California ISO

Business Requirements Specification

Reliability Services Initiative 2017

Document Version: 2.0

Date Created: 4/12/2017

Revision History

Date	Version	Description
12/23/2016	1.0	Creation of Document
3/3/2017	1.1	All edits to the document have been made in red along with strikethrough of requirements or language that either is not needed or will be delivered at another point in time. Specifics on strikethrough requirements will be denoted below: • BRQ201: Eliminated the Records Retention Business Rule. This will be implemented as an enhancement at a future date. • BRQ005 verbiage refinements • BRQ021 is a duplicate of BRQ012, therefore BRQ021 has been removed. • BRQ204 has the following clarification added to the BRS: *OIA is part of the monthly module and will run based on the schedule by the internal user. For the forced outage piece, the forced outage impact would be a UI screen (on-demand). This UI screen would be accessible by internal ISO users and external users.* • BRQ031/32: CSRM/CLRC is now separated into two sentences. This has been completed within BRQ031 and BRQ032. • Annual NQC Section 4.9 has been descoped for Fall 2017.

Date	Version	Description

		• Updated CPRM-BRQ005 (scope from RSI1A) numbering to differentiate it from RSI1B-BRQ005 (caused confusion). Updated CPRM-BRQ005 to RSI1B-BRQ632.
		• RSI1B-BRQ620 was listed twice. Updated second requirement dealing with CPM MWs to BRQ633.
		• BRQ205: Eliminate Settlements as an impacted system.
		• Removal of BRQ107 since this scope is already covered in BRQ207
		• BRQ055: Removed Settlements as an impacted system and updated requirement with minor verbiage changes.
		• BRQ058, 073,074,620,621,622: Removed Settlements as an impacted system.
		• Section 4.11 has been removed as a scope item for this initiative
		• Section 4.8 has been removed as a scope item for this initiative
		• Section 4.9 has been removed as a scope item for this initiative
		• BRQ043 has been updated to reflect T-9 to T-8. Also changed T-8 to T-7.
		• BRQ206 removed Settlements as an impacted system.
		• BRQ105, 633, 621, 622, and 2001 were removed from scope for this initiative
		• The following requirements were removed from Fall 2017 scope:
		  ○ BRQ013: Record retention/storage requirement
		  ○ BRQ075: Reorganization of UI screens

4/11/2017	2.0	Added RSI 2 scope. Renamed document RSI 2017.

Disclaimer

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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). 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 initiative is to finish implementing BOG (Board of Governors) approved policy. This initiative address issues with the current RA process: Replacement process is extremely complicated and cumbersome, overlapping cure periods lead to complexity, replacement outage responsibility is difficult to track, contracting complexity, and inaccurate outage assessments due to current Monthly RA process.

The RSI Phase 2 policy initiative seeks to implement and enhance the following scope items:

1. Local and system RA capacity designation – Under current rules, an RA resource located in a local area that goes on a forced outage must substitute its capacity with another resource located in the same local area, regardless of whether the resource was procured to meet a local capacity requirement. Management proposes to allow resources procured as system capacity in a local area to no longer be required to provide substitute capacity in the same local area. The ISO will modify the RA showings and supply plan templates to allow entities to clearly designate and distinguish the capacity that is being used to meet local and system capacity requirements.
2. RA showing requirements for small load serving entities (LSEs) – LSEs whose flexible or local RA requirement is calculated to be less than one megawatt (MW) for all 12 months of the applicable RA compliance year will be considered to have an actual monthly flexible or local RA requirement of zero, and as such the LSE will not be required to submit a flexible or local RA showing. This change will bring treatment of calculated flexible and local RA requirements of less than one MW into alignment with how calculated system requirements of less than one MW are currently treated.
3. Process to update effective flexible capacity (EFC) list during the year – The ISO will clarify the process by which a resource may change its EFC through the course of the RA year. For 2017, this functionality will not be automated.
4. RA showing tracking and notification – The ISO will track RA showings through a reporting tool in its RA business application and implement a communication process to ensure that all LSEs, regardless of size, are notified when they have not submitted a timely RA showing. Some of this functionality will be automated in 2018.

2. Details of Business Need/Problem

2.1 Description

Business Opportunity/Problem Statement:	
What:	The proposed provisions define new resource adequacy rules for planed outage substitution for generic RA resources. The proposal also creates changes to the monthly RA process in terms of timeline and deficiency analysis of RA data. **Key Notes:** • Board approved policy • Tariff stakeholder process completed • Issues with current RA process ○ Complicated RA process leads to data transparency issues, administrative and coordination costs for market, and customer satisfaction concerns. • Overlapping cure periods leads to complexity
Why do we have this opportunity/problem:	The increase in renewable and preferred resources has led to the need for new resource adequacy rules to maintain reliability during the unprecedented change in the ISO's resource mix and subsequent increased flexibility needs.

