CIRA Technology Upgrade: Business Requirements Specification - RAMPD Track 1

11/06/2026
Version 1

© California ISO. All rights reserved.

TABLE OF CONTENTS

Disclaimer **3**

Scope **3**

CIRA-PSCP-1 RAMPD Track 1 3

Downstream Scope Elements: 3

CIRA-SCPE-38 RAMPD Track 1 Enhancements 3

RAMPD Track 1 - Project Description **4**

CIRA-CMP-75 Drop 9 BRS **6**

CIRA-BRQ-290 New Resource Default NQC Report 6

Downstream FUS: 6

CIRA-FUS-464 Default NQC - Upload CAISO-Calculated Default NQC 6

CIRA-FUS-465 Default NQC - Maintain Default NQC Upload Option in CIRA UI 6

CIRA-FUS-466 Default NQC - Persist Latest CAISO-Calculated Default NQC 7

CIRA-FUS-467 Default NQC - View and Download Default NQC Report 7

© California ISO. All rights reserved.

Disclaimer

All information contained in this draft Business Requirements Specification (BRS) as provided by the California Independent System Operator Corporation (ISO) is prepared for discussion and information purposes only. The draft BRS is provided "as is" without representation or warranty of any kind, including, without limitation, a representation or warranty as to accuracy, completeness, or appropriateness for any particular purpose. The draft BRS shall be revised as the development and review of the business requirements progresses. The ISO assumes no responsibility for the consequences of any errors or omissions. The ISO may revise or withdraw all or part of this information at any time at its discretion without notice.

Scope

CIRA-PSCP-1 RAMPD Track 1

Assumptions, Constraints, and Dependencies:

Downstream Scope Elements:

CIRA-SCPE-38 RAMPD Track 1 Enhancements

Upstream Relationships:

- CIRA-PSCP-1 RAMPD Track 1 (Derived from)

© California ISO. All rights reserved.

RAMPD Track 1 - Project Description

Purpose: Update CAISO's **default** RA rules—**Planning Reserve Margin (PRM)** and **Qualifying Capacity (QC)**—so they reflect today's fleet and **meet a 0.1 LOLE (1-in-10-year)** reliability benchmark.
Scope:

- Retire the longstanding **15% default PRM** and replace it with **month-specific PRMs** determined by a recurring **probabilistic LOLE study** aligned with CAISO's **Summer Assessment**.
- Shift QC accreditation to a **hybrid** of **Average ELCC** (for energy-limited and variable resources) and **UCAP** (for dispatchable/pumped storage/nuclear/thermal) with **resource-specific adjustments**.

Defaults apply **only** where Local Regulatory Authorities (LRAs) don't set their own rules. They **do not** alter LRA authority.

- Implementation: August 2026 for RA year 2027
- **BOG Date:** October 30, 2025

Business Opportunity/Problem Statement:	
What:	Update CAISO's default methodologies for qualifying capacity (QC) and planning reserve margin (PRM) • Removes the longstanding default planning reserve margin of 15 percent and replaces it with a margin that CAISO will periodically update based on probabilistic reliability studies to ensure the resulting portfolio would meet a 0.1 LOLE, modeled after CAISO's Summer Loads and Resources Assessment (Summer Assessment) • Updates the default methodology for qualifying capacity by adopting average effective load carrying capability (ELCC) or unforced capacity (UCAP) as the primary accreditation approaches. o ELCC incorporates both capacity and energy contributions through probabilistic modeling, measuring energy limited resources' contribution to reliability. o For dispatchable resources that aren't subject to short term energy limitations, UCAP

© California ISO. All rights reserved.

	accurately captures the resource availability by using historic forced outage rates during tight system conditions as a proxy for capacity value. Clarifies **default methodology only**—it's available for voluntary adoption and used if LRAs do not specify.
Why do we have this opportunity/problem:	To address whether legacy defaults achieve **0.1 LOLE** given the rapid growth of **storage, hybrids, variable renewables**, and evolving reliability risks
Who does this opportunity/problem impact:	Resource Assessment and Planning, Policy, Software Engineering

© California ISO. All rights reserved.

CIRA-CMP-75 Drop 9 BRS

CIRA-BRQ-290 New Resource Default NQC Report

Create a new resource-level Default NQC report in CIRA

- CAISO shall upload the CAISO calculated resource Default NQC for the CAISO calculated resources, using a new template for Resource default NQC
  - Add upload default NQC option under CIRA Plans-NQC
  - The new default NQC template shall include all the fields for reporting.
- Persist CAISO-calculated Default NQC from the latest CAISO upload process, corresponding resource have valid resource ID and NQC not exceed Pmax.
- Add CIRA reports-Default NQC report CIRA UI Default NQC report display Year, Resource ID, local area, generation name, Month, Default QC show the value for CAISO-calculated resources using the latest upload.
- Support download of the Default NQC Report to Excel
  - Include resource Default QC. Default QC is for information only

Requirement Type	Core
Impacted Application(s)	CIRA

Upstream Relationships:

- CIRA-SCPE-38 RAMPD Track 1 Enhancements (Derived from)

Downstream FUS:

CIRA-FUS-464 Default NQC - Upload CAISO-Calculated Default NQC

As an RAOE CIRA Write user

I want to upload CAISO-calculated resource Default NQC values into CIRA using a new resource-level template

So that CAISO-calculated Default NQC can be centrally managed and reported.

Requirement Type	Core
Impacted Application(s)	CIRA

Upstream Relationships:

- CIRA-BRQ-290 New Resource Default NQC Report (Derived from)

CIRA-FUS-465 Default NQC - Maintain Default NQC Upload Option in CIRA UI

As an RAOE CIRA Write user

© California ISO. All rights reserved.

I want an option to upload Default NQC data under CIRA Plans → NQC
So that Default NQC administration aligns with existing NQC processes.

Requirement Type	Core
Impacted Application(s)	CIRA

Upstream Relationships:

- CIRA-BRQ-290 New Resource Default NQC Report (Derived from)

CIRA-FUS-466 Default NQC - Persist Latest CAISO-Calculated Default NQC
As an RAOE CIRA Write user
I want the system to persist the latest CAISO-calculated Default NQC values
So that downstream reporting reflects the most recent CAISO upload.

Requirement Type	Core
Impacted Application(s)	CIRA

Upstream Relationships:

- CIRA-BRQ-290 New Resource Default NQC Report (Derived from)

CIRA-FUS-467 Default NQC - View and Download Default NQC Report
As an RAOE CIRA Write user
I want to view a resource-level Default NQC report in CIRA
So that CAISO-calculated Default NQC values can be reviewed and analyzed.

Requirement Type	Core
Impacted Application(s)	CIRA

Upstream Relationships:

- CIRA-BRQ-290 New Resource Default NQC Report (Derived from)

© California ISO. All rights reserved.