LSE Survey for RA modeling

April 23, 2024

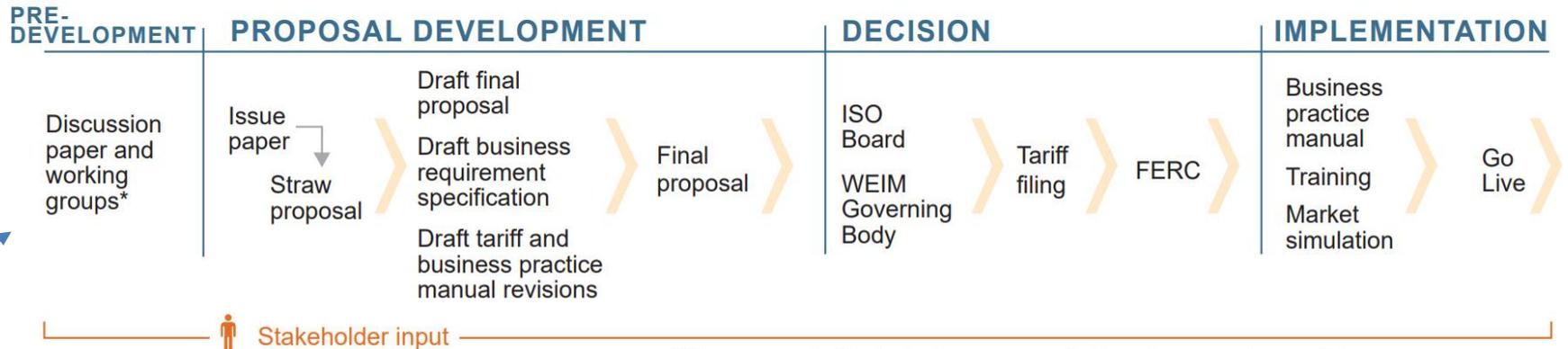Resource Adequacy Modeling and Program Design Working Group

Housekeeping Reminders

- This call is being recorded for informational and convenience purposes only. Any related transcriptions should not be reprinted without ISO's permission.

- These collaborative working groups are intended to stimulate open dialogue and engage different perspectives.

- Please keep comments professional and respectful.

Instructions for raising your hand to ask a question

- If you are connected to audio through your computer, select the raise hand icon located on the bottom of your screen.

- If you dialed in to the meeting, press #2 to raise your hand.

- Please remember to state your name and affiliation before making your comment.

- You may also send your question via chat to all panelists.

Working Group in context

PRE-DEVELOPMENT | **PROPOSAL DEVELOPMENT** | **DECISION** | **IMPLEMENTATION**

Discussion paper and working groups*

Issue paper → Straw proposal

Draft final proposal
Draft business requirement specification
Draft tariff and business practice manual revisions

Final proposal

ISO Board
WEIM Governing Body

Tariff filing

FERC

Business practice manual
Training
Market simulation

Go Live

Stakeholder input

This represents the typical process, and often stages run in parallel.

Stakeholder meetings, working groups and workshops may occur throughout the stakeholder process.

We are here

California ISO

Agenda

Time (PST)	Topic	Speaker
1:00 - 1:10 PM	Logistics and Welcome	Isabella Nicosia
1:10 – 1:45 PM	Modeling scope - Recap	Aditya Jayam Prabhakar
1:10 - 2:45 PM	LSE survey discussion	Samuel Hawkes
2:45 – 3:00 PM	Adjourn	All

California ISO

Quick Recap

MODELING SCOPE

California ISO

RA modeling will focus around three time horizons to answer specific questions

Timeframe	Question	Sufficiency Analysis of:	What are we looking for?
Year Ahead	Are the year ahead RA showings adequate?	RA Showings	Does the ISO BAA have a MW shortfall or excess? Determine default PRM and counting rules.
Years 2-4	Is the current level of authorized procurement and contracted capacity sufficient?	Existing capacity plus authorized procurement	Do we have enough collectively and who needs to bring more?
Years 5-10	Is the LT plan producing resource adequate portfolios to meet reliability targets?	Resource plans by consolidating LSE IRPs	To determine if the ISO BAA has sufficient resources for years 5 to 10.

