3.0	3/28/13	Dena Giessmann	Updated to include reference to Request Management System, additional information in *Next Steps* and *Additional Documentation.*

Document Purpose

This template should be used to provide initial and ongoing communication of member impacting projects to the CWG and membership.

The Project Manager should provide the MIPO with an initial review period. The CWG Representative should review the MIPO and provide feedback and response, including request for a MIPO review meeting, during the comment period.

All MIPO updates will be red-lined, and that version will be saved as MIPO_<PR#_NAME_V#.R#> where V# is the version number associated with the touch point, and R# is the release within that touch point. The latest version will have accepted redline from the previous version, and any new changes redlined. The CWG and/or project liaison will be notified of any MIPO change.

Executive Summary

1.1 Background

The TCR Workstream is responsible for implementing the business and system changes in support of the Integrated Marketplace's congestion hedging functionalities. In doing so, the TCR Workstream is responsible for implementing a web-based TCR Management System (i-HEDGE). This is a fully integrated system that will facilitate the control and administration of SPP's congestion hedging market. The system will allow Market Participants to take part in the ARR allocation, TCR auctions and secondary TCR markets, while allowing SPP market operators to govern these ARR allocation and TCR auction markets. The functionalities that this workstream will perform include:

1. Perform various TCR Education Sessions to provide training and familiarity to Market Participants in terms of the allocation and auction process.
2. Preparation and execution of the TCR Mock Auctions.
3. Integration of the TCR system with the with Settlements system
4. Integration of the TCR system with the Credit system
5. Preparation and execution of the TCR Market Trials.
6. Performing/executing the Annual ARR Validation
7. Preparation of the Feasibility Models
8. Performing/executing the Annual ARR Allocation
9. Performing/executing the Annual TCR Auction
10. Performing/executing the Incremental ARR Allocations (if requested)
11. Performing/executing the Monthly TCR Auction (except for June)
12. Executing the Secondary TCR Market (via bulletin board)

1.2 TCR Workstream Description

The main functionality of this workstream consists primarily around the performing and executing of the Annual, Monthly and Secondary TCR Markets. In more detail, these functions include:

1. Project Design Phase (6/2/11 – 9/1/11)
    a. SPP & Nexant to Review i-HEDGE system design documentation for use in the project Build Phase. I-HEDGE Design documentation will be completed and approved by 9/16/11
    b. Market Participants to identify their TCR liaison by 9/1/11. This will assist in the effort of streamlining communication of the TCR process between SPP and its Market Participants.
    c. SPP to begin collecting and mapping, loop, model, candidate and topology data in preparation for the TCR Mock Auctions.

2. Project Build Phase (9/1/11 – 8/31/12)
    a. TCR Liasion Kick-off
        i. A high level touch-base with TCR Liasons to review the TCR preparation timeline as well as expectations of both SPP and our Market Participants along with logistics of the process. This touch-

base will stress the importance on the TCR Mock Auction in terms of the benefits to the Market Participants as well as to SPP.

ii. This will occur on 10/5/11 in Dallas, TX

b. Training and Support Sevices

i. A number of TCR Market training and support services will be available to all Market Participants. Please see the Training section below for more details

c. Mock Auction Phase 1 Touchpoint

i. The Mock Auction Phase 1 Touchpoint is a final group conference call prior to the beginning of Mock Auction Phase 1 to ensure Market Participants are prepared to participate. The focus of this call is to encourage participation, reiterate the logistics/timeline of the mock auction as well as review the importance of providing quality input.

ii. This will will occur on 1/9/12

d. TCR Mock Auction Phase 1

i. SPP and its Market Participants will perform an optional participation offline trial run of the TCR process using spring seasonal and monthly data. The objective of this mock auction is primarily to:

