



Southwest Power Pool
FINANCE COMMITTEE MEETING
January 10, 2014
Teleconference

• Summary of Action Items •

1. Approved MPRR-161: ARR Self-Conversion Credit Exposure Calculation

• Schedule of Follow-up Items •

1. Establish a scorecard for presentation to MOPC, SPC, and BOD indicating costs associated with member required projects/services.
2. Presentation at a future meeting which will cover the exposure calculations and credit underwriting practices of the Credit Policy.
3. Presentation from IT on hardware and software acquisition and management strategy at the April 2014 meeting.
4. Develop schedule of items that require Committee approval, items that require Committee monitoring, and items that require Committee input.
5. Review of ARR exposures after July 2014
6. Review SPP's status when a market participant declares bankruptcy
7. Review any other alternatives to netting ARRs which can mitigate the short window of ARR exposure.

Southwest Power Pool
FINANCE COMMITTEE MEETING
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• M I N U T E S •

Administrative Items

SPP Chair Harry Skilton called the meeting to order at 1:30 p.m. The following members of the Finance Committee were in attendance:

Harry Skilton	SPP Director
Larry Altenbaumer	SPP Director
John Olsen (proxy for Kelly Harrison)	Westar Energy
Sandra Bennett	AEP
Coleen Wells	Kansas Electric Power Coop
Mike Wise	Golden Spread Electric Coop
Tom Dunn	SPP
Others attending included:	
Laura Kapustka	Lincoln Electric
Bruce Cude	SPS
Trent Campbell	OCC
Phyllis Bernard	SPP Director
Jason Fortik	Lincoln Electric
Tom Hestermann	Sunflower
Carol Shoemake	OG&E
Kelly Walters	Empire
Nick Brown	SPP
Scott Smith	SPP
Phil McCraw	SPP
Ty Mitchell	SPP
Temujin Roach	SPP

MPRR 161: ARR Self-Conversion Credit Exposure Calculation

SPP's currently in force credit policy requires entities holding auction revenue rights ("ARR"s) to post collateral for any ARR's selected for self-conversion which have a negative credit value; the entities are not allowed to net the negative value ARR's against any positive value ARR's selected for self-conversion. Once transmission congestion rights ("TCR"s) are awarded then the entity is allowed to net the positive TCR's against the negative TCR's for determining collateral requirements. The time period between electing to self-convert ARR's and the awarding of TCR's is approximately 10 calendar days.

The Credit Practices Working Group proposed changing the credit policy to allow the negative value ARR's selected for self-conversion to be netted against 90% of the positive value ARR's selected for self-conversion. The change is intended to significantly reduce the amount of excess collateral entities are required to post prior to TCR awards without exposing the market to excessive risk of default.

Larry Altenbaumer motioned to approve MPRR 161 with the further provision that SPP will review the results of the TCR auctions over the next 6 months and report to the Committee on the impact this change has created. The motion was seconded by Sandra Bennett and approved by a unanimous voice vote.

Finance Committee
January 10, 2014

The Chair of the Committee also requested staff engage legal counsel to review SPP's status when a market participant declares bankruptcy and to also review any other alternatives to netting ARR's which can mitigate the short window of ARR exposure.

Future Meetings

The next meeting of the Finance Committee will be March 7, 2014 beginning at 7:30am in Jacksonville, FL. Agenda topics include complete reviews of SPP's credit practices and process improvement initiatives.

There being no further business, Harry Skilton adjourned the meeting at 2:40 p.m.

Respectfully Submitted,

Thomas P. Dunn
Secretary



Southwest Power Pool, Inc.
CREDIT PRACTICES WORKING GROUP
Recommendation to the Finance Committee
January 10, 2014

Change to ARR Self-Conversion Credit Exposure Calculations

Organizational Roster

The following persons are members of the Finance Committee:

Harry Skilton	Director
Larry Altenbaumer	Director
Coleen Wells	Kansas Electric Power Coop
Mike Wise	Golden Spread Electric Coop
Sandra Bennett	American Electric Power
Kelly Harrison	Westar Energy

Background

Article 5A of Attachment X (Credit Policy) describes the methodology of how SPP calculates credit exposures for the lifecycle of Transmission Congestion Rights (TCR). TCRs can be acquired from self-converting Auction Revenue Rights (ARR) during the auction process.

Analysis

ARRs are awarded to holders of firm transmission service reservations. An ARR can only be self-converted to a TCR during the auction process by the holder of that ARR. Currently during the auction process, ARR self-converts are treated similarly to TCR bids with respect to the calculation of credit exposure. SPP only recognizes the negatively-valued ARRs/TCRs in a market participant's bid portfolio until such time as the auction window closes and all bids/offers are cleared and published. In the December 2013 auction, the bidding window opened on December 3, closed on December 6, and the auction was cleared with awards published on December 13.

Once the clearing has occurred and TCRs have been awarded (through self-convert or bid), SPP will net the positive and negative valued TCR credit exposures. For some market participants, ARR self-converts can require significant amounts of collateral for a brief period of time. SPP's members have indicated their desire to allow the netting of 90% of positively-valued ARR self-converts with 100% negatively-valued ARR self-converts during the auction period (up to 10 days in the December 2013 auction). Research indicated that by allowing 90% netting in the December 2013 auction, no market participants would have had their credit exposure increase as a result of the clearing/awards of ARR self-converts.

