## Resource Adequacy Modeling and Program Design (RAMPD) Initiative

## **Track 1: Modeling and Default rules**

Stakeholder comment summary

October 2025

Stakeholder Name	Stakeholder Comment Summary	ISO Response
Alliance for Retail Energy Market (AreM)	Supports waiting to implement this proposal for a year to allow coordination between ISO and the California Public Utilities Commission (CPUC) to occur prior to implementation, reducing administrative burden for all parties.  Concerned that without modeling local constraints, ISO risks modeling invalid calibrated portfolios that do not include resources still needed for local reliability. Excluding such resources could have impacts to the effective load carrying capability (ELCC) of storage and other resources due to interactive effects.	Management recognizes that the CPUC is also in process of developing its own unforced capacity (UCAP) design for its storage and thermal resource qualifying capacity (QC) methodology. Management remains committed to collaboration and will seek opportunities to align inputs and assumptions where appropriate. In addition, the ISO will continue to evaluate industry best practices in reliability modeling and qualifying capacity criteria as the ISO develops the details of the UCAP methodology, which will be transparent to stakeholders and memorialized in the Business Practice Manuals.  Removal of plants in the calibration phase has no bearing on local RA requirements. While removal of a specific power plant over another should have negligible impact on model results, the ISO will evaluate the potential impact and alternative methods of calibration that would allow plants necessary to meet local RA requirements to remain untouched.

California Community Choice Association	Indicates that ISO should be explicit that the default planning reserve margin (PRM) adopted is in no way relevant to any other PRM that applies to any other accounting methodology.  Recommends ISO should consider the cost implications when weighing the advantages and disadvantages of choosing alternative event distributions for determining the default PRMs.  Recommends ISO revise its methodology so that ELCC values are differentiated by duration to reflect differences in reliability contribution that battery storage may have that are driven by duration, in addition to forced outages.	The default PRM and QC criteria are designed as a holistic set of RA rules and based on modeling and analysis that ISO has developed with stakeholders. Local regulatory authorities (LRAs) still hold the authority to set their own PRMs, and can consider various factors in this process.  We will revisit the need to develop additional default QC criteria for new resource types, including long duration storage, in future annual processes as described in the proposal.
California Department of Water Resources (CDWR)	Supports or does not oppose the proposal and the importance the ISO places on maintaining LRA autonomy.  Proposed an alternative default QC for participating load.	CDWR's feedback is appreciated including alternatives for participating load. We appreciate their perspectives of why CDWR might adopt a different framework.
California Efficiency + Demand Management Council	Recommends the ISO explain how the proposed methodology would interact with the resource adequacy availability incentive mechanism (RAAIM) to ensure that these policies do not interact in unanticipated ways.	Efforts to reform or replace RAAIM will continue in RAMPD Track 2. The implications and the interaction of the proposed default rules with the penalty and incentive mechanisms will be considered in Track 2.
California ISO – Department of Market Monitoring	Supports the proposal and the importance the ISO places on maintaining LRA autonomy.	DMM's support is appreciated.

Energy Division California Public Utilities Commission	Expressed concern that the timing would effectively limit the opportunity for continued collaboration on UCAP design.  Advocated for a UCAP counting approach for battery storage.  Encourage ISO to refine its RA framework to better align with the CPUC's Slice of Day framework which examines if there is capacity during all hours of the peak day of each month. In prior comments, Energy Division staff suggested examining the peak and net peak as a transition to a full Slice of Day-like assessment.	We agree with the CPUC Energy Division that our future reforms to our programs should examine holistically whether we have the right set of program requirements based on the evolving reliability needs, and can consider, for example, whether an evaluation of net-peak sufficiency and energy sufficiency is needed as those tracks proceed.  Management's proposed UCAP design provides an effective framework for establishing default resource qualifying capacity values. We recognize that continued coordination will remain important both to ensure the CPUC develops an effective UCAP structure for its jurisdictional load serving entities and the ISO is utilizing best practices in our calculations of UCAP. Management remains committed to collaboration and will seek opportunities to align inputs and assumptions where appropriate.
Public Advocates Office California Public Utilities Commission	Indicated that interaction of the ISO's proposed UCAP default accreditation and RAAIM must be clarified.	Reforms to RAAIM will be considered in Track 2 of the RAMPD initiative.
California Energy Storage Alliance	Supports ISO's revised approach for setting the UCAP assessment hours based on studied critical hours.  Does not support ISO's revised set of outage natures-of-work that should be excluded from the UCAP assessment, because it is not aligned with well-established NERC forced outage definitions that are focused on plant equipment failures leading to loss of capability, and would result in penalizing resources for operating within their design specifications or for using outages to compensate for deficiencies in ISO's market modeling.	To better predict future availability of dispatchable thermal, pumped storage hydro, and nuclear resource contribution to overall reliability, all forced outage natures of work will be considered in ISO's default UCAP design.  However, ISO recognizes that the CPUC is also in process of developing its own UCAP design for its storage and thermal resource QC methodology. Management remains committed to collaboration and will seek opportunities to align inputs and assumptions where appropriate. In addition, the ISO will continue to evaluate industry best practices in reliability modeling and qualifying capacity criteria as the ISO develops the details of the UCAP methodology.

