

Business Requirements Specification

Operations Foundational Improvements – Import Allocation Automation

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1 Introduction

1.1 Purpose


This document describes high level business requirements to support the Operations Foundational Improvement initiative as it relates to **the** import allocation process in Steps 8 through 13.

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2 Details of Business Need/Problem

2.1 Description


Business Opportunity/Problem Statement:	
What:	The project aims to primarily automate the import allocation OES processes in steps 8-13.
When	Refer to Release Users Group (RUG) postings for updated timelines.
Why do we have this opportunity/problem:	Delivering timely systems improvements that support day-to-day needs of Operations (OE), Operations Engineering Services (OES), and Market Services (MSE) groups.

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3 Business Impacts

3.1 Business Practice Manuals (BPM)

BPM	Description of Impact(s)
Reliability Requirements	Yes Updates for the Import Allocations Process.

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4 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.

4.1 Business Process:

4.1.1 Business Requirements: CIRA

ID#	Business Feature	Req. Type	Potential Application(s) Impacted
OSI22 – BRQ024 External BRS	System (CIRA) must store all submittal requests from all users for the following steps: <ul style="list-style-type: none"> • Step 8 • Step 9 • Step 11 • Step 13 	Core Global requirement	CIRA



<p>OSI22 – BRQ25</p> <p>External BRS</p>	<p>System (CIRA) must have the following ribbon tabs for OES steps 8 through 13 on “CIRA -> Plans -> Manage Import Allocation”:</p> <ul style="list-style-type: none"> • Step 8 – Transfers of Import Capability • Step 9 – Initial SC Request to Assign Remaining Import Capability by Intertie • Step 10 – Notification of Initial Remaining Import Capability Assignments and Unassigned Capability • Step 11 – Secondary SC Request to Assign Remaining Import Capability by Intertie • Step 12 – Notification of Secondary Remaining Import Capability Assignments and Unassigned Capability • Step 13 – Requests for Balance of Year Unassigned Available Import Capability 	<p>Core</p>	<p>CIRA</p>
<p>OSI22 – BRQ027</p> <p>External BRS</p>	<p>Step 8 of OES Import Allocation process:</p> <p>System (CIRA) must have a user interface on “CIRA -> Plans -> Manage Import Allocations -> Step 8” for LSE to transfer import capability from one LSE to another LSE.</p> <ul style="list-style-type: none"> ○ Transferor ○ Transferee ○ MW ○ Start time/End time ○ Price (\$/MW) 	<p>Core</p>	<p>CIRA</p>



<p>OSI22 – BRQ028</p> <p>External BRS</p>	<p>Step 8 of OES Import Allocation process:</p> <p>System (CIRA) must have user interface on “CIRA -> Plans -> Manage Import Allocations -> Step 8” that displays to all users all completed import capability transfers.</p>	<p>Core</p>	<p>CIRA</p>
<p>OSI22 – BRQ029</p> <p>External BRS</p>	<p>Step 8 of OES Import Allocation process:</p> <p>System (CIRA) must have user interface on “CIRA -> Plans -> Manage Import Allocations -> Step 8” that displays to internal ISO user all completed import capability transfers.</p>	<p>Core</p>	<p>CIRA</p>



OSI22 – BRQ030 External BRS	Step 8 of OES Import Allocation processes: System (CIRA) must have a validation to ensure that the transferor has sufficient Remaining Import Capability (RIC) in MW. Implementation note: When the transferor submits the transfer the record is finalized and no further action is required from the transferee side to accept or reject.	Core	CIRA
OSI22 – BRQ191 External BRS	Step 8 of OES Import Allocation processes: System (CIRA) must have a validation to ensure that the transferor is the one who is doing the transfer. Implementation note: There is a similar process for bi-lateral trade of import capability, reference if needed. Must ensure transferor has proper access provisioning.	Core	CIRA
OSI22 – BRQ031 External BRS	Step 8 of OES Import Allocation process: System (CIRA) must have configurable parameters in the UI to allow the internal ISO user to set the start/end date and time for this step's submissions.	Core	CIRA
OSI22 – BRQ032	Step 8 of OES Import Allocation process:	Core	CIRA