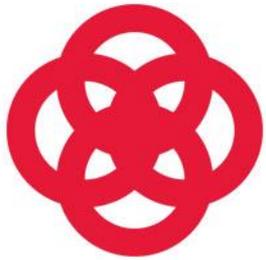
In a joint meeting with the both the Credit Practices Working Group (CPWG) and the Market Working Group (MWG), member stakeholders unanimously approved the attached changes to Article 5A of Attachment X.

Recommendation

The CPWG recommends the Finance Committee approve the policy and associated tariff changes presented.

Approved:

Action Requested: Approve Recommendation



INTEGRATED MARKETPLACE

 **SPP** *Southwest
Power Pool*

SPP Interim Annual Auction Results: ARR Activities & Credit Exposure

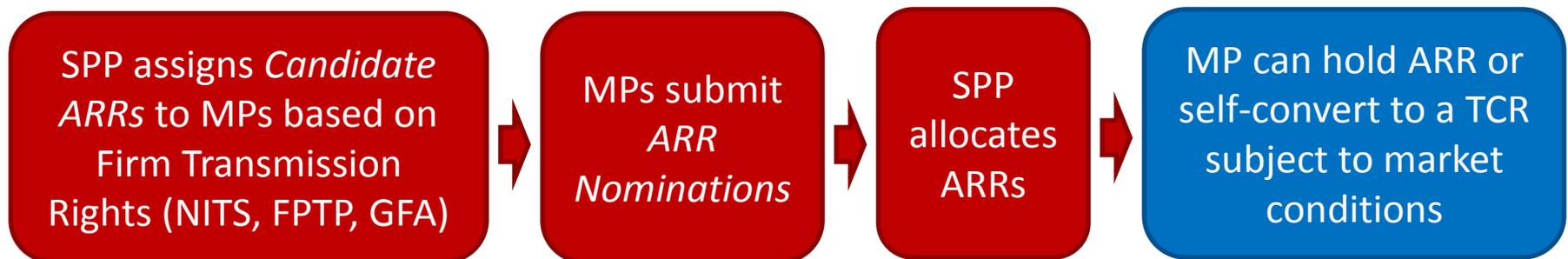
January 2, 2014

Scott Smith
ssmith@spp.org



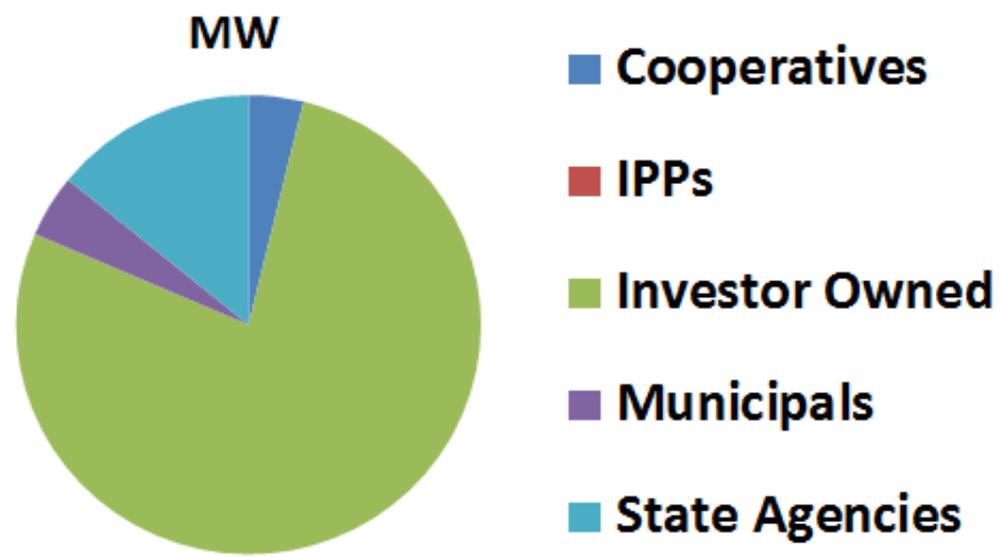
Auction Revenue Rights Primer

- A financial right, awarded during the annual allocation process
- Entitles the holder to a share of the auction revenues
- Entitles to holder to self-convert the ARR into a TCR
 - Subject to market liquidity and system rating
- ARRs can not be bilaterally traded in SPP's market