3. Business Process Impacts

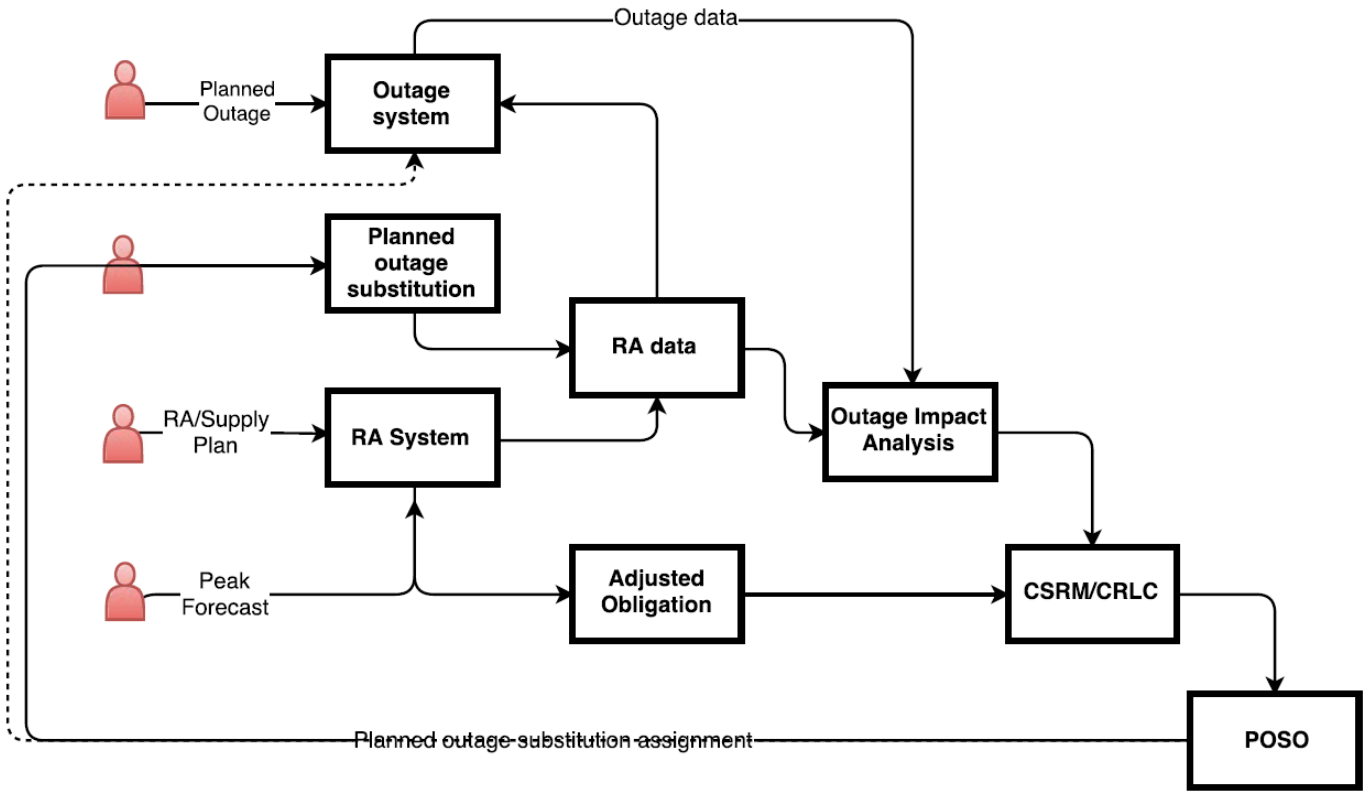
3.1 High Level Description of Business Process

The Reliability Services Initiative Phase 1B initiative impacts the following existing business process diagram:

