



# Business Requirements Specification

## OSI Enhancements 2022

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### Revision History

Date	Version	Description
04/22/2022	1.0	Creation of Document
08/10/2022	1.1	Added RC Portal requirements (BRQ318, BRQ319, BRQ320)

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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 determine the scope of projects and all Business Process Modeling and System Requirements Specifications (SRS) 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 deliver, satisfy, or meet the business requirements (what).

### Background:

- Operation System Improvements Enhancements 2022 focuses on delivering timely systems improvements that support day-to-day needs of Operations (OE), Operations Engineering Services (OES), and Market Services (MSE) groups. The project aims to primarily improve market robustness, performance, and the technology foundation for system grid reliability by updating functionality and interfaces to reduce workarounds, automating manual processes and addressing minor defects or functionality enhancements identified in by the business units.
- The secondary goal for this project is to deliver needed system improvements that are identified through the process of resolving settlement disputes. Creating a project dedicated to identifying and expediting the remediation and reduction of the software issues and sources of settlements disputes has led to improved customer satisfaction and reduction of the inefficiencies and effort required to resolve these disputes. This request proposes an on-demand setup where issues and disputes created during normal operations are identified, investigated and evaluated for impact, diagnosed for root cause, specified for remediation and negotiated with vendor, and fixes implemented in production in an expedited manner.

**Note:** This External BRS only covers high priority items that have Market Participant impacts for OSI Enhancements 2022.

## 2 Intellectual Property Ownership

Intellectual Property covers a broad array of information and materials, including written works, computer programs, software, business manuals, processes, symbols, logos, and other work products. Determining ownership of Intellectual Property is very important in preserving the rights of the California ISO, and helps to avoid Intellectual Property infringement issues. In considering the business requirements or service requirements to be performed, the business owner of the project must determine Intellectual Property Ownership.

### 2.1 Guidelines

Intellectual Property ownership must be considered by all applicable stakeholders before the services are performed. The level of analysis is two-fold:

1. One, the business owner must determine if the Intellectual Property necessary to perform the services is owned by the California ISO or whether it must be obtained from a third party. Once the California ISO has secured the proper Intellectual Property rights to perform the services (i.e., the Intellectual Property is owned by the California ISO or we have licensed it from a third party), the California ISO can undertake the next step.
2. The second step in the analysis is to consider whether new Intellectual Property will be created as a result of the business requirements or service requirements to be performed, and how that Intellectual Property will be owned and protected by the California ISO.

In order to assist the business owner in the analysis previously described, refer to the California Intellectual Property Policy available at:

<http://www.caiso.com/rules/Pages/LegalPoliciesNotices/Default.aspx>, which provides a brief tutorial on what Intellectual Property is and how the California ISO can protect its Intellectual Property. Contact the Legal Department if you have any questions regarding Intellectual Property.

**There are no impacts to intellectual property based on the requirements stated in this document.**

## 2.2 Acronyms and Definitions Table

Acronym	Definition
ADS	Automated Dispatch System
RC	Reliability Coordinator
RTM	Real-Time Market

## 3 Details of Business Need/Problem

### 3.1 Description

Business Opportunity/Problem Statement:	
<b>What:</b>	The project aims to primarily improve market robustness, performance, and the technology foundation for system grid reliability by updating functionality and interfaces to reduce workarounds, automating manual processes and addressing minor defects or functionality enhancements identified in by the business units.
<b>When:</b>	Refer to Release Users Group (RUG) postings for updated timelines.
<b>Why do we have this opportunity/problem:</b>	Delivering timely systems improvements that support day-to-day needs of Operations.
<b>Who does this opportunity/problem impact:</b>	Customer Service, Market Participants