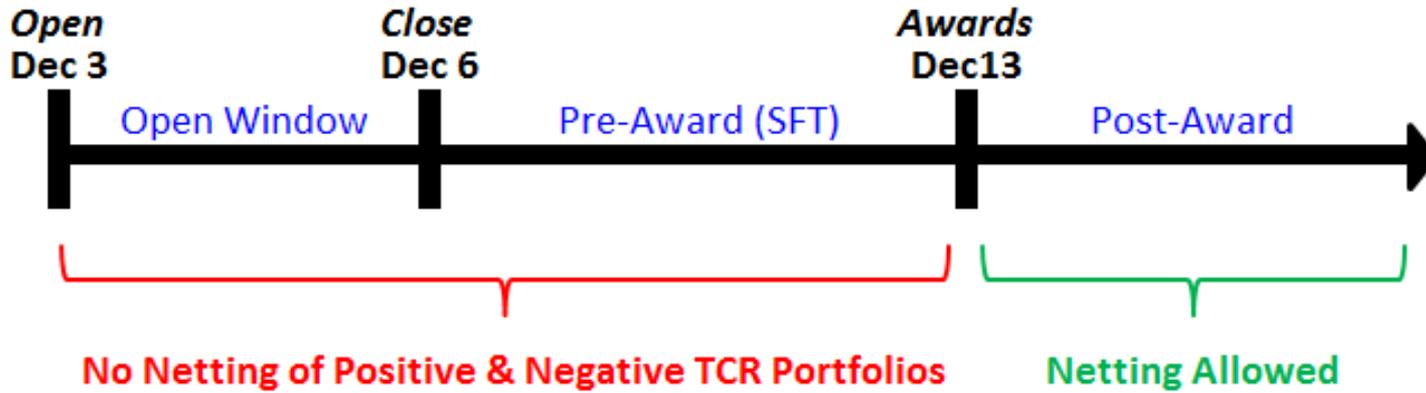


ARR Holders

- **30 Credit Holders with ARR activity in December auction**
 - 8 Investor Owned
 - 5 Cooperatives
 - 4 IPPs
 - 8 Municipals
 - 5 State Agencies
- **No “Financial Only” participants received ARR**



ARR Self Convert Timeframe



- During the Auction period: ARR self-converts are treated like TCR bids: **ONLY** negative valued bids are included in exposure calculation
- Positive & Negative credit exposure values are derived from the sign of the TCR Final Reference Price (multiplied by # of MW)

Auction Statistics for ARR Activities

Total Credit Holders w/ARR Activity	30
Total ARR Conversion Bids	1,637
Total Megawatts Bid for ARR Conversion	164,790
Total Megawatts Awarded for ARRs	157,774
% of TCRs Awarded for ARR Conversions	95.7%

ARRs Converted by Month

MWs	March	April	May	Total
Total ARRs Bid for Conversion *	53,311	52,683	58,797	164,790
Total TCRs Converted from ARRs	51,002	51,075	55,697	157,774
Difference (<i>Not Awarded</i>)	2,309	1,608	3,100	7,017
% TCRs Awarded	95.7%	96.9%	94.7%	95.7%

** Amount of MWs all participants solicited to convert to TCRs; not amount allocated in pre-auction allocation*

Observations

- No apparent difference in clearing amount by months or peak
- Auction results based on 90% system capacity; annual auction capacity is scaled from 100% to 60% from June-May

ARRs Converted by Reference Price Value

MWs	Negative Ref Price	Positive* Ref Price	Total
Total ARR Bid for Conversion	67,537	97,253	164,790
Total TCRs Converted from ARRs	64,756	93,018	157,774
Difference (<i>Not Awarded</i>)	2,782	4,235	7,017
% TCRs Awarded	95.9%	95.6%	95.7%

** Zero Dollar Ref Prices applied to 2,039 MW bid*

Observations

- No apparent difference in clearing amounts by Ref Price Value
- If netting were allowed during the auction period; unawarded ARR/TCRs with POSITIVE valued Final Reference Prices could result in an increase in exposure once awards are published

Analysis of ARR Scenarios

- 30 Credit Holders bid to convert ARRs during the auction window
 - SPP does not net positive and negative values during the auction
 - 24 Credit Holders had collateral requirements
 - \$80MM of exposure was calculated during auction window
 - \$35MM of exposure was calculated after TCRs were awarded

- If Positive ARRs were allowed to net at 100% during the auction window
 - 15 Credit Holders would have collateral requirements
 - \$35MM of exposure would be calculated during auction window
 - 14 Credit Holders' exposure would have **INCREASED** from awards
 - 5 Credit Holders would have additional collateral requirements as a result
 - Range from \$162 to \$1.6MM (4 < \$12K)

Analysis of ARR Scenarios

- **If Positive ARRs were allowed to net at 90% during the auction window**
 - 15 Credit Holders would have collateral requirements
 - \$39MM of exposure would be calculated during auction window
 - No Credit Holders exposure would have INCREASED from awards
- **If Positive ARRs were allowed to net at 75% during the auction window**
 - 17 Credit Holders would have collateral requirements
 - \$44MM of exposure would be calculated during auction window

<input type="checkbox"/> EIS Market
<input checked="" type="checkbox"/> Integrated Marketplace

