

Comments on Resource Adequacy Modeling, Default Rules, and Ambient Derates (Track 1) Straw Proposal

Department of Market Monitoring

June 25, 2025

Overview

The Department of Market Monitoring (DMM) appreciates the opportunity to comment on the *Resource Adequacy Modeling, Default Rules, and Ambient Derates (Track 1) Straw Proposal* and *Straw Proposal Meeting* dated June 6 and 11, respectively.^{1,2} In these comments, DMM adds to our previous comments in response to the ISO, *Resource Adequacy Modeling and Program Design (RAMPD) Working Group* dated March 13, 2025.³ DMM includes additional comments on the following two issues:

- **Default accounting rules.** DMM continues to support the default accounting rules, and recommends the ISO incorporate resource-level accounting for storage resources.
- **Accounting for ambient derates.** Ambient derates should be self-reported by the resource through the outage management system, and the must offer obligation should remain unchanged as long as interdependent policies (e.g., availability or performance incentives) are improved.

Comments

Default accounting rules

DMM continues to support the development of default qualifying capacity methodologies. The ISO is proposing to develop default net qualifying capacity (NQC), and planning reserve margin (PRM) methods to meet a 0.1 loss of load expectation (LOLE) across the default values. DMM understands that NQC and PRM values established by the local regulatory authority (LRA) will take precedent where such values exist. However, the default accounting rules would establish these values where not established by the LRA. The default accounting rules would create a framework and structure for the ISO to ensure there may be equitable procurement across the LRAs within the CAISO footprint by ensuring each LRA meets the 0.1 LOLE threshold. DMM believes the robust default PRM, and default resource accounting, will create a vetted process for equitable backstop, and provide for greater transparency moving forward in the case of any future backstop procurement.

¹ *Resource Adequacy Modeling, Default Rules, and Ambient Derates (Track 1) Straw Proposal*, California ISO, June 6, 2025: <https://stakeholdercenter.caiso.com/InitiativeDocuments/Track1StrawProposal-ResourceAdequacyModelingandProgramDesign-June62025.pdf>

² *Resource Adequacy Modeling and Program Design: Track 1*, California ISO, June 11, 2025: <https://stakeholdercenter.caiso.com/InitiativeDocuments/Presentation-ResourceAdequacyModelingandProgramDesign-Jun112025.pdf>

³ *Comments on Resource Adequacy Modeling and Program Design Working Group*, Department of Market Monitoring, March 13, 2025: <https://www.caiso.com/documents/dmm-comments-on-resource-adequacy-modeling-and-program-design-working-group-mar-13-2025.pdf>

Default net qualifying capacity rules

The development of the default NQC values vary across resource types, whereby some resources will be assessed at a resource class-level, and other resources will be assessed at the unit-level. DMM supports variable energy resources to be assessed their effective load carrying capability (ELCC). DMM also supports an ELCC approach for hydro resources, which have additional constraints on the resource such as instream flow requirements. Additionally, DMM supports dispatchable resources (e.g., thermal resources) to have their qualifying capacity (QC) assessed at their unforced capacity (UCAP) value because it will incentivize the dispatchable resources to plan and coordinate their outages to increase their NQC valuation.

DMM suggests further demonstration from the ISO that the storage ELCC approach is preferred to a UCAP valuation for storage resources. A UCAP valuation incentivizes resources to improve performance and maximize capacity available to the resource adequacy (RA) market, whereas the current formulation of the ELCC approach does not. The ISO's current proposal would use one QC value multiplier for all storage resources. A strength of the ELCC methodology is that it includes an energy sufficiency test in the valuation of the storage resources. However, this step could also be included in a UCAP framework. DMM recommends the UCAP framework, or a mechanism to adjust the ELCC valuation such that it can reflect resource-specific availability to incentivize increased system reliability.

To incentivize improved resource