## 4 Business Impacts

### 4.1 High-Level Description of Business Process

Business Process Framework (Level I)	Related Business Process Impacted (Level II)	Impact Description
<u>Manage Market &amp; Reliability Data &amp; Modeling (MMR)</u>	Not Impacted	Not Applicable
<u>Develop Infrastructure (DI)</u>	Not Impacted	Not Applicable
<u>Develop Markets (DM)</u>	Not Impacted	Not Applicable
<u>Manage Human Capabilities (MHC)</u>	Not Impacted	Not Applicable
<u>Manage Market &amp; Reliability Data &amp; Modeling (MMR)</u>	Not Impacted	Not Applicable
<u>Manage Operations Support &amp; Settlements (MOS)</u>	Not Impacted	Not Applicable
<u>Plan &amp; Manage Business (PMB)</u>	Not Impacted	Not Applicable
<u>Support Business Services (SBS)</u>	Not Impacted	Not Applicable
<u>Support Customers &amp; Stakeholders (SCS)</u>	Not Impacted	Not Applicable

## 4.2 Business Practice Manuals (BPM)

BPM	Description of Impact(s)
Energy Imbalance Market (EIM)	<b>Yes</b> <ul style="list-style-type: none"> <li>BRQ177: Updates to BPM language in section 11.3.13.</li> </ul>
Market Operations	Not Impacted
Outage Management	Not Impacted
Reliability Requirements	Not Impacted
BPM Change Management	Not Impacted
Candidate CRR Holder Registration	Not Impacted
Compliance Monitoring	Not Impacted
Congestion Revenue Rights	Not Impacted
Credit Management and Market Clearing	Not Impacted
Definitions & Acronyms	Not Impacted
Demand Response	Not Impacted
Direct Telemetry	Not Impacted
Distributed Generation for Deliverability	Not Impacted
Generator Interconnection and Deliverability Allocation Procedures	Not Impacted
Generator Interconnection Procedure (GIP)	Not Impacted
Generator Management	Not Impacted
Managing Full Network Model	Not Impacted
Market Instruments	Not Impacted
Metering	Not Impacted
Reliability Coordinator Services	Not Impacted
Rules of Conduct Administration	Not Impacted
Scheduling Coordinator Certification and Termination	Not Impacted
Settlements and Billing	Not Impacted
Transmission Planning Process	Not Impacted

### 4.3 Other

Impact	Description (optional)
Market Simulation	<p><b>Yes</b>, refer to specific BRQs for more information.</p> <p><b>Unstructured Market Simulation:</b></p> <ul style="list-style-type: none"> <li>• BRQ003</li> </ul>
Market Participant Impact	<p><b>Yes</b>, refer to specific BRQs for more information.</p> <ul style="list-style-type: none"> <li>• BRQ003</li> <li>• BRQ177</li> <li>• BRQ318, BRQ319, BRQ320, BRQ321</li> </ul>
External Training	<p><b>Yes</b>, refer to specific BRQs for more information.</p> <ul style="list-style-type: none"> <li>• BRQ003</li> <li>• BRQ177</li> <li>• BRQ318, BRQ319, BRQ320, BRQ321</li> </ul>
Policy Initiative	Not Applicable
Development/Vendor	<b>Yes</b>
Architectural Framework and Roadmap	Design will follow existing architectural framework and will align with the roadmap.

## 5 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.

## 5.1 General: OSI Enhancements 2022 Requirements

### 5.1.1 Business Requirements: Automated Dispatch System (ADS)

ID#	Business Feature	Req. Type	Potential Application(s) Impacted
OSI22 – BRQ003	<p>System must have the capability to "update existing configuration" across profiles &amp; "have shared displays synchronized."</p> <p>Note: If profile saved user to reload screen to view updated data.</p> <p><b>Impacted:</b> External UI/API, External Training, Customer Outreach, Unstructured Market Simulation</p>	Core	ADS