PRR Recommendation Report

PRR No.	Marketplace-PRR161	PRR Title	TCR Credit Limits
Timeline	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Expedited <input type="checkbox"/> Urgent Action Provide explanation if Expedited and/or Urgent Action is selected:		
Recommendation Action	<input checked="" type="checkbox"/> Approve <input type="checkbox"/> Reject <input type="checkbox"/> Require additional information <input type="checkbox"/> Defer <input type="checkbox"/> Refer		
Impact Analysis Required	<input type="checkbox"/> Yes – If yes, estimated cost: <input checked="" type="checkbox"/> No SPP Staff will complete this section.		
Protocol Section(s) Requiring Revision	Section No.: N/A Title: N/A Protocol Version: 17.0		
Type of Revision	<input type="checkbox"/> Correction/Clean-Up <input checked="" type="checkbox"/> Clarification <input type="checkbox"/> Design Enhancement <input type="checkbox"/> Design Change		
Timeline	<input type="checkbox"/> Go-Live <input checked="" type="checkbox"/> Post Go-Live		
Revision Description	This change will assist in resolving an unintended consequence of credit requirements for Auction Revenue Rights (ARRs) converted to Transmission Congestion Rights (TCRs). The current practice resulted in temporary credit calls issued to Market Participants for a short period of time during a week that there is no actual settlement. This MPRR helps enhance the credit policy by allowing netting to occur during the process that Market Participants are self-converting their ARR into TCRs.		
Tariff Implications or Changes	<input checked="" type="checkbox"/> Yes – Section No: <i>(Include a summary of impact and/or specific changes)</i> Attachment X Article 5 A Section, Transmission Congestion Rights (TCRs) <input type="checkbox"/> No		
Criteria Impact or Changes	<input type="checkbox"/> Yes – Section No: <i>(Include a summary of impact and/or specific changes)</i> <input checked="" type="checkbox"/> No		
MWG Review PRR Recommendation	Date of Vote: 1/2/2014 Vote: Unanimously approved with modifications Opposed: N/A Abstained: N/A		
CPWG Review	Date of Vote: 1/2/2014 Vote: Approved		
RTWG Review	Date of Vote: 1/3/2014 Vote: Approved		
ORWG Review	Date of Vote: Vote:		
Finance Committee Review	Date of Vote: Vote:		
MOPC Recommendation	Date of Vote: Vote:		
Board Review	Date of Vote: Vote:		

Date	12/19/2014
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Sponsor	
Name	Amber Metzker
E-mail Address	Amber.I.metzker@xcelenergy.com
Company	Xcel Energy
Phone Number	303.571.6202

Proposed Protocol Language Revision
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N/A

Proposed Tariff Language Revision
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ARTICLE FIVE A

Transmission Congestion Rights (TCRs)

5A.1 Overview.

5A.1.1 Transmission Congestion Rights create potential exposure of non-payment, and therefore, have a credit requirement. SPP will establish a Total TCR Credit Requirement for each Credit Customer holding TCRs or participating in a TCR Auction. A Credit Customer may satisfy its Total TCR Credit Requirement by providing Financial Security. Unsecured Credit is not available to support a Credit Customer's holding of TCRs or activity in TCR Auctions. Additionally, SPP's prior approval is required for a Credit Customer to acquire or transfer TCRs through bilateral transactions.

5A.1.2 To establish the credit requirement associated with TCRs, SPP analyzes: (i) the TCRs the Credit Customer holds (including TCRs held via self-conversion from ARRs); (ii) the Credit Customer's Bids and Offers for TCRs in the TCR Auctions; (iii) TCR payments or charges for which settlement has been calculated but not yet invoiced; and (iv) TCR payments or charges for which an invoice has been issued but payment has not occurred.

- (a) SPP calculates the potential exposure associated with the full portfolio of TCRs that are held by the Credit Customer.
- (b) SPP evaluates individually each TCR Bid in the TCR Auctions to ensure that the Credit Customer has sufficient Financial Security to cover the credit requirements to purchase and hold the TCR. Only the TCR Bids for which the Credit Customer has sufficient Financial Security will be credit approved for consideration in the TCR Auction.
- (c) SPP evaluates individually each TCR Offer in the TCR Auctions to ensure that the Credit Customer has sufficient Financial Security to cover any credit requirements associated with the Offer and the credit requirements for the retained TCR portfolio that would result if the TCR Offer clears in

the TCR Auction. Only the TCR Offers for which the Credit Customer has sufficient Financial Security will be credit approved for consideration in the TCR Auction.

- (d) Additionally, SPP analyzes the credit requirements associated with TCRs that are the subject of a proposed bilateral transfer prior to providing approval of such transfers. SPP approval of a bilateral transfer for TCRs is required for such bilateral transfers to be completed.

5A.1.3 As part of the determination of the credit requirement associated with TCRs, SPP calculates the Estimated TCR Exposure (ETCRE), which is an estimate of the potential value of the TCR over the life of the TCR. It will be calculated for all TCRs the Credit Customer holds, the Credit Customer's TCR Bids and TCR Offers, proposed TCR bilateral transfers, and TCRs acquired through ARR self-conversion. SPP will determine the credit requirement associated with TCRs and whether the Credit Customer has available Financial Security to support its TCR activity. After the close of a TCR Auction and on an ongoing basis, SPP will update the Credit Customer's Total TCR Credit Requirement associated with TCRs to reflect the actual TCRs the Credit Customer holds and TCR Auction results, including the costs to acquire or sell TCRs in a TCR Auction.

5A.1.4 This Article addresses the calculation of the Total TCR Credit Requirement associated with TCRs, including the ETCRE calculations for the TCRs the Credit Customer holds and the Credit Customer's Bids and Offers for TCRs in the TCR Auctions and the acquisition and disposal costs of the TCR in the TCR Auctions; as well as the TCR payments or charges for which settlement has been calculated but not yet invoiced; and the TCR payments or charges for which an invoice has been issued but payment has not occurred. This Article also addresses the determination whether a Credit Customer has sufficient Financial Security available for the Credit Customer's proposed TCR Auction activity or proposed bilateral transfers of TCRs.