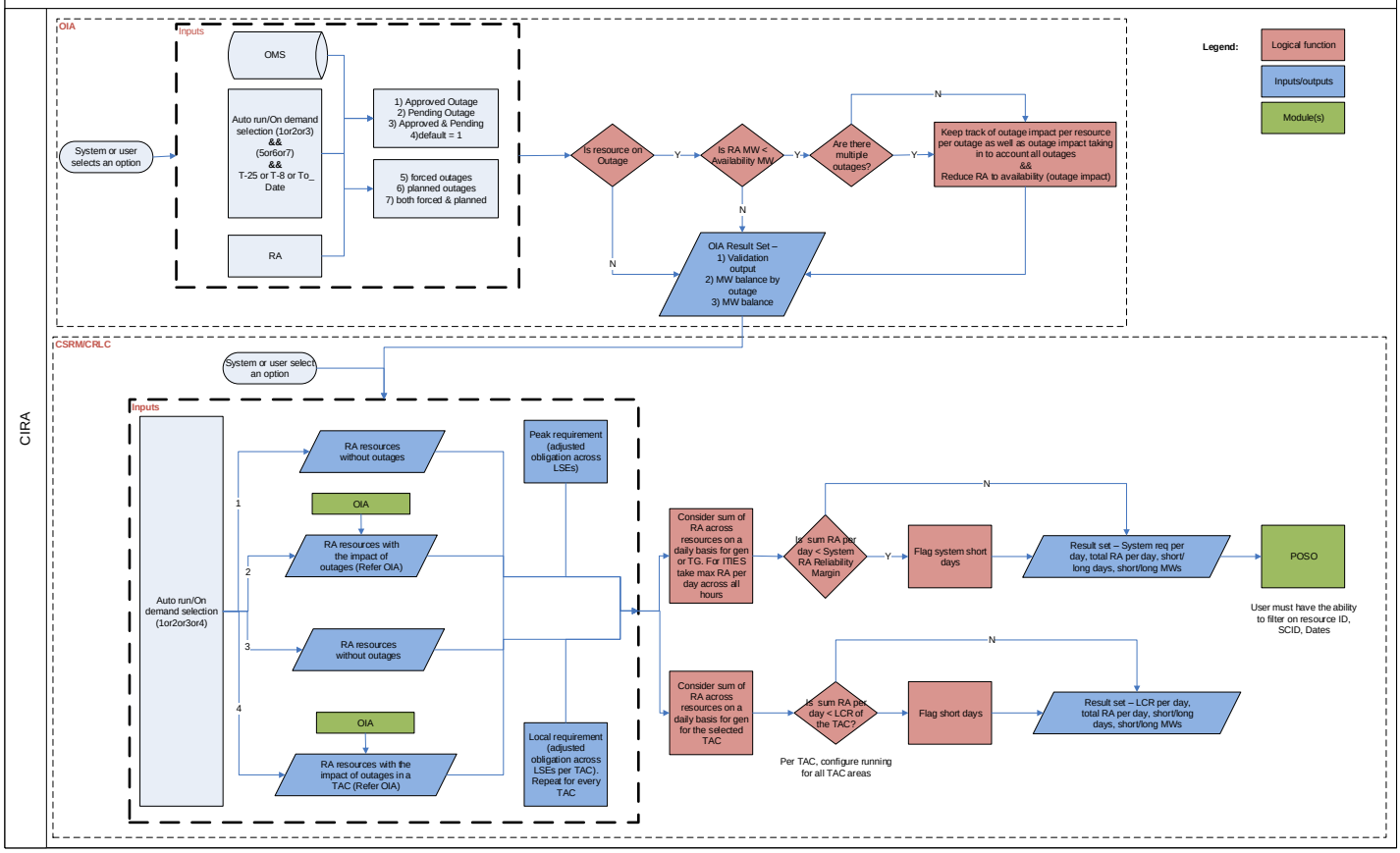
- Manage Market & Reliability Data & Modeling

3.2 Visual Aides

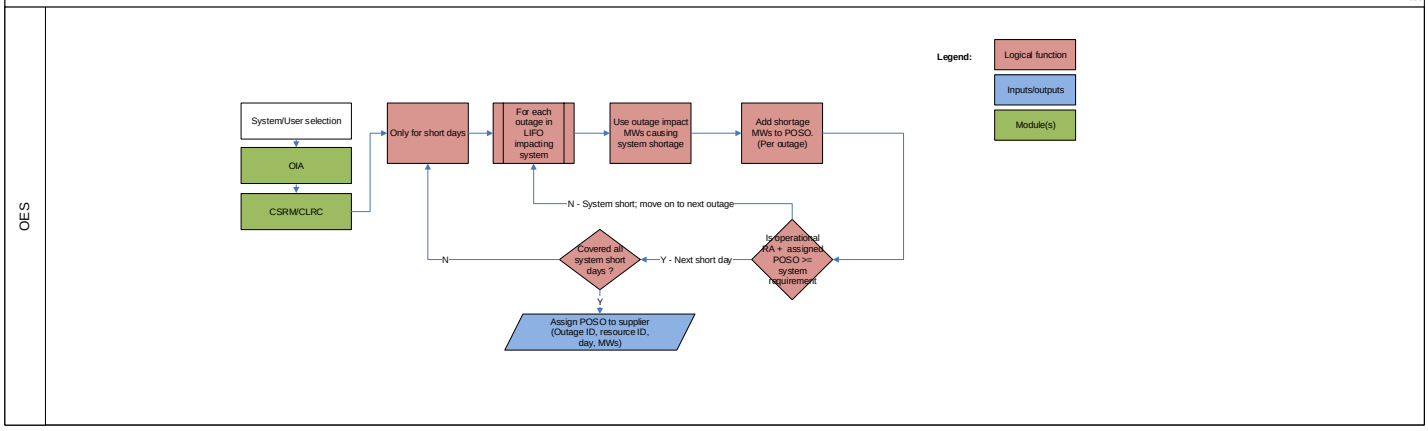
Context flow (business level):



Outage Impact Analysis (OIA) & CAISO System Reliability Margin (CSRM)/CAISO Local Reliability Check (CLRC)



Planned Outage Substitution Obligation



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.

General Notes:

- RA resources in the context of this initiative refer to System (generic) RA Resources.