External BRS	<p>System (CIRA) must prevent the SCs of LSEs from submitting after the time/date deadline.</p> <p>Implementation note: They will receive a message in the UI that they cannot submit after the deadline.</p>		
OSI22 – BRQ033 External BRS	<p>Step 8 of OES Import Allocation process:</p> <p>System (CIRA) must have the capability for users to update/edit the submitted requests up to the end of the date/time deadline.</p>	Core	CIRA
OSI22 – BRQ034	<p>Step 8 of OES Import Allocation process:</p> <p>System (CIRA) must have a new UI that tracks the annual Import Allocation process for this step.</p>	Core	CIRA



External BRS			
OSI22 – BRQ035 External BRS	Step 9 of OES Import Allocation process: System (CIRA) must have user interface on “CIRA -> Plans -> Manage Import Allocations -> Step 9” for LSE(s) to submit requests for Import Capability they want on each Branch Group (Time constraint).	Core	CIRA
OSI22 – BRQ036 External BRS	Step 9 of OES Import Allocation process: System (CIRA) must have the capability for one or more LSEs to submit requests for Import Allocation on BGs.	Core	CIRA
OSI22 – BRQ037	Step 9 of OES Import Allocation process: System (CIRA) must have configurable parameters in the UI to allow the internal ISO user to set the start/end date and time for this step’s submissions.	Core	CIRA



External BRS			
OSI22 – BRQ038 External BRS	Step 9 of OES Import Allocation process: System (CIRA) must prevent external users (SCs of LSEs) from submitting after the date/time deadline. Implementation note: Users will receive a message in the UI that they cannot submit after the deadline	Core	CIRA
OSI22 – BRQ039 External BRS	Step 9 of OES Import Allocation process: System (CIRA) must have the capability for users to update/edit the submitted requests up to the end of the date/time deadline.	Core	CIRA
OSI22 – BRQ040 External BRS	Step 9 of OES Import Allocation process: System (CIRA) must have a new UI that tracks the annual Import Allocation process for this step.	Core	CIRA



External BRS	<p>System (CIRA) must have a validation to check whether the LSEs have enough Import Capability at the time of the submission:</p> <ul style="list-style-type: none"> • If the LSE has sufficient Import Capability then the request passes this validation step • If the LSE does not have sufficient Import Capability then the request fails and no submission is made. The RIC MW limit is tracked across submissions for a LSE 		
OSI22 – BRQ045 External BRS	<p>Step 9 of OES Import Allocation process: System must have the capability to check whether BGs have enough Import Capability.</p> <ul style="list-style-type: none"> • If the BG has sufficient Import Capability then the request passes this validation step • If the BG does not have sufficient Import Capability then the request fails and no submission is made. This is specific to each request where a single requested MW cannot exceed BG RIC. 	Core	CIRA
OSI22 – BRQ046 External BRS	<p>Step 10 of OES Import Allocation process: If a BG is over allocated, System (CIRA) must allocate the import capability on the BG to the LSE based on the Load Share Ratio.</p> <p>Example: BG1 has 100 MW of RIC. LSE1 requests 50 MW. LSE2 requests 40 MW. LSE3 requests 30 MW. System shall allocate the 100 MW on the BG to the LSEs based on their loadshare ratio. $LSE1 = 100MW * 0.42$ (assuming 0.42 is the loadshare ratio). If LSE1 has the highest loadshare ratio they may get up to their requested MW.</p>	Core	CIRA



OSI22 – BRQ047 External BRS	<p>Step 10 of OES Import Allocation process: System (CIRA) must have a report with the remaining import capability per branch group (BG) after processing all of the requests in steps 8 and 9.</p> <p>Implementation note: Report to be displayed on the UI and be downloadable.</p>	Core	CIRA
OSI22 – BRQ048 External BRS	<p>Step 10 of OES Import Allocation process: System (CIRA) must have the capability for users to initiate the validation of step 10 after the run of the report deadline in step 9.</p> <p>Note: See step 9 for validation information.</p> <p>Implementation note:</p> <ul style="list-style-type: none"> • CIRA will be running an automated job after deadline of Step 9 and • Manual option is also available for the calculation to the ISO User. <p>Note that manual option is available only to ISO User.</p>	Core	CIRA