5A.2 Calculation of Estimated TCR Exposure (ETCRE) for TCRs that a Credit Customer Holds (ETCRE Hold). SPP will calculate the ETCRE Hold, which is an estimate of the potential value (positive or negative) of the TCR contract for the term of the TCR, for TCRs that a Credit Customer holds. A negative ETCRE Hold means SPP estimates that the potential value of the TCR will result in a payment by the Credit Customer. A positive ETCRE Hold means SPP estimates that the potential value of the TCR will result in a payment to the Credit Customer. The ETCRE Hold calculation is determined for each TCR on an individual basis. ETCRE Hold is the product of the TCR Final Reference Price times the TCR megawatts times the complete duration of the TCR. SPP will calculate the TCR Final Reference Price for each TCR based on the difference of historical Day-Ahead Market Marginal Congestion Cost (MCC) between the TCR source and TCR sink.

5A.2.1 TCR Final Reference Price. For a given source and sink combination and with respect to time (season or month) and class (on-peak and off-peak), the TCR Final Reference Price has two components: (i) a TCR Mean Price; and (ii) a TCR Stress Test Price. The Final Reference Price is the TCR Mean Price minus the TCR Stress Test Price.

Comment [TRR113.1]: TRR113. RTWG approved on 10/24/2013.

5A.2.1.1 Both the TCR Mean Price and TCR Stress Test Price are determined using the Day-Ahead Market Marginal Congestion Component (MCC) prices from the prior two years. Each year of the prior two year period will be weighted, with the more recent year receiving a 75% weighting and the more distant year receiving a 25% weighting. The MCC prices used in the calculations for a TCR match the definition of the TCR with respect to time (season or month) and class (on-peak and off-peak). Historical The MCC prices used in the calculation must be complete for each hour of the time (season or month) to be considered in the calculation. MCC prices to be used for the more recent year will only be used if the specific time period (season or month) has been completed, i.e. no partial period MCC prices will be used to calculate Final Reference Prices. If the MCC prices for each hour of a time (season or month) are not complete, then that entire time (season or month) is not included in the prior two year period for a given TCR.

Comment [TRR113.2]: TRR113. RTWG approved on 10/24/2013.

5A.2.1.1.1 A TCR Final Reference Price determination is used in the calculations for ETCRE Hold, ETCRE Bid, and ETCRE Offer calculations. For each such calculation, the prior two year period used in the calculation is measured from the time of the calculation. ETCRE Hold calculations will be updated to reflect updated prior two year periods for a given TCR as MCC prices are completed for a season or month that previously was not included in the prior two year period.

5A.2.1.2 The TCR Mean Price is the sum of 75% of the mean of the hourly Day-Ahead Market MCC difference calculated as between the source and sink combination of the sink MCC minus the source MCC for the more recent year in the prior two year period plus 25% of the mean of the hourly Day-Ahead Market MCC difference calculated as between the source and sink combination of the sink MCC minus the source MCC for the more distant year in the prior two year period.

Comment [TRR113.3]: TRR113. RTWG approved on 10/24/2013.

Comment [TRR113.4]: TRR113. RTWG approved on 10/24/2013.

5A.2.1.3 The TCR Stress Test Price calculation differs for TCRs with positive and negative Mean Prices. For a TCR with a negative TCR Mean Price, the TCR Stress Test Price is the 75th-90th percentile of the opposite flow value (i.e. if the source and sink were reversed source MCC minus sink MCC) in the prior two year period. For a TCR with a positive TCR Mean Price, the TCR Stress Test Price is the 90th-75th percentile of the opposite flow value (i.e. if the source and sink were reversed source MCC minus sink MCC) in the prior two year period. The TCR Stress Test Price has a minimum value of zero and thus can never increase the TCR Final Reference Price. The TCR Stress Test Price is included only if it is has a positive value, otherwise, zero will be included in the calculation.

Comment [TRR113.5]: TRR113. RTWG approved on 10/24/2013.

Comment [TRR113.6]: TRR113. RTWG approved on 10/24/2013.

Comment [TRR113.7]: TRR113. RTWG approved on 10/24/2013.

Comment [TRR113.8]: TRR113. RTWG approved on 10/24/2013.

Comment [TRR113.9]: TRR113. RTWG approved on 10/24/2013.

5A.2.2 Calculation of TCR Final Reference Price during the Initial Two-Years of the Integrated Marketplace. Prior to the accumulation of complete MCC data sufficient to calculate the TCR Final Reference Price pursuant to Section 5A.2.1, to calculate both the

Mean Price and Stress Test Price, to the extent complete MCC price data for the applicable prior two year period is not available, SPP will use the applicable historical energy imbalance service price differences.

5A.2.3 Calculation of TCR Final Reference Price for New Settlement Locations. When a new Settlement Location is created, SPP will use a proxy price based on the system average Day-Ahead Market MCC to calculate the TCR Mean Price and TCR Stress Test Price for the new Settlement Location. The system average Day-Ahead Market MCC for each defined TCR is the mean of the hourly Day-Ahead Market MCC for all Settlement Locations for which a Day-Ahead Market MCC exists for each hour in the prior two year period for a defined TCR. Based on a two year weighted average approach, the proxy will be blended with actual data after the first year.

Comment [TRR113.10]: TRR113. RTWG approved on 10/24/2013.

Comment [TRR113.11]: TRR113. RTWG approved on 10/24/2013.