4.1 Business Process: Monthly RA Process and Outage Snapshot

Change in timeline to separate monthly RA process from planned outage assessment is required. This eliminates overlapping cure periods for SC FOR THE LSE monthly RA requirements and planned outage responsibility. This reduces over-procurement and simplifies the process.

4.1.1 Business Requirements

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ001	RA system shall no longer reference the following fields in the RA & Supply Plan template: • Specified replacements • Non-Specified replacements • Contract ID column • Capacity designation ○ Upload validation on above must be removed Business Rule: Corresponding validation rules on other fields must be updated.	Core	CIRA
RSI1B-BRQ200	System must have the ability to support effective dating for the plan template.	Core	CIRA

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ106	Upload of RA and supply plan interface must be updated to include a comments field (free form text for user to enter). The comments must be displayed on the download page for user to view. Only SC for the plan and ISO users shall have the capability to view these comments. The ISO expects external users to provide comments when their Plans are late (missed the submission timeline).	Core	CIRA
RSI1B-BRQ002	RA system users must retain the ability to view historical replacements, replacement approvals, replacement rejections, replacement requirements, RA plans, and Outage Management (OM) replacements.	Existing requirement	CIRA
RSI1B-BRQ003	RA system users must retain the ability to view historical Outage Impact Assessments (OIA), CSRM, SR, NR, and Replacement requirement modules for dispute resolution purposes.	Core	CIRA
RSI1B-BRQ201	Internal system users must have the ability to view and download historical runs. The internal system user shall not have the ability to rerun historical runs.	Core	CIRA
RSI1B-BRQ004	RA system must retain the ability to rerun historical trade dates for any of the existing modules for dispute resolution purposes. Based on the logic effective for those trade dates.	Core	CIRA

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted

RSI1B-BRQ005	RA system must have the ability to run the monthly module twice daily at a predetermined times (3 am and 10 am) automatically.
	Business Rule: Initially, the system shall be configured to run twice daily.
	Business Rule: Monthly module shall consist of the following modules:
	• Cross validation for generic RA
	  ○ Publish generic deficiency results
	• Cross validation for flexible RA
	  ○ Publish flexible deficiency results
	• Outage Impact Analysis
	• CSRM/CLRC
	• Planned Outage Substitution Obligation
	  ○ Publish Planned Outage Substitution Obligation results
		Core	CIRA

RSI1B-BRQ006	The monthly module job must contain flex cross validation (flex cv) and flex deficiency analysis. The job must make available externally to market participants the flex deficiency results upon every run.	Core	CIRA
RSI1B-BRQ007	RA system must preserve the following results and reports for historical recalculation: • OM report • TAC/Peak results (for internal ISO users. SC for the supplier shall have the ability to request historical reports via offline mechanism).	Core	CIRA
RSI1B-BRQ008	ISO users and SC for the supplier must have the ability to view outage impact and outage availability screens.	Core	CIRA

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ068	SC FOR THE LSEs must ***not*** have the ability to view outage impact and outage availability screens within the RA system. SC for the LSE shall have the ability to request historical reports via offline mechanism).	Core	CIRA
RSI1B-BRQ009	RA system must cap the local RA obligation at the system obligation (if the system obligation exists) for both annual and monthly RA. Business Rule: System shall **not** store the initial local/system values. The system shall only retain the adjusted values. Obligation = min (system obligation, local obligation) Business Rule: If the obligation numbers change, the business unit shall rerun the validation suite. Business Rule: Upon upload of system or local, this check must be completed.	Core Tariff	CIRA
RSI1B-BRQ010	RA system must have separate user roles for the SC FOR THE LSE and SC for the supplier. SC FOR THE LSEs must be responsible for the monthly RA plan and SC for the supplier shall be responsible for planned outage RA substitution with the ISO. Business Rule: The business recommends a new user role for the RA system. Below is an outline of the new roles that are required: 1. Create a new role for SC FOR THE LSEs 2. Consume SC FOR THE LSE from Master File 3. Create a new role for supplier SCs Note: Separation of certain UI screens could be necessary depending on design of user roles.	Core	CIRA; AIM; Master File

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ012	RA system must have the ability to automatically run and display OIA, CAISO System Reliability Margin (CSRM), and Planned Outage Substitution Obligation (POSO) based on the configuration defined by internal system user. Business Rule: The system must execute the above defined modules for the T-25 Outage Snapshot and for new planned outages that are submitted after T-25. RA system must use the T-25 outage snapshot to assign POSO at T-22. Business Rule: Any outages submitted after T-25 shall be placed under “outages to date”. Example: Assign POSO to supplier at T-22 and T-8 based on T-25 Outage Snapshot (including any outage updates in the snapshot – see diagram in Visual Aide section). Assign POSO to supplier once every day for any new planned outages for the compliance month. Business rule: The above is also required for on demand execution.	Core	CIRA
RSI1B-BRQ016	Changes to an outage that results in an extension of the duration or increase in the curtailment within the RA compliance month timeframe shall result in the lowering of the priority within the outage stack.	Existing Requirement	CIRA

4.2 Business Process: Outage Impact Analysis (OIA)

The outage impact analysis is the impact of outages to RA from supply plan.