1. Help Market Participants understand the ARR/TCR concept and process flow using the realistic data
2. Verify and validate data
3. Resolve any conflicting data prior to Market Trials

ii. This will occur from 1/16/12 – 4/13/12

e. TCR Outreach

i. SPP Training Staff with support from the TCR SMEs will conduct a TCR phone outreach to all Market Participants who are enrolled in the TCR Mock Auctions to ensure they are comfortable and have everything they need from a knowledge perspective to participate in the Auction activities.

ii. This will occur between Janurary 2012 and June 2012.

f. TCR Mock Auction Phase 2 Kickoff

i. The TCR Mock Auction Phase 2 Kickoff will be a group conference call to encourage participation and assist Market Participants in preparing for phase 2 of the TCR Mock Auction. This discussion will stress the logistics/timeline of the Mock Auction, as well as outline the differences between Phase 1 and Phase 2 of the TCR Mock Auctions. SPP staff will also take this opportunity to share any lessons learned from TCR Mock Auction Phase I.

ii. This will occur on February 27, 2012.

g. Mock Auction Phase 2 Touchpoint

i. The Mock Auction Phase 2 Touchpoint is a final group conference call prior to the beginning of Mock Auction Phase 2 to ensure Market Participants are prepared to participate. The focus of this call is to

encourage participation, reiterate the logistics/timeline of the mock auction as well as review the importance of providing quality input.

ii. This will will occur on 3/26/12

h. TCR Mock Auction Phase 2

i. SPP and its Market Participants will perform a full participation offline trial run of the TCR process using summer monthly data. The objective of this mock auction is the same as the Phase 1 Mock Auction, however more Market Participants are expected to participate.

ii. This will occur between 4/2/12 – 8/31/12

3. Project Go-live (10/18/2013)

a. Annual Congestion Hedging

i. ARR Validation Overview and Background

Annual ARR Validation is the means by which SPP Transmission Customers with firm SPP transmission service rights prior to the start of the Annual ARR Allocation Process are eligible to nominate ARRs. Entities with firm non-SPP transmission service into, out of, within or through the SPP Region must be validated with SPP annually prior to the start of the Annual ARR Allocation Process in order to be eligible to nominate ARRs.

ii. Prepare Feasibility Model

The Preparation of the Feasibility Model addresses how data from the Operations Model, Near-Term Planning Model as well as loop flow data is used to create a Feasibility Model for use in Annual ARR Allocation and TCR Auction sub-processes.

iii. Annual ARR Allocation

Annual ARR Allocation addresses how Transmission Service entitlements identified in the Annual ARR Validation Process may be nominated and converted to ARRs. Transmission Customers and other eligible entities may nominate the ARRs that they wish to receive up to their ARR Nomination Caps. The annual allocation process determines the portion of the nominated ARRs that it is simultaneously feasible to allocate to each Transmission Customer.

iv. Annual TCR Auction

The Annual TCR Auction is the mechanism through which Market Participants may obtain annual TCRs, through the submission of TCR Bids to purchase TCRs and/or through direct conversion of ARRs into TCRs through self-converting.

b. Monthly Congestion Hedging

i. Incremental ARR Allocation

Incremental ARR Allocation is the means by which Eligible Entities with firm transmission service that has been confirmed following completion of the Annual TCR Auction Process and prior to the next Annual ARR Verification Process are eligible to nominate incremental candidate ARRs associated with such services for each remaining month in the current Annual ARR Allocation Process period for which the firm transmission service applies. To the extent that the Eligible Entity's firm transmission service term extends beyond the current Annual ARR Allocation Process period, such remaining service will be included in the next Annual ARR Verification Process. Eligible Entities must verify such services with SPP in order to be eligible to nominate incremental candidate ARRs.

ii. Monthly TCR Auction

The Monthly TCR Auction is the mechanism through which Market Participants may obtain TCRs over and above those obtained in the Annual TCR Auction through submission of TCR Bids to purchase TCRs and/or through direct conversion of ARRs allocated in the Annual ARR Allocation Process into TCRs through self-converting.

c. Secondary TCR Market

i. Execute Secondary TCR Market

The Secondary TCR Market process includes activities that are performed following the completion of a Monthly Congestion Hedging Run. Inclusive within the TCR Market is the opportunity for TCR Holders to either sell their own Rights to a third party Market Participant, or attempt to acquire additional TCR's from those Market Participants that have had them allocated or won at auction. The period for secondary TCR market is restricted up to a month. Both purchaser and seller must be a Market Participant that has met applicable credit requirements.