OSI22 – BRQ049 External BRS	<p>Step 11 of OES Import Allocation process:</p> <p>System (CIRA) must have user interface on “CIRA -> Plans -> Manage Import Allocations -> Step 11” for LSE(s) to submit requests for Import Capability they want on each Branch Group (Time constraint).</p> <p>Implementation note: Note that Step 11 is a repeat of step 9. In step 11 start and end date is set after step 10. The reference data in step 11 will come from data up to step 10.</p>	Core	CIRA
OSI22 – BRQ050 External BRS	<p>Step 11 of OES Import Allocation process:</p> <p>System (CIRA) must have the capability for one or more LSE(s) to submit requests for Import Allocation on BGs.</p>	Core	CIRA
OSI22 – BRQ051 External BRS	<p>Step 11 of OES Import Allocation process:</p> <p>System (CIRA) must have configurable parameters in the UI to allow the internal ISO user to set the start/end date and time for this step’s submissions.</p>	Core	CIRA



<p>OSI22 – BRQ052</p> <p>External BRS</p>	<p>Step 11 of OES Import Allocation process:</p> <p>System (CIRA) must prevent external users (SCs of LSEs) from submitting after the date/time deadline.</p> <p>Implementation note: Users will receive a message in the UI that they cannot submit after the deadline.</p>	<p>Core</p>	<p>CIRA</p>
<p>OSI22 – BRQ053</p> <p>External BRS</p>	<p>Step 11 of OES Import Allocation process:</p> <p>System (CIRA) must have the capability for users to update/edit the submitted requests up to the end of the date/time deadline.</p>	<p>Core</p>	<p>CIRA</p>
<p>OSI22 – BRQ054</p> <p>External BRS</p>	<p>Step 11 of OES Import Allocation process:</p> <p>System (CIRA) must have a new UI that tracks the annual Import Allocation process for this step.</p>	<p>Core</p>	<p>CIRA</p>
<p>Not Applicable</p> <p>Internal BRS</p>	<p>Step 12 of OES Import Allocation process:</p> <p>The second market notice is done manually by the OES Business Unit.</p> <p>Implementation note: Market Notices are not uploaded to CIRA but are sent out publically via the CAISO notifications process.</p>	<p>Business Process</p>	<p>CIRA</p>




	Implementation note: Note that this step is a repeat of step 10. Business process only, does not need to be tested.		
OSI22 – BRQ056 External BRS	<p>Step 12 of OES Import Allocation process:</p> <p>System (CIRA) must have the capability for ISO users to initiate the validation of step 12 after the run of the report deadline in step 11.</p> <p>Implementation note:</p> <ul style="list-style-type: none"> • CIRA running an automated job after deadline of Step 11 and • Manual option is also available for the calculation to the ISO User. 	Core	CIRA
OSI22 – BRQ057 External BRS	<p>Step 12 of OES Import Allocation process:</p> <p>System (CIRA) must have the capability to automate notifications to users for amounts requested and received in Step 9.</p> <p>Note: System shall have the capability to send an automated notification to the external users notifying them of the completion of the step 11 validation (this is done automatically at the conclusion of the validation).</p>	Core	CIRA
OSI22 – BRQ058 External BRS	<p>Step 12 of OES Import Allocation process:</p> <p>System (CIRA) must have the capability to calculate import allocations for LSE on BGs.</p>	Core	CIRA

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OSI22 – BRQ059 External BRS	Step 11 of OES Import Allocation process: System (CIRA) must have a validation to check whether the LSEs have enough Import Capability at the time of submission: <ul style="list-style-type: none"> • If the LSE has sufficient Import Capability then the request passes this validation step • If the LSE does not have sufficient Import Capability then the request fails and no submission is made. The RIC MW limit is tracked across submissions for a LSE. 	Core	CIRA
OSI22 – BRQ060 External BRS	Step 11 of OES Import Allocation process: System must have the capability to check whether BGs have enough Import Capability. <ul style="list-style-type: none"> • If the BG has sufficient Import Capability then the request passes this validation step • If the BG does not have sufficient Import Capability then the request fails and no submission is made. This is specific to each request where a single requested MW cannot exceed BG RIC. 	Core	CIRA
OSI22 – BRQ061	Step 12 of OES Import Allocation process:	Core	CIRA