5A.3 TCR Portfolio Credit Requirement. The Financial Security required for a Credit Customer's TCR portfolio is the TCR Portfolio Credit Requirement and is one component of the Total TCR Credit Requirement. The TCR Portfolio Credit Requirement is the sum of (i) the sum of the ETCRE Hold values for each TCR in the Credit Customer's TCR portfolio; (ii) the portion of the cost to acquire each TCR in a TCR Auction that has not yet been settled; and (iii) the disposal cost for TCR Offers that clear a TCR Auction that has not yet been settled.

5A.3.1 The sum of the ETCRE Hold values for each TCR in the Credit Customer's TCR portfolio used in the calculation of the TCR Portfolio Credit Requirement is equal to the net sum of the ETCRE Hold values for each TCR in the Credit Customer's TCR portfolio, with individual positive and negative ETCRE Hold values netted, for a time period greater than the last settled operating day~~the month in the future~~ with the largest most negative net sum of ETCRE Hold values of the Credit Customer's TCR portfolio. For a TCR with a term longer than a month, the ETCRE Hold for each month of the TCR is equal to the total ETCRE Hold for the TCR divided by the number of months of the term of the TCR. SPP calculates the ETCRE Hold ~~for~~ each day for which at least one TCR in the portfolio is valid.

Comment [TRR113.12]: TRR113. RTWG approved on 10/24/2013.

Comment [TRR113.13]: TRR113. RTWG approved on 10/24/2013.

5A.3.2 The portion of the acquisition cost to acquire each TCR in a TCR Auction that has not yet been settled includes the amounts that the Credit Customer is required to pay for TCRs it acquires in a TCR Auction, that have not yet been settled, and does not include amounts that may be owed to a Credit Customer to acquire a TCR. For TCRs acquired through self-scheduled converted ARR, the acquisition cost is zero. For TCRs acquired through a bilateral transfer the acquisition cost is zero for the buyer because the acquisition cost remains the responsibility of the participant who originally acquired the TCR in a TCR Auction.

Comment [TRR113.14]: TRR113. RTWG approved on 10/24/2013.

5A.3.3 The portion of the disposal cost for each TCR Offer that clears a TCR Auction that has not yet been settled is the portion of a Credit Customer's loss associated with the difference between the Offer price and the original Auction Clearing Price for the TCR that is the subject of the TCR Offer. For TCRs acquired pursuant to a bilateral transfer that are the subject of a TCR Offer, zero will be used for the Auction Clearing Price for this calculation.

5A.3.4 Except in the case of ARRs self-converted to TCRs, Only only positive-negative TCR Portfolio Credit Requirements are included in the Total TCR Credit Requirement. If the

Comment [TRR113.15]: TRR113. RTWG approved on 10/24/2013.

TCR Portfolio Credit Requirement is a ~~negative-positive~~ value it does not ~~add to~~ diminish the Financial Security requirement for TCRs and zero will be used for the TCR Portfolio Credit Requirement in the calculation of the Total TCR Credit Requirement.

Comment [TRR113.16]: TRR113. RTWG approved on 10/24/2013.

Comment [TRR113.17]: TRR113. RTWG approved on 10/24/2013.

5A.3.5 Both positive and negative TCR values for ARRs self-converted to TCRs in a TCR Auction will be included in the Credit Customer's Total TCR Credit Requirement. Ninety percent (90%) of the ~~positive and one hundred percent (100%) of the negative~~ TCR values for ARRs self-converted will be netted and the netted value used in establishing the credit requirement.

5A.4 Calculation of ETCRE Bid. SPP evaluates the Bids for TCRs to ensure that the Credit Customer has sufficient Financial Security to cover any Financial Security requirements to purchase and hold the TCR. The ETCRE Bid calculates the Financial Security requirements for each Bid. When a TCR Bid is submitted, SPP will calculate the ETCRE Bid for the Bid, which is the maximum sum of (i) the ETCRE Segment and (ii) the TCR Segment Cost, for the segments in the Bid. SPP calculates the ETCRE Segment for each megawatt point on the submitted Bid curve, and the TCR Segment Cost for each megawatt point on the submitted Bid curve. For each segment, SPP calculates the sum of (i) the ETCRE Segment and (ii) the TCR Segment Cost.

5A.4.1 ETCRE Segment. In evaluating TCR Bids, SPP calculates the ETCRE Segment for each megawatt point on the submitted Bid curve. The ETCRE Segment can be positive or negative. It is the potential value of holding the TCR in the Bid. It is calculated in the same manner as the ETCRE Hold, using the Final Reference Price, and the TCR Bid megawatts ~~and duration~~.

Comment [TRR113.18]: TRR113. RTWG approved on 10/24/2013.

Comment [TRR113.19]: TRR113. RTWG approved on 10/24/2013.

5A.4.2 TCR Segment Cost. In evaluating TCR Bids, SPP estimates the TCR acquisition cost by calculating the TCR Segment Cost for each megawatt point on the submitted Bid curve by multiplying the Bid price for that megawatt point times the megawatts ~~and hours~~ for that point on the submitted Bid curve. The TCR Segment Cost is the potential cost for the Credit Customer to acquire any megawatt point on the submitted Bid segment. For TCRs with negative acquisition costs, e.g., if the Bid curve has a negative Bid price, the TCR Segment Cost will be zero. For ~~a TCR Bid~~ resulting from an ARR self-conversion, the TCR Segment Cost also will be zero.

Comment [TRR113.20]: TRR113. RTWG approved on 10/24/2013.

Comment [TRR113.21]: TRR113. RTWG approved on 10/24/2013.