4.2.1 Business Requirements

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ020	System must include planned outages for the purpose of OIA (for outages to date purposes). Business Rule: Internal and External user must have the ability to view the outage results.	Core	CIRA
RSI1B-BRQ202	System must include planned outages for T-25 purposes.	Core	CIRA

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ203	System must include planned, forced, or all outages (both planned and forced) for the purpose of OIA. Business Rule: POSO must not have the ability to select OIA runs that included forced outages.	Core	CIRA
RSI1B-BRQ204	The OIA automated job must have the ability to run for both forced and planned outages with outages to date. Clarification: OIA is part of the monthly module and will run based on the schedule by the internal user. For the forced outage piece, the forced outage impact would be a UI screen (on-demand). This UI screen would be accessible by internal ISO users and external users.	Core	CIRA
RSI1B-BRQ022	RA system user must have the ability to choose approved and/or pending outages.	Core	CIRA

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ023	Only passed records from generic CV shall be used for OIA. Note: RSI Phase 2 will consider include Flex CV for POSO purposes.	Core	CIRA
RSI1B-BRQ024	System must receive updates on outages, cancelations, changes in derates, and timing.	Existing Requirement	CIRA
RSI1B-BRQ025	System must have the ability to calculate resource availability due to outages for RA resources on the supply plan (current implementation takes resource availability off of RA Plan). This calculation shall result in the "operational RA MW". Business Rule: The calculation of operational RA MW is described below: a. Calculate daily sum of RA for all resources sold to multiple SC FOR THE LSEs b. Check against the outage availability for each resource c. Take the minimum availability for each resource for each day of the month d. If the resource is on outage and the resource availability < RA MW then reduce the RA MW to equal the resource availability for that day	Core	CIRA

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ067	System user must have the ability to view OIA data for the entire RA compliance month.	Core	CIRA
RSI1B-BRQ026	The output of the OIA shall be validation by outage ID, MW balance, and MW balance by outage ID.	Core	CIRA
RSI-BRQ2000	For trade dates effective after go-live the following displays shall not be applicable (but will be kept for historical purposes): • OIA Details: LSE Ratio • Peak result report • TAC result report		

4.3 Business Process: CAISO System Reliability & Local Reliability Check (CSRM/CLRC)

This module is required to determine if ISO has enough operational RA for each day. This is done by comparing the operational RA against the system requirement/local requirement per TAC.

4.3.1 Business Requirements

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ027	System must have the ability to determine if the ISO has enough operational RA for each day of the month. RA system shall compare the operational RA against the system and local (aggregated TAC wide) requirement.	Core	CIRA
RSI1B-BRQ028	System user must have the ability to run on-demand runs for CSRM and CLRC.	Core	CIRA
RSI1B-BRQ029	CSRM/CLRC shall use the CEC system requirement (adjusted obligation), OIA output (see BRQ026), and local requirement (adjusted obligation) as inputs to its calculations.	Core	CIRA
RSI1B-BRQ030	CSRM/CLRC shall sum the operational RA MW per day across all resources for local and system. RA system user must have the ability to perform this analysis for each TAC area. a. Example – PGE, then consider all resources in PGE TAC b. Example – Local + System, then consider all resources in all local areas, CIASO system and ITIE/TG resources	Core	CIRA

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ031	CSRM shall check if the total RA per day (sum of RA) < CAISO system reliability margin. CLRC shall check if the total RA per day (sum of RA) < CAISO local requirement. The RA system shall flag any days that are considered short of the RA obligation. Note: This calculation is for Generic RA.	Core	CIRA
RSI1B-BRQ032	CSRM shall check if the total RA per day (sum of RA) >= CAISO system reliability margin/local requirement. CLRC shall check if the total RA per day (sum of RA) >= CAISO system reliability local requirement. The RA system shall flag any days that are considered long of the RA obligation. Note: This calculation is for Generic RA.	Core	CIRA
RSI1B-BRQ033	The output of the CSRM/CLRC shall display (only to Suppliers and system users) : • System/Local short day(s) • System/Local long day(s) Business rule – Display of above results shall be required at aggregated granularity per TAC/system area.	Core	CIRA

4.4 Business Process: Planned Outage Substitution Obligation (POSO)

This module is required to assign planned outage substitution obligation to SC for the supplier.