Microsoft	Supported an average ELCC resource accounting method for all resources in the past, but does support a UCAP accounting methodology for thermal, pumped storage hydro, and nuclear resources as important for alignment with the CPUC and to account for resource reliability contributions.	Microsoft's support is appreciated.
Middle River Power, LLC	Did not support previous default UCAP assessment hours proposal (supply cushion).	The proposed UCAP design was modified to incorporate an at-risk hours approach that incorporates reliability modeling results to determine the periods that resource adequacy resources should be considered to be in demand.
Northern California Power Agency	Appreciates the importance the ISO places on maintaining LRA autonomy.  Does not support bundling dispatchable hydroelectric facilities and run-of-river hydroelectric facilities into a single resource type.	The proposed hydroelectric ELCC design was revised to suballocate run-of-river and dispatchable QC criteria.
Pacific Gas & Electric (PG&E)	Believes the proposed ISO default counting rules and default PRM is a better reflection of the contribution of different resource types and individual resources to maintain balancing authority area-wide reliability and meet a 1 in 10 LOLE industry standard, while maintaining the autonomy of local regulatory authorities to set their own rules.  Appreciates ISO recognizing PG&E's unease about Track 1 changes causing potential misalignment and additional considerations to address within Track 2 efforts as well as the CPUC's current UCAP effort.	PG&E's support for the proposal is appreciated. Efforts to reform RAAIM and resource adequacy substitution will continue in RAMPD Track 2 and Track 3B and will be coordinated with LRA rules including the CPUC's UCAP development.
Renew Home	Offers additional suggestions regarding the demand response performance factor design.	Discussions may continue in the ongoing annual process on how to refine the inputs and assumptions in the demand response performance factor calculation.

Rev Renewables	Recommends one QC method with sub-resource types for different storage resource durations.	The ISO will revisit the need to develop additional default QC criteria for new resource types, including long duration storage, in future annual processes as described in the proposal.
San Diego Gas & Electric (SDG&E)	SDG&E remains concerned with the potential long-term implications of reducing the QC of resources operating within their design specifications based on instances when, due to limitations in the market model, they must use outage cards to represent known operating characteristics. SDG&E understands that the Storage Design and Modeling initiative may be the appropriate venue for providing the requested analysis and moving forward with market model enhancements.  Regarding UCAP design, SDG&E recommends	Management remains committed to collaboration and will seek opportunities to align inputs and assumptions where appropriate. In addition, the ISO will continue to evaluate industry best practices in reliability modeling and qualifying capacity criteria as the ISO develops the details of the UCAP methodology.
	that ISO explores removing the worst performing year within the historical period. SDG&E recommends that ISO further explore this proposal as it may better represent a resource's capabilities and aligns with CPUC's direction in its own UCAP design.	
Six Cities	Support the ISO's proposal to preserve the current structure of including default—rather than required minimum RA program elements—in the ISO Tariff and the ISO's continued acknowledgement that determining planning reserve margins and qualifying capacity counting rules is the responsibility of LRAs.  However, the Six Cities have remaining concerns regarding whether use of a 0.1 LOLE to set the informational PRM is appropriate or, more fundamentally, whether the outcome of these studies will be PRM values that are reasonably	Management values Six Cities' input and recognizes the considerations that LRAs make when setting QC criteria and a PRM. LRAs retain the ability to weigh various factors, including capacity prices and resource planning, in setting their QC methodology and PRM.
	regarding whether use of a 0.1 LOLE to set the informational PRM is appropriate or, more fundamentally, whether the outcome of these	

Southern California Edison (SCE)	SCE advocates that given potential differences in reliability modeling, entities should not be able to pick and choose various QC values or PRMs from unrelated mechanisms or studies. SCE argues that entities that choose to use the ISO's default counting rules should also be required to use the default PRM from those same studies.  SCE also argues that a Performance-Based UCAP for demand response resources should not be set at the demand response provider (DRP) level.	SCE's concerns with LRAs selecting misaligned QC values or PRMs from unrelated reliability mechanisms are noted. Modifying LRA authority to make these determinations was not in the scope of this proposal.  The proposal maintains the DRP-level performance factor. This level of performance assessment ensures that frequent re-registration of PDR resources does not skew default QC criteria for demand response.
Western Power Trading Forum (WPTF)	WPTF supports the ISO's approach of beginning with simple methodologies and increasing complexity and accuracy over time as needed.  WPTF recommends the ISO evaluate market data to establish fixed monthly risk hours during top load days to assess resource's UCAP value. WPTF supports reviewing UCAP for individual resources and average resource types under this and the prior methodology and letting the data drive the ultimate methodology decision.	Management appreciates WPTF's support of the proposal. The risk hours used to determine the UCAP assessment period based will be considered based on the results of the recurring probabilistic modeling efforts described in the proposal.