



Business Requirements Specification

Congestion Revenue Rights Clawback Rule Modification

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1. Introduction

1.1 Purpose

The purpose of this document is to capture and record a description of what the Users and Business Stakeholders of the project wish to obtain by providing high-level business requirements. This document establishes the basis for the agreement between the initiators and implementers of the project. The information in this document serves as input to determining the scope of projects and to all Business Process Modeling and System Requirements Specifications efforts.

Business requirements are what must be delivered to provide value for the Users and Business Stakeholders. Systems, software, and processes are the ways (how) to delivery, satisfy or meet the business requirements (what).

During the intertie liquidity workshop held in 2015, one of items were identified that could address real-time intertie liquidity: Currently, the CRR Clawback rule, under Section 11.2.4.6 of the ISO tariff, treats a day-ahead intertie award that is reduced in real-time as a “virtual award.”

The ISO is proposing modifications to which transactions are considered “virtual awards” and therefore subjected to the CRR Clawback rule procedures.

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2. Details of Business Need/Problem

2.1 Description

- During the intertie liquidity workshop held in 2015, one of items were identified that could address real-time intertie liquidity: Currently, the CRR Clawback rule, under Section 11.2.4.6 of the ISO tariff, treats a day-ahead intertie award that is reduced in real-time as a “virtual award.”
- The ISO proposes conditions by which a schedule change between day-ahead and real-time will not be considered a “virtual award”, thereby, not subjecting the change to the CRR Clawback rule procedures.
- The ISO is proposing modifications to which transactions are considered “virtual awards” and therefore subjected to the CRR Clawback rule procedures. The two modification are:
 - 1) Import and export changes that meet certain conditions are no longer subject to CRR Clawback rules.
 - a. If import bid \leq day-ahead price, then the import is not considered a virtual award.
 - b. If export bid \geq day-ahead price, then the export is not considered a virtual award
 - 2) Convergence bids at default load aggregation points and trading hubs are no longer exempt from CRR Clawback rules.
- The rebidding of day-ahead import/export schedules into the FMM is beneficial for real-time intertie liquidity.
- The external transmission is already procured and compensated by the payment for the day-ahead schedule. This flexibility can be bid into the FMM without incurring an additional transmission charge external to the ISO.

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3. Business Requirements

The sections below describe the Business Processes and the associated Business Requirements involved in the project. These may represent high level functional, non-functional, reporting, and/or infrastructure requirements. These business requirements directly relate to the high level scope items determined for the project.

3.1 Business Process: General

3.1.1 Business Requirements

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
CRRCBM-BRQ010	ISO shall inform Market Participants of CRR annual allocation/auction about the activation dates and the modified CRR Clawback rules. <u>Note:</u> There are no CRR system changes.	Core	Manual

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3.2 Business Process: CRR Clawback Rules

3.2.1 Business Requirements

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
CRRCBM-BRQ110	<p>CRR Clawback exemption rules for import/export schedule shall be modified as follows:</p> <ol style="list-style-type: none"> i. If RTM import submitted (clean) bid \leq original DA (IFM) LMP price (not the corrected LMP), then the import shall not be considered a virtual award. ii. If RTM export submitted (clean) bid \geq original day-ahead (IFM) LMP price (not the corrected LMP), then the export shall not be considered a virtual award. iii. If RTM import/export submitted (clean) bid/self-schedule in RTM is less than the DA schedule, then the difference shall still be subject to CRR Clawback rule. iv. There shall not be any changes related to Circular Schedules. If the schedule in real-time market is identified as circular schedule, it shall be subject to CRR Clawback. <p>Clarifying Notes:</p> <ul style="list-style-type: none"> • The CRR Clawback exemption rules shall be applied to the following resources: <ul style="list-style-type: none"> ○ MF-registered resources. ○ Transaction ID's • The CRR Clawback exemption rules shall not be applied to the following resource types: <ul style="list-style-type: none"> ○ ETSR's ○ Internal scheduled resources (resource names that start with "ciso_"). These are non-bid, non-settled resources. • See Appendix-2 for examples. 	Core	CRR Clawback
CRRCBM-BRQ120	<p>CRR Clawback rules for CB on TH's and LAP's shall be modified as follows:</p> <p>A configurable table exists in the Clawback process to exempt certain APnodes, for example THs and LAPs from the flow impact process (aka STEP-1). The table shall be modified to include an end date in addition to the existing start date field. The process shall read the start and end date fields and exempt the APnode entries only when the record is active, as determined by comparing the run date with the start and end</p>	Core	CRR Clawback

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ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
	dates.		
CRRCBM-BRQ125	End dates described in CRRCBM-BRQ120 shall be set so that the resources will no longer be exempted after the effective date of the policy associated with this BRS.	Core	Manual
CRRCBM-BRQ140	The modified CRR Clawback rules shall be activated by Spring 2017.	Core	CRR Clawback

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4. Appendices

4.1 Appendix-1: Acronym Definition

Acronym	Definition
APnode	Aggregate Price Node
BRS	Business Requirement Specifications
CAISO	California Independent System Operator
CB	Convergence Bidding / Convergence Bid
CISO	California Independent System Operator
CRR	Congestion Revenue Right
DA	Day-Ahead
DLAP	Default Load Aggregation Point
ETSR	Energy Transfer System Resources
FMM	Fifteen Minute Market
ID	Identifier
IFM	Integrated Forward Market
ISO	California Independent System Operator
LAP	Load Aggregation Point
LMP	Locational Marginal Price
MF	Master File
MOS	Manage Operations Support & Settlements
RT	Real-Time
RTM	Real-Time Market

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Acronym	Definition
TH	Trading Hub

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4.2 Appendix-2: Examples for CRRCBM-BRQ110

Here are some examples of how imports and exports shall be treated:

Import:

DA award 100 MW, uncorrected LMP \$50

RT bid: Self-Schedule 50 MW, bids as follows:

(50, \$40)

(60, \$60)

(70, \$60)

In other words the resource is self-scheduling 50 MW, bidding 10 MW at \$40 and another 10 at \$60.

Expected result: from this RT bid, the self-scheduled portion will be automatically exempted. The 10 MW at \$40 would also be exempted, since it is less than the uncorrected LMP. The 10 MW at \$60 would not be exempted, since it is greater than the uncorrected LMP, and would be passed along to the rest of the Clawback process. Also the 30 MW unbid portion (100-70) would be passed along to the rest of the Clawback process.

Export:

DA award 100 MW, uncorrected LMP \$50

RT bid: SS 50 MW, bids as follows:

(50, \$60)

(60, \$40)

(70, \$40)

In other words the resource is self-scheduling 50 MW, bidding 10 MW at \$60 and another 10 at \$40.

Expected result: from this RT bid, the self-scheduled portion will be automatically exempted. The 10 MW at \$60 would also be exempted, since it is greater than the uncorrected LMP. The 10 MW at \$40 would not be exempted, since it is less than the uncorrected LMP, and would be passed along to the rest of the Clawback process. Also the 30 MW unbid portion (100-70) would be passed along to the rest of the Clawback process.