### 5.1.2 Business Requirements: RC Portal

ID#	Business Feature	Req. Type	Potential Application(s) Impacted
OSI22 – BRQ318	<p>System must have workflow for when reports are submitted to the RAS Review library for the OEs to mark the document as "Reviewed" or "Needs More Info".</p> <p>System must have a field for comments if reviewed and/or what information is needed.</p> <p><b>Impacted:</b> User Interface, User Acceptance Testing, Internal Training, External Training, Customer Outreach</p>	Core	RC Portal
OSI22 – BRQ319	<p>TOP-003 Library must have a title.</p> <p><b>Impacted:</b> User Interface, User Acceptance Testing, Internal Training, External Training, Customer Outreach</p>	Core	RC Portal
OSI22 – BRQ320	<p>System must have a view that filters the library and alerts the user of changes to that specific view when documents become available or changed.</p> <p><b>Impacted:</b> User Interface, User Acceptance Testing, Internal Training, External Training, Customer Outreach</p>	Core	RC Portal

### 5.1.3 Business Requirements: Real-Time Market (RTM)

ID#	Business Feature	Req. Type	Potential Application(s) Impacted
OSI22 – BRQ177	<p>"Use Advisory" solution instead of "Use Previous" solution when the RTD threshold engages.</p> <p>The enhancement requirements are listed below:</p> <ul style="list-style-type: none"> <li>• When an EIM threshold is triggered, the default should be to send the advisory solution instead of the current function of sending the previous solution</li> <li>• Before sending the advisory solution, the EIM thresholds should be checked against the advisory solution and if the threshold is not triggered, then send advisory. If the threshold is triggered then send previous solution.</li> <li>• The RTD and RTPD dispatch control UIs should have an extra tab where the advisory dispatch information can be shown to the operator.</li> </ul> <p>Note: See HPQC Attachment for examples.</p> <p><b>Impacted:</b> EIM BPM section 11.3.13, External Training, Customer Outreach</p>	Core	RTM

## 5.2 Business Process: Market/Business Simulation

This section shall provide a basis for the development of the Market/Business Simulation Scenarios. These requirements will provide guidance on the market participant impacts, inputs into the Scenarios, endpoints to the Scenarios and reasons for potential Scenarios. The guidance on market participant impacts shall be gathered from the requirements that impact rules, interfaces, applications/reports, new system processes, new/modified data models, and new user roles. The source and sink systems shall be determined through the development of the system context diagram and the web service requirements. The *Reason for the Potential Scenario* column will be to offer guidance regarding what potential scenarios, and their context, may be needed for this project. This section applies to all policy development projects, market enhancements, technology enhancements, operation enhancements, Energy Imbalance Market (EIM) implementations, and Reliability Coordination (RC) service implementations.

In the Reason for Potential Scenario column, select one or more of the following reasons:

1. **Rule Impacts:** Generalized changes in market rules, bidding rules, settlements rules, market design changes, or other business rules.
2. **Interface changes:** Changes that impact templates (e.g., the Resource Adequacy (RA) supply plan), user interface (UI), and application programming interface (API) (e.g., retrievals of new shadow settlement data).
3. **New application/report:** Changes that cause addition/modification of market software or reports, especially when market data input is required by the market participant.
4. **New system process:** Modification of data flow in systems, especially if the new process requires the market participant to demonstrate proficiency prior to production.
5. **New/Modified model data:** Addition or substantial modification of model data as a market solution or export provided by the ISO.
6. **New user role:** The addition or modification of access permissions for a user role applied to specific business units within an EIM entity or market participant organization (e.g., Load Serving Entity (LSE) as a Local Regulatory Authority (LRA) role). Scenarios are beneficial for market participants taking on a new function or process within their organization.

### 5.2.1 Business Requirements

ID#	Guidance on Market Participant Impacts	Source System	Sink System	Reason for Potential Scenario
MKT – 002	<b>Unstructured Market Simulation:</b> User can update an existing “Shared” profile and then check if it’s all displays are synchronized across all shared profile.	N/A	ADS (BRQ003)	User Interface changes