4.4.1 Business Requirements

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ034	System must have the ability to assign planned outage substitution obligations to SC for the supplier.	Core	CIRA
RSI1B-BRQ035	System must receive OIA (planned outages), CSRM, and CV as inputs into its calculations.	Core	CIRA
RSI1B-BRQ036	System users must have the ability to run on demand scheduled runs for POSO.	Core	CIRA
RSI1B-BRQ037	Appropriate warning messages should be displayed to RA system user if OIA used inputs containing only Approved state outages. Business Rule: This only applies to on-demand jobs.	Core	CIRA

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ038	System must perform the following: For days in which the total RA is less than the system requirement (adjusted obligation) i.e. short days resulting from CSRM, the following steps must be taken: • Order outages in LIFO order (last in first out based on outage priority) • For outages in LIFO, stack up the impacted MW (not whole outage derate) ○ Ex: System is short only 100 MW but the outage curtailment might be 500 MW. Consider only 100 MW as the impact MW. • Use the outage impact MW which is causing the system shortage and add this to the POSO of the supplier. • Outage ID must be specified to the supplier to inform which outage is causing the POSO. This information shall allow the user to cancel or move the outage. Business rule: 1. LSEs short/long status shall no longer be considered for assigning POSO. 2. System shall automatically notify SCs who created the outage within OMS regarding POSO assignment.	Core	CIRA
RSI1B-BRQ040	System must check if the cumulative system + assigned POSO meets the peak system (this would denote that the cumulative system requirement was met for the day – thus move onto next day). If POSO does not meet the peak system move onto the next outage in stack. Business Rule: The entire outage MW of the last outage in the stack shall be used for POSO assignment.	Core	CIRA

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ041	System shall ensure that approved substitutions remain approved for the RA life cycle. Business Rule: Update/cancel logic shall work based on the substitution cutoff timeline (follow forced outage substitution rules implemented in RSI 1A).		CIRA
RSI1B-BRQ042	Rerun of POSO shall include new substitute capacity provided to satisfy previous POSO.	Core	CIRA
RSI1B-BRQ043	POSO shall be assigned before the start of the RA month. • T-22 through T-8 based on outage snapshot at T-25 • T-7 through T+end of month based on outages to date Business Rule: This data must be published automatically.	Core	CIRA
RSI1B-BRQ046	The output of POSO must be displayed to SC for the supplier and ISO users similar to the existing replacement requirement/peak results screen. Note: Participants have requested for a positive confirmation if they don't have a POSO.	Core	CIRA

4.5 Business Process: Submission of Planned Outage Substitution

4.5.1 Business Requirements

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ047	RA system shall allow the supplier to submit a substitute resource to meet POSO. This shall only occur once the POSO is assigned to the supplier.	Core	CIRA
RSI1B-BRQ048	Substitute resources must be submitted and approved (including third party approval) prior to a configurable cut off time for the following day. The substitution submission shall follow the forced outage substitution submission timeline for both Day Ahead and Real Time. Each resource can have multiple outages. Each outage can have multiple POSO by day. Each POSO can have multiple substitutions. We should be able to keep track of each POSO with corresponding substitution.	Core	CIRA
RSI1B-BRQ066	System must allow the creation of POSO substitutes for pending or approved outages. Business: Definitions of the current outage states (in production) shall apply.	Core	CIRA
RSI1B-BRQ049	RA system must display the outage ID and POSO assignment information. The outage and POSO information should be visible to suppliers and ISO users.	Core	CIRA

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ050	If the supplier submits a substitution, the RA obligation from the outage resource is transferred to the substitute resource.	Core	CIRA
RSI1B-BRQ051	Only internal ISO BA resources shall be used to satisfy the POSO. Note: In future initiatives, we will consider external resources to the ISO BAA.	Core Tariff	CIRA
RSI1B-BRQ205	CIRA must send total generic exempt MW and total flexible exempt MW to settlements to perform RAAIM calculation	Core	CIRA
RSI1B-BRQ206	CIRA UI for RAAIM pre-calculation needs to be updated to include total flexible exempt MW and total generic exempt MW	Core	CIRA
RSI1B-BRQ065	System must have the ability for POSO outages to be flagged within the RA system so that ISO users have the ability to deny the outage within the outage system.	Core	CIRA
RSI1B-BRQ053	The ISO shall allow the supplier to release any provided planned outage substitute capacity. Business Rule: Similar to the release of forced outage substitution. (Implemented in RSI 1A). Note: Same functionality as for forced outage substitution as in RSI 1A.	Core Tariff	CIRA

4.6 Business Process: Planned Outage Substitution Obligation (POSO) for Outages to Date

Once the planning activities are complete, POSO is required for the operational period (within the RA month).

4.6.1 Business Requirements

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ054	Any new planned outages submitted after T-25 must be evaluated for POSO (outages to date).	Core	CIRA

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ055	System must have the ability to run on a configurable basis and perform the following business logic: 1. Determine if resource is RA a. If yes determine if the outage MW impacts the system requirement (taking into account operational RA MW) i. If the outage MW impacts the system requirement, assign a POSO to the supplier. The MWs assigned must be impact MW and not the whole curtailment Business rule: 1. System shall run OIA, CSRM and POSO for planned outages to date at configurable times and assign POSO to suppliers automatically 2. Apart from auto runs the system shall allow internal users to run POSO on demand and publish the requirements to the suppliers 3. POSO assignment would not consider the effect of a forbidden zone of a resource or the pmin of the resource.	Core	CIRA; OMS

4.7 Business Process: Outage Management Report

Requirements defining the Outage Management Report.