Business Impact

The implementation of the new TCR system (i-HEDGE) provides the following changes from the current EIS Market.

- TCRs replace use of Energy Schedules and Native Load Schedules as congestion hedges.
- Congestion hedging process moves ahead of Real-Time and even Day-Ahead operations (annual ARR allocation, TCR Auction and Monthly TCR auction processes).
- Congestion hedging process eliminates need for curtailment of current bilateral Energy trades in Real-Time Balancing Market.
    - Only Interchange schedules into, out of, or through SPP CBA would be subject to TLR.
- External participants and those without assets in market footprint can participate.

Users Impacted

Transmission Owners, Transmission Customers and Financial Players who will participate in the TCR market.

Business Functions Impacted
The TCR Market will change how business is done today in the EIS market. In the TCR Market, Market Participants will have the opportunity to account for future congestion costs. Credit will be checked upon utilization of this market. Models will be developed to help Market Participants to determine historical data and future data.

Technical Impact

Beginning with Market Trials and go-live, a new TCR System (i-HEDGE) will be utilized for all allocations, auctions, and secondary market transactions in the TCR Market. API and WSDL documentations that contains technical specifications will be provided to Market Participants to assist market participants in preparing their systems for go-live. Data will be uploaded via the SPP Portal.

SPP Systems/Processes Impacted

- Crow
- OASIS
- Settlements

Anticipated Market Participants Systems/Processes Impacted
The i-HEDGE system will enable Market Participants to be awarded Auction Revenue Rights (ARRs) and will allow them the option to convert the ARRs into Transmission Congestion Rights (TCRs). Market Participants will also have the option to submit bids and offers for TCRs in the auction period within i-HEDGE. Market Participants will then have the option to trade TCRs on the TCR Secondary Market with other Market Participants and Financial Players. Reports will be generated and can be downloaded via the Market User Interface within i-HEDGE.

Member Requirements

Market Participants Education

- Identify TCR Liason by 9/1/11
- Participate in the following education sessions
    - TCR Kick-Off (10/5/11)
    - Market Overview Training (Monthly 10/11 – 3/12)
    - Preparing for the Mock Auction Training (11/11 – 3/12)

TCR Mock Auctions (Phase 1 & 2)

- Register Mock Auction Participants by 11/19/11 for participation in Phase 1 of the TCR Mock Auction
- Obtain GlobalScape access by 11/19/11 for participation in Phase 1 of the TCR Mock Auction
- Register GFA ARRs for use in Phase 1 of the TCR Mock Auction by 11/19/11

- Register Mock Auction Participants by 1/27/12 for participation in Phase 2 of the TCR Mock Auction
- Obtain GlobalScape access by 1/27/12 for participation in Phase 2 of the TCR Mock Auction
- Register GFA ARRs for use in Phase 2 of the TCR Mock Auction by 1/27/12

Market Trials

- Be able to use i-HEDGE production system through SPP Portal by 1/14/13
- Understand Credit and Settlements Interfaces along with SPP Portal by 1/1/13
- Structured testing will occur during Phase 1.
- Unstructured testing will occur during Phase 2.
- The following 3 internet browsers will be supported for Integrated Marketplace: IE 8.0 and higher,Mozilla Firefox 7.0 and higher, and Chrome 11.0 and higher. All user interfaces will be tested using these three internet browsers.