External BRS	<p>If a BG is over allocated, System (CIRA) has to allocate the import capability on the BG to the LSE for the Load Share Ratio.</p> <p>Example: BG1 has 100 MW of RIC. LSE1 requests 50 MW. LSE2 requests 40 MW. LES3 requests 30 MW. System shall allocate the 100 MW on the BG to the LSEs based on their loadshare ratio. LSE1 = $100\text{MW} \times 0.42$ (assuming 0.42 is the loadshare ratio). If LSE1 has the highest loadshare ratio they may get up to their requested MW.</p>		
OSI22 – BRQ062 External BRS	<p>Step 12 of OES Import Allocation process:</p> <p>System (CIRA) must have a report that shows the remaining import capability per branch group (BG) after processing all of the requests in step 11.</p> <p>Implementation note: report to be displayed on the UI and be downloadable.</p>	Core	CIRA
OSI22 – BRQ063 External BRS	<p>Step 12 of OES Import Allocation process:</p> <p>System (CIRA) must have the capability for users to initiate the validation of step 12 after the run of the report deadline in step 11.</p> <p>Note: See step 11 for validation information.</p>	Core	CIRA

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OSI22 – BRQ072 External BRS	<p>After Step 13 of OES Import Allocation process:</p> <p>System (CIRA) must display the following reports in CIRA -> Plans -> Import Allocation Tab and be downloadable:</p> <p>Report 1: Holder Import Capability (example http://www.caiso.com/Documents/2021_HoldersImportCapability.pdf)</p> <p>Report 2: Import Capability Used in Annual RA Plan (Example http://www.caiso.com/Documents/2021ImportCapabilityUsedonAnnualResourceAdequacyPlans.pdf)</p> <p>Implementation note: displayed on the UI and be downloadable.</p>	Core	CIRA

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4.2 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. If the project team has deemed that no structured testing is needed, an end-to-end test case must be specified.

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.

4.2.1 Business Requirements



ID#	Guidance on Market Participant Impacts	Source System	Sink System	Reason for Potential Scenario
MKT - 001	<p>End-to-End: System (CIRA) must store all submittal requests from all users for steps 8, 9, 11, 13.</p> <p>Note: In reference to BRQ024.</p>	N/A	CIRA	System Process Changes
MKT - 002	<p>Structured Market Simulation: LSE must be able to transfer import capability to another LSE.</p> <p>Note: In reference to BRQ027.</p>	N/A	CIRA	System Process Changes
MKT - 003	<p>End-to-End: System (CIRA) must have the capability for users to update/edit the submitted requests up to the end of the date/time deadline.</p> <p>Note: In reference to BRQ033, BRQ039, BRQ053.</p>	N/A	CIRA	System Process Changes
MKT - 004	<p>End-to-End: System (CIRA) must prevent external users (SCs of LSEs) from submitting after the date/time deadline.</p> <p>Note: In reference to BRQ038, BRQ052.</p>	N/A	CIRA	System Process Changes



ID#	Guidance on Market Participant Impacts	Source System	Sink System	Reason for Potential Scenario
MKT - 005	<p>End-to-End: LSE(s) to submit requests for Import Capability they want on each Branch Group.</p> <p>Note: In reference to BRQ035, BRQ049.</p>	N/A	CIRA	System Process Changes
MKT - 006	<p>End-to-End: System (CIRA) must have the capability for one or more LSEs to submit requests for Import Allocation on BGs.</p> <p>Note: In reference to BRQ036, BRQ050.</p>	N/A	CIRA	System Process Changes
MKT - 007	<p>End-to-End: System (CIRA) must have the capability to send automated notifications to external users notifying them of the completion of validation for amounts requested and received.</p> <p>Note: In reference to BRQ042, BRQ057.</p>	N/A	CIRA	System Process Changes



ID#	Guidance on Market Participant Impacts	Source System	Sink System	Reason for Potential Scenario
MKT - 008	<p>End-to-End: System (CIRA) must have the capability for users (SCs of LSEs) to initiate the validation of step after the run of report deadline.</p> <p>Note: In reference to BRQ048, BRQ056, BRQ063.</p>	N/A	CIRA	System Process Changes
MKT - 009	<p>End-to-End: All SCs should be able to participate in Step 13 for requesting for Import Capability then want on each BG.</p>	N/A	CIRA	System Process Changes
MKT - 010	<p>End-to-End: System (CIRA) shall allow the external user to submit up to two requests per week.</p>	N/A	CIRA	System Process Changes