4.7.1 Business Requirements

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ056	The existing Outage Management report within the RA system must have the ability to pull RA data from the RA tracker. Note: The report needs to be enhanced to accommodate forced outage impact.	Core	CIRA
RSI1B-BRQ057	The Outage Management report must use the output from the OIA and CSRM/CLRC.	Core	CIRA
RSI1B-BRQ071	The Outage Management report must be able to display the latest record version of the historical trade dates. All historical data prior to RSI 1B shall be accessible to show only planned outage impact. No versioning is required for this report.	Existing Requirements	CIRA
RSI1B-BRQ072	The Outage Management report must be updated when a new job runs. If no data exists, a message will be displayed.	Existing Requirements	CIRA

4.8 Business Process: CSP Offer Publication (Descoped from RSI 1A)

Requirements defining the business need for publication of CSP offers. System requirements have already been developed as part of RSI 1A.

4.8.1 Business Requirements

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI1B-BRQ632	The ISO shall publish all finalized offers into the competitive solicitation process on a rolling five-quarter delay. Business Rule: This information is considered public. Business Rule: Supplier offers shall be described by generation technology type, MW quantity, price, RA capability (system, flexible, local), and competitive solicitation process offered. Offers shall be aggregated in the event less than three resources are in a single generation technology type.	Core Tariff 43.A.6.4	OASIS

4.9 Business Process: RA/Supply Template Changes and Showing Validation

This section applies to both annual and monthly RA.

4.9.1 Business Requirements

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI2-BRQ001	RA application shall accept the new RA/Supply Plan template. Note: RSI2-BRQs in this section apply to both Annual and Monthly RA. Note: RA application must have the ability to support the old and new RA and Supply Plan templates. The data submitted for the 2017 RA compliance year must use the old template and the data submitted for the 2018 RA compliance year must use the new template.	Core	CIRA

RSI2-BRQ002	RA application shall validate the following on submission of a Supply plan: 1. On RA Capacity tab: a. Sum of local RA + system RA sold across LSEs <= NQC of the resource b. Only local resources can have a MW value in the local RA capacity column and system RA capacity column c. Non local resources cannot have a MW value in the local RA capacity column d. Resource ID has to be valid ID defined in master file e. Resource ID has to be associated to the SC submitting the plan for the RA month f. No changes to validation rules imposed on import resources implemented in RSI 1 A g. LSE ID has to be a valid ID defined in master file h. The time stamp is removed for start and end date from the template. i. Note: Physical resource must be shown for the entire month and Import resources (TG, Dynamic, ITIE) can be shown for subset of days only. This was implemented in RSI 1A 2. No change to validation rules on flex RA capacity. The Flex tab is removed and data elements are moved to RA Capacity tab. 3. No change to validation rules on admin tab 4. No change to remaining validation rules on upload of a plan Note: Contract ID has been removed across the template since it is not used by the application and there is no business use for this field. Note: Local designation field is only for substitution, CV, and POSO purposes. This shall not impact the TAC area validation (this validation shall still use the total MW).	Core Reliability Requirements BPM	CIRA

RSI2-BRQ003	RA application shall validate the following on submission of a RA plan: 1. On RA Capacity tab: a. Only local resources can have a MW value in the local RA capacity column and/or system RA capacity column b. Non local resources cannot have a MW value in the local RA capacity column c. The time stamp is removed for start and end date from the template. i. Note: Physical resource must be shown for the entire month and Import resources (TG, Dynamic, ITIE) can be shown for subset of days only. This was implemented in RSI 1A 2. No change to validation rules on flex RA capacity. The flex tab is removed and consolidated within the RA capacity tab. 3. No change to validation rules on admin tab 4. No change to remaining validation rules on upload of a plan Note: Contract ID has been removed across the template since it is not used by the application and there is business use for this field. Note: Local designation field is only for substitution, CV, and POSO purposes. This shall not impact the TAC area validation (this validation shall still use the total MW).	Core	CIRA
RSI2-BRQ004	RA application shall store and display local RA, system RA and total generic RA MW on a resource. Potential UI impacted: RA report; RA/Supply plans displays; CPUC Reports; CV validation screens; Transmission planning.	Core	CIRA

RSI2-BRQ006	Cross validation between RA and Supply plans shall validate the breakup of local and system RA MWs between LSE and Supplier. Example – If LSE 1 claims 100 MW local, 50 MW system on res A and supplier shows 100 MW local and 40 MW system on res A for LSE 1 then cross validation shall display a warning to LSE 1 for claiming an excess of 10 MW system RA and cap LSE MW to the supplier MW. If LSE 1 claims 100 MW local, 50 MW system on res A and supplier shows 100 MW local and 50 MW system on res A for LSE 1 then cross validation shall pass the records. If LSE 1 claims 100 MW local, 50 MW system on res A and supplier shows 110 MW local and 60 MW system on res A for LSE 1 then cross validation shall pass the records. If LSE 1 claims 100 MW local, 50 MW system on res A and supplier shows 90 MW local and 60 MW system on res A for LSE 1 then cross validation shall display a warning to LSE 1 for claiming an excess of 10 MW local RA and cap LSE MW to supplier MW.	Core	CIRA
RSI2-BRQ007	RA application shall use the total generic RA MW for determining the planned outage substitution obligation. Note: The breakup of system and local should not impact POSO as POSO is a system requirement.	Core	CIRA
RSI2-BRQ008	Total generic RA shall be used for system RA validation (Peak Obligation validation – all resources), Total Generic RA MW = Local RA MW + System RA MW Business rule: *All MWs of capacity designated as local on RA plans and supply plans will automatically count towards the LSE's system RA requirement.*	Core	CIRA

