California ISO

Business Requirements Specification

Settlements Performance Improvements

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Revision History

Date	Version	Description
2/20/2018	1.0	Creation of Document
7/26/2018	1.1	Addition of BRQ014, BRQ015, BRQ016
8/10/2018	1.2	Removal of BRQ016 per Market Participants request (Release User Group). Adding requirements (BRQ017, BRQ018, and BRQ019) that have been discussed under the Tariff Clarification Filing Process initiative (2018 Draft Tariff Clarifications Language - Revised Martix). The technical documentation for these requirements can be found at the following link: http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=89927D64-5FA3-42D0-8A37-AB6755D2D733 Specific Charge Codes: CG PC Real Time Energy Quantity v5.18, CC6090, CC6194, CC6196, CC6294, CC6296, CC6594, CC6596.

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	Technology	**Template Version:**	**4.3**
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Settlements Performance Improvements **Business Requirements Specification - Planning**		**Date Created:**	**8/10/2018**

Table of Contents

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). The Initial BRS will provide sufficient information to determine the scope of the project and will provide the functional business requirements so that the Architecture Decision can be made. Following the Architecture Decision, the remaining non-functional business requirements, such as data, performance, web services, and security can be added to complete the Final BRS.

The purpose of this project is to implement Settlements performance improvements to statement generation processes by Fall 2018 Release. The additional market data created as the ISO extends EIM opportunities and new resources to surrounding Balancing Authorities (BA) throughout the West, has caused performance issues in the existing Settlements systems.

The existing file structure is a risk. There is a risk in the creation and posting of the actual bill determinant file. To mitigate the risk, we will break up the bill determinant contents broken into smaller file sizes.

This project means to address the performance improvements required to successfully support current stakeholders and additional EIM entities.

The scope of the Settlements Performance Improvements include:

    a. Performance improvements for Post Bill Determinant Mapping process
        i. Non-production storage issue causing delays to the statement publication
    b. Performance improvements of Statement Generation (BD File Size issue):
        i. Daily Statements generation
        ii. Monthly Statements and Invoice generation
    c. Changes related to the XML file split
    d. Ccode removal

2 Business Impacts

2.1 High Level Description of Business Process

Manage Market Billing & Settlements (MOS LII) has been reviewed – No process changes needed. Listed for reference purposes only.

2.2 Business Practice Manual (BPM)

BPM	Description of Impact(s)
Managing Full Network Model	N/A
Congestion Revenue Rights	N/A
Market Instruments	N/A
Outage Management	N/A
Reliability Requirement	N/A
Market Operations	N/A
Compliance Monitoring	N/A
Metering	N/A
Scheduling Coordinator Certification & Termination	N/A
Rules of Conduct Administration	N/A
BPM Change Management	N/A
Definitions & Acronyms	N/A
Settlements & Billing	Yes – updates to the Settlements configuration guide
Credit Management	N/A
Candidate CRR Holder	N/A
Transmission Planning Process	N/A
Direct Telemetry	N/A
Distributed Generation for Deliverability	N/A
Energy Imbalance Market (EIM)	N/A
Generator Interconnection Procedure (GIP)	N/A
Generator Interconnection and Deliverability Allocation Procedures	N/A

BPM	Description of Impact(s)
Generator Management	N/A
Managing Full Network Model	N/A

2.3 Other

Impact:	Description: (optional)
Market Simulation	Yes
Market Participant Impact	Yes
User Acceptance Testing (UAT)	No
Internal Training	No
External Training	No
Policy Initiative	No
Vendor	No
Architectural Framework and Roadmap	Yes

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: Manage Settlements and Billing

3.1.1 Business Requirements

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
SPI-BRQ002	Settlement informational file interface (SIFI) shall generate the common bill determinant file per BAA. For example, there will be one common BD file for the CAISO BAA and a separate common BD file for each EIM BAA entity.	Core	Settlements
SPI-BRQ003	All of the common BD files shall be made available to all ISO market participants that have access to the Settlement system.	Core	Settlements
SPI-BRQ004	Settlement file specification shall be modified to distinguish between the common CAISO BD file and the common EIM BAA files.	Core	Settlements
SPI-BRQ005	Each EIM BAA file must be distinguishable by their file name. For example: The BD file name must capture the EIM entity name.	Core	Settlements
SPI-BRQ006	MRI-S shall publish all the new common BD files in addition to the common CAISO BD file.	Core	Settlements

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
SPI-BRQ007	SFTP shall make available all the new common BD files in the common CAISO folder along with the common CAISO BD file.	Core	Settlements
SPI-BRQ008	The ISO shall eliminate reporting of IndexA from the settlement files since the hierarchy reported in the IndexA field can be derived from the configuration file. This applies to all existing Settlement files that have IndexA defined within its XSD structure. Note: No XSD changes shall be needed as confirmed by the model design engineer.	Core	Settlements
SPI-BRQ009	The ISO shall eliminate reporting of Ccode from the settlement files since it can be derived from the configuration file. This applies to all existing Settlement files that have Ccode defined within its XSD structure. Note: No XSD changes shall be needed as confirmed by the model design engineer.	Core	Settlements
SPI-BRQ014	System must have a mechanism to suppress the processing of 0 and null values based on an analysis of impacted bill determinants. Note: Based on sample trade date, 30% of the records stored are either null or 0 for the whole date and included in the processing, calculation and statement publication. The processing of these records has a multiplier effect due to hierarchical roll-up of the calculation.	Core	Settlements

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ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
SPI-BRQ015	System shall stop displaying path 15 and path 26 data from 11/1 onward. Note: This relates to provisions specified in the 2018 Tariff Bucket Filing.	Core	OASIS
SPI-BRQ017	Settlement Interchange Schedule data for Intertie Schedule resources for the initial statement shall be based on the total Expected Energy and dispatch of the resources as calculated in the Real-Time Market (as modified by any applicable corrections to the Dispatch Operating Point for the resource).	Core Tariff 11.1.4	Settlements
SPI-BRQ018	Settlements shall not estimate Unaccounted for Energy, the rescission of payments for Regulation Up and Regulation Down, and Real-Time Imbalance Energy Offset adjustment for the initial statement.	Core Tariff 11.1.4	Settlements
SPI-BRQ019	For a given Settlement period, the difference between the upwards Ancillary Service (AS) cost and the sum of the total AS obligation and neutrality adjustments shall be allocated to all Scheduling Coordinators in proportion to their upward AS obligation (before taking into consideration the Inter-SC trades for AS). Note: The ISO shall exclude EIM Transfers between the ISO and an EIM entity from the calculation of the upwards AS obligation for this neutrality requirements.	Core Tariff 11.10.6	Settlements