California ISO

Survey discussion

- Based on stakeholder feedback received, the CAISO is engaging with Load Serving Entities (LSE) to collect the following data:
  - Short term – 100% year-ahead, non-binding, soft showing
  - Mid-term: all RA-eligible resources + authorized procurement
  - Long-term: all resources + resource plan information

- Each LSE to ensure that the resources provided meet their LRA RA obligations

California ISO

Why is this data being requested?

- Fleet transition towards increasing renewables and battery resources

- CAISO will use the results to inform default PRM and default counting rules

- LSEs are requested to provide their latest views of resource evolution in the coming years

For discussion - CAISO could survey Load Serving Entities (LSE's) to provide projected RA showings, projected RA contracts, and planning information

From previous WG discussions

For the year ahead, monthly projected RA showings

Summary	January	February	March	April	May	June	July	August	September	October	November	December
Monthly Peak Load (MW)												
PRM (%)												
Reserve requirement (NQC Capacity MW)												
yes, if sum >=requirement												
CAISO Resource ID	**January**	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**
Resource1												
Resource2												
Resource3												
Resource4												
Resource5												
Resource6												
Resource7												

Example

From previous WG discussions

- Information that CAISO may need –
  - projected estimates of contract capacity including incremental new additions and retirement assumptions.
  - CAISO resource IDs and queue numbers for new resource additions.

Summary		2025	2026	2027						
Annual Peak Load (MW)										
PRM (%)										
Total contracted capacity for peak month (MW)										
	yes, if sum >=requirement									
New RA from authorized procurement orders										
Resource ID	CAISO queue number	Resource Name	Installed Capacity	COD		Fuel Type	NQC	Deliverabililty	Location	Area
Resource1										
Resource2										
Resource3										
Resource4										
Resource5										

Example

SURVEY DISCUSSION

What is the survey asking?

- The survey requests LSE's to provide projected RA-eligible resource MW's to cover 100% of what is required to meet LSE's load + reserves (determined from PRM)
  - Monthly RA obligation for each month of 2025
  - RA obligation at forecast annual peak month for 2026-2034

- LSE's should use their LRA resource counting methodology and submit RA-eligible contracted MW's
  - Provide all available information, if CAISO resource ID's or queue numbers are not available these may be left blank
  - Planned resources may be given a generic placeholder name

What is the survey asking?

- Additional information on requested columns:
  - "Installed Capacity" is the entire resource capacity
  - "Contracted MW" is the amount that will be used to serve LSE load (a single resource may be split between LSE's)
  - Paired generation and storage should not exceed POI limit (indicate the amount by resource type in the notes)
  - "Fuel Type" categories should match those on the CAISO Master Control Area Generating Capability List
  - "Peak Month" should be consistent with the currently adopted CEC's 2023 IEPR forecast
- Please also include data for on-site generation that is used to charge grid connected batteries

What about confidentiality?

- Only aggregated results will be shared publicly

- LSE's should not submit any confidential or market sensitive information
  - This does not include information that is already protected under existing confidentiality agreements (Resource ID's, load forecasts, etc.)

What is the periodicity of modeling updates?

- The CAISO will determine the frequency of survey after further coordination with other similar surveys by the CEC and CPUC.

- The goal is to improve the process for future years so one entity can request all information from LSE's at one time.

NEXT STEPS

What is the timeline?

- Survey due by May 16, 2024

- Responses should be submitted through the CAISO Customer Inquiry, Dispute and Information system ([CIDI](#))

- Direct questions to Sam Hawkes: shawkes@caiso.com

- Next working group meeting: April 29th and 30th (Hybrid)