RSI2-BRQ009	RA application shall use Total RA *MWs of capacity for local RA resources on RA plans and supply plans in validating LSE's local RA requirement.*	Core	CIRA
RSI2-BRQ009 (cont.)	Local Obligation: RA system shall validate the TAC obligation check based on current practice. a. The MW split between local and system shall not be considered for year/month ahead for a local deficiency validation of a LSE. Example – Res A is a local resource in PGE TAC with NQC 110 MW. It is listed as 60 MW local and 40 MW system on the RA plan. RA system shall count 100 MW (60 + 40) towards meeting the ISO local obligation of the LSE. The ISO shall count total generic MWs of a local resource listed as local and system in meeting its local obligation (irrespective of how resource is contracted).	Core	CIRA
RSI2-BRQ010	Splitting of local and system RA shall not impact any downstream application/process.	Core	CIRA
RSI2-BRQ044	System shall evaluate Local Capacity demonstration in two phases: 1. Phase 1 of the Local Capacity Area Resource sufficiency evaluation will be made without regard to capacity's identification as Listed Local RA Capacity 2. Phase 2 of the Local Capacity Area Resource sufficiency evaluation will consider capacity to be a Local Capacity Area Resource only if it is Listed Local RA Capacity. The above validation check shall be accessible in cross validation of RA and Supply plans and the results must be viewable by both internal and external stakeholders.	Core	CIRA

4.10 Business Process: Forced Outage Substitution

4.10.1 Business Requirements

ID#	Business Feature	Requirement Type	Potential Application(s) Impacted
RSI2-BRQ014	Forced outage substitution in RA application shall be enhanced to include the break up generic RA in to local and system RA	Core	CIRA
RSI2-BRQ015	Following rules shall apply for forced outage substitution: 1. If a local RA resource is shown as 100 MW system and 50 MW local goes on forced outage then a. RA application shall allow the SC of the resource on outage to use any CAISO system resource or local resource to substitute the 100 MW shown as system RA i. RA application shall limit the total substitute MW to 100 MW of system substitution ii. If a local resource is used to substitute the 100 MW of system RA on outage then the substitute MW is considered as system RA MW b. RA application shall allow the SC of the resource on outage to use any local resource (same local area) to substitute the 50 MW shown as local RA The existing local substitution rules apply	Core	CIRA

RSI2-BRQ016	RA application UI for forced outage substitution shall be modified to include the breakup of generic RA into local and system RA. The RA MWs row shall be split in to local RA MW and system RA MW. The substitute MW row shall be split into local MW and system MW. Note: Submission and view screens need to be modified.	Core	CIRA
RSI2-BRQ017	A local resource shown as partial local RA (part of the resource has been shown as local capacity and the remaining is available) must have the ability to be used for substitution of a resource shown as system RA on outage. The substitute resource will now have local and system RA obligation Example: Assume two resources. Res A is a local RA resource with 100 MW NQC which is shown as 50 MW local. Res B is shown as a 50 MW system RA resource. Res B has a forced outage of 20 MW. Res A substitutes 20 MW of its remaining Non-RA capacity. Res A will need to show 50 MW of local and 20 MW of system RA.	Core	CIRA
RSI2-BRQ034	For data starting from 2017 RA compliance year and before, market participants must have the ability to view historical substitution data.	Core	CIRA

4.11 Business Process: Tracking Missing and Late Plans

4.11.1 Business Requirements

ID#	Business Feature	Requirement Type	Business Unit(s) Affected	Potential Application(s) Impacted
RSI2-BRQ030	The missing plans report in CIRA shall be modified to exempt LSEs with an obligation less than 1 MW (configurable). If LSE total peak obligation (across TACs) is less than 1 MW then the SC should not show up in the missing plans report.	Core	OES	CIRA
RSI2-BRQ031	The missing plans report in CIRA shall be enhanced to include late RA and supply plans. The report must be renamed “missing or late plans report”. If RA plan and/or supply plan is submitted after T-45 then the plan should show up as a late plan. The report should include the plan submit date and the number of days it is late. This data set shall be accessible to ISO/SC users.	Core	OES	CIRA
RSI2-BRQ032	RSI2-BRQ 30 and RSI2-BRQ 31 apply to monthly and annual RA.	Core	OES	CIRA