Testing

1. Project Test Phase (8/31/12)
    a. TCR Market Trials
        i. This will be the first time the i-HEDGE will be run on the production system, with the objectives of:
            1. Allowing MPs to use i-Hedge
            2. Interfacing with the SPP Portal, Registration, Credit Management and Settlement systems
            3. Readiness for TCR and Integrated Marketplace go-live
        ii. Market Participants Inclusive Market Trials
            a. The Market Participants Inclusive Market Trials will have i-HEDGE and interfacing systems fully functional in a production system and will include Market Participants actively participating in the annual and monthly ARR/TCR allocation and auction process.
            b. This will occur between 1/14/13 -9/27/13

Training

To prepare Market Participants as well as SPP Staff for the TCR Market Process, SPP will be conducting numerous trainings and providing support services leading up to and throughout the TCR Mock Auctions and TCR Market Trials. These education session are as follows:

a. Market Overview Training
    i. Market Overview Training will provide an overview to the Southwest Power Pool Integrated Marketplace and the market fundamentals for operating and participating in the Day-Ahead, Real-Time, and Transmission Congestion Rights (TCR) markets.
    ii. There will be a monthly re-occurence of this training between October 2011 through March 2012

b. Preparing for the TCR Mock Auction
    i. Preparing for TCR Mock Auction training will be a high-level review of TCR basics which will include TCR processes and timelines with added specifics on how Market Participants can prepare for the TCR Mock Auction activities, roles and responsibilities.
    iii. There will be a monthly re-occurance of this training between November 2011 and March 2012

c. One-on-One TCR SME Support

i. One-on-One TCR SME Support allows SPP TCR SMEs to be available to participate in a one-on-one phone/web meeting with individual Market Participants to ensure they are comfortable and have everything they need from a knowledge perspective to participate in the TCR Mock Auctions.
ii. This will occur per Market Participants request throughout the Mock Auctions and Market Trials.

d. Integrated Market In-Depth: Preparing for Market Trials
i. This module is available via LMS

Implementation/Back-out Plan

TBD

Summary of Timeline

Date	Responsible Party	Action
1/16/2012	Market Participants	Begin of TCR Mock Auction Phase I
1/27/2012	Market Participants	Phase II Mock Auction Participation Deadline
4/2/2012	SPP	Begin of TCR Mock Auction Phase II
1/14/2013	SPP/Market Participants	Market Trials Begins
10/18/2013	SPP	Go-Live

Assumptions

TBD

Risks

There are currently no risks.

Additional Documentation

Preparing for TCR Mock Auction Participant TrainingTCR Kick-Off Meeting Materials 10-5-2011
GFA Registraton Packet
Mock TCR Registration Packet
TCR Market Trials Project Documents

Communication Plan

All project communication and information will be posted to the SPP Change Working Group Project Documentation folder. This MIPO will be updated upon change or with any new information, a redline version posted to the project documentation folder, and the CWG notified.

Important updates and communication will sent to the TCR Liaison Distribution list, which consists of representatives from SPP Market Participant entities. If any Market Participant has questions or needs assistance an email can be sent to MarketplaceTCR@spp.org. Questions may also be submitted through SPP's Request Managemen System (RMS).

During Mock Auction Phase I and II data will uploaded via GlobalScape where each TCR Liaison will have access to a public and private folder. GlobalScape can be accessed by going to https://xfer.spp.org. The Market Participants that are registered for Mock Auction Phase I and II will be given login information for the Mock Auction User Interface (found in GlobalScape). The Mock Auction UI can be accessed at http://tcrmock.spp.org/.

Throughout the Mock Auction process, TCR outreach conference calls will occur until Market Trials. During Market Trials bi-weekly Touch Base calls will be held.

Next Steps

Action	Assignee	Status & Due Date
Register for Mock Auction Phase II	Market Participants	Complete
Register GFAs	Market Participants	Complete
TCR Market Trials Phase 1		In progress; 1/14/13 - 4/26/13
TCR Market Trials Phase 2		In progress: 3/18/13 – 9/27/13

FAQs

For general questions regarding TCRs please refer to this FAQ
For questions regarding GlobalScape please refer to this FAQ