Comment [TRR113.22]: TRR113. RTWG approved on 10/24/2013.

5A.4.3 If multiple TCR Bids and Offers are included in a single submission, the Credit Customer must have sufficient Financial Security to cover all of the Bids and Offers in the submission. The Financial Security requirement for a single submission is the sum of the ~~positive-negative~~ ETCRE Bid and ETCRE Offer for the Bids and Offers in the submission without any netting of the individual ETCRE Bid or ETCRE Offer for the TCR Bids and Offers that are included in the submission.

Comment [TRR113.23]: TRR113. RTWG approved on 10/24/2013.

5A.5 Calculation of ETCRE Offer. SPP evaluates the Offers for TCRs to ensure that the Credit Customer has sufficient Financial Security to cover any Financial Security requirements resulting if the TCR is no longer held and potential losses resulting from the sale. The ETCRE Offer calculates the Financial Security requirement for each Offer. When a TCR Offer is submitted, SPP will calculate the ETCRE Offer for the Offer which is the maximum sum of (i) the ETCRE Offer Segment; and (ii) the TCR Offer Segment Cost, for the segments in the Offer.

SPP calculates the ETCRE Offer Segment for each megawatt point on the submitted Offer curve. For each segment, SPP calculates the sum of (i) the ETCRE Offer Segment, and (ii) the TCR Offer Segment Cost.

5A.5.1 ETCRE Offer Segment. In evaluating TCR Offers, SPP calculates the ETCRE Offer Segment for each megawatt point on the submitted Offer curve. It is the potential value of disposing of an existing TCR in the Offer. It is calculated in the same manner as the ETCRE Hold, using the Final Reference Price, and the TCR Offer megawatts and duration. If the calculated ETCRE Offer Segment is ~~negative~~positive, SPP sets the ETCRE Offer to zero

Comment [TRR113.24]: TRR113. RTWG approved on 10/24/2013.

Comment [TRR113.25]: TRR113. RTWG approved on 10/24/2013.

Comment [TRR113.26]: TRR113. RTWG approved on 10/24/2013.

5A.5.2 TCR Offer Segment Cost. In evaluating TCR Offers, SPP estimates the TCR disposal cost by calculating the TCR Offer Segment Cost for each megawatt point on the submitted Offer curve by multiplying the difference between the original Auction Clearing Price for the TCR from the TCR Auction in which the TCR originally was acquired and the Offer price for that megawatt point times the megawatts and hours for that point on the submitted Offer curve. The TCR Offer Segment Cost is the potential cost for the Credit Customer to dispose of any megawatt point on the submitted Offer segment. If the TCR was originally acquired from an ARR self-schedule or pursuant to a bilateral transfer, zero is used for the original Auction Clearing Price. If the calculated ETCRE Offer Segment Cost is ~~negative~~positive, SPP sets the ETCRE Offer to zero.

Comment [TRR113.27]: TRR113. RTWG approved on 10/24/2013.

Comment [TRR113.28]: TRR113. RTWG approved on 10/24/2013.

Comment [TRR113.29]: TRR113. RTWG approved on 10/24/2013.

5A.5.3 If multiple TCR Bids and Offers are included in a single submission, the Credit Customer must have sufficient Financial Security to cover all of the Bids and Offers in the submission. The Financial Security requirement for a single submission is the sum of the ~~positive~~negative ETCRE Bid and ETCRE Offer for the Bids and Offers in the submission without any netting of the individual ETCRE Bid or ETCRE Offer for the TCR Bids and Offers that are included in the submission.

Comment [TRR113.30]: TRR113. RTWG approved on 10/24/2013.

5A.6 Determination of Credit Approved TCR Bids and Offers and Rejection of TCR Bids and Offers which are Credit Disapproved.

5A.6.1 If the sum of the ETCRE Bid and ETCRE Offer for all TCRs (other than TCRs self-converted from ARRs) included in a single submission of Bids and Offers for a TCR Auction, calculated pursuant to sections 5A.4 and 5A.5, without netting, is less than the Credit Customer's available amount of Financial Security, then the submission is credit approved for inclusion in the TCR Auction.

5A.6.2 If the sum of the ETCRE Bid and ETCRE Offer for all TCRs (other than TCRs self-converted from ARRs) included in a single submission of Bids and Offers for a TCR Auction, calculated pursuant to sections 5A.4 and 5A.5, without netting, is greater than the Credit Customer's available Financial Security, then the entire submission is credit disapproved and the Bids and Offers will not be included in the TCR Auction.

5A.6.3 If the sum of the ETCRE Bid and ETCRE Offer for all TCRs included in a single submission of ARR self-conversions for a TCR Auction, calculated pursuant to sections 5A.4 and 5A.5, with netting as described in Section 5A.3.5 of this Attachment X, is less than the Credit Customer's available amount of Financial Security, then the submission is credit approved for inclusion in the TCR Auction.

5A.6.4 If the sum of the ETCRE Bid and ETCRE Offer for all TCRs included in a single submission of ARR self-conversions for a TCR Auction, calculated pursuant to sections 5A.4 and 5A.5, with netting as described in Section 5A.3.5 of this Attachment X, is greater than the Credit Customer's available Financial Security, then the entire submission is credit deficient and the ARR self-conversion will not be included in the TCR Auction unless satisfactory alternate credit arrangements are made.

5A.7 Updated ETCRE Calculation Post TCR Auction. After the clearing of a TCR Auction, the TCR Portfolio Credit Requirement will be updated to reflect the TCRs awarded in the TCR Auction, including the acquisition cost for TCR Bids that cleared the TCR Auction and the disposal cost for TCR Offers that cleared the TCR Auction. For TCR Bids, the TCR acquisition cost is calculated as the product of the Auction Clearing Price times the awarded megawatts times the duration of a given TCR. For TCR Offers, the TCR disposal cost is calculated as the product of the ~~dollar per megawatt profit or loss~~ Auction Clearing Price times the megawatts sold times the duration of the TCRs sold. The ETCRE Hold portion of the TCR Portfolio Credit Requirement will be updated to reflect the actual TCRs in the portfolio.

Comment [TRR113.31]: TRR113. RTWG approved on 10/24/2013.

5A.8 Total TCR Credit Requirement. The total Financial Security requirement associated with the Credit Customer's holding of TCRs and participating in the TCR Auctions is the Total TCR Credit Requirement. The Total TCR Credit Requirement for a Credit Customers is the sum of (i) the TCR Portfolio Credit Requirement for the Credit Customer's TCR portfolio, reflecting all of the TCRs held by the Credit Customer, calculated pursuant to section 5A.3; (ii) the Financial Security required for the Credit Customer's participation in a TCR Auction, determined by the credit approved ETCRE Bid, calculated pursuant to section 5A.4, and ETCRE Offer, calculated pursuant to section 5A.5, for a TCR Auction that has not yet occurred; (iii) all TCR charges or credits that have been invoiced but not yet paid; and (iv) TCR charges or credits that have been calculated but not yet invoiced.

Total TCR Credit Requirement =
TCR Portfolio Credit Requirement + ETCRE Bid + ETCRE Offer + (ITCRC + CTCRC)

Where,

TCR Portfolio Credit Requirement is calculated pursuant to section 5A.3.

ETCRE Bid is the sum of the ETCRE Bid amounts for the Credit Customer's credit approved Bids for an auction that has not yet occurred, as calculated pursuant to section 5A.4, without netting ETCRE Bid or ETCRE Offers in a submission.

ETCRE Offer is the sum of the ETCRE Offer amounts for the Credit Customer's credit approved Offers for an auction that has not yet occurred, as calculated pursuant to section 5A.5, without netting ETCRE Bid or ETCRE Offers in a submission.

ITCRC is the Invoiced TCR Charges (all TCR charges or credits that have been invoiced but not yet paid). If the sum of ITCRC and CTCRC for a Credit Customer is negative, then zero will be included for the sum of ITCRC and CTCRC in the calculation of the Total TCR Credit Requirement.

CTCRC is the Calculated TCR Charges (TCR charges or credits that have been calculated but not yet invoiced). If the sum of ITCRC and CTCRC for a Credit Customer is negative, then zero will be included for the sum of ITCRC and CTCRC in the calculation of the Total TCR Credit Requirement.

5A.8.1 If a Credit Customer's available Financial Security is less than its Total TCR Credit Requirement, then the Credit Customer shall be required to provide additional Financial Security within two (2) Business Days from receipt of notice of such violation. Failure to provide such Financial Security is a Default under this Credit Policy.

5A.9 Transfer of TCRs. If a Credit Customer proposes to sell or acquire TCRs through a bilateral transfer with another Credit Customer, SPP will evaluate the effect of the proposed transfer on the Total TCR Credit Requirement of each party to the proposed bilateral transfer and determine if both the buyer and the seller have sufficient Financial Security for the bilateral transfer to occur. SPP approval of such bilateral transfers, based on whether both the buyer and seller have provided sufficient Financial Security to support the transfer, is required prior to such transfers.

5A.9.1 For the seller in a bilateral transfer, SPP calculates the impact of the proposed transfer on the TCR Portfolio Credit Requirement that would result from the removal of the TCRs that are the subject of the proposed bilateral transfer from the TCR portfolio of the Credit Customer that is the seller in the bilateral transfer.

5A.9.2 For the buyer in a bilateral transfer, SPP calculates the impact of the proposed transfer on the TCR Portfolio Credit Requirement that would result from the addition of the TCRs that are the subject of the proposed bilateral transfer from the TCR portfolio of the Credit Customer that is the buyer in the bilateral transfer.

5A.9.3 If multiple TCRs are included in a single proposed bilateral transfer, both parties to the bilateral transfer must have sufficient Financial Security for the transfer of all of the TCRs in the proposed transfer.

5A.9.4 SPP, in its sole discretion, may approve bilateral transfers if a Credit Customer does not have sufficient Financial Security to support the transfer, but the transfer would result in a reduction in Total TCR Credit Requirement for that Credit Customer.

5A.9.5 The bilateral TCR transfer price is not included in SPP's evaluation of a bilateral transfer of TCRs. After an approved bilateral transfer of TCRs is completed, each Credit Customer's Total TCR Credit Requirement is updated.

5A.10 Return of TCR Financial Security. A Credit Customer may request that SPP return any Financial Security no longer required to hold TCRs or participate in TCR Auctions if it is not needed to support other market services. SPP may limit the frequency of such requested Financial Security returns, provided that Financial Security returns will be made by SPP at least once per month, if requested by a Credit Customer.

Proposed Criteria Language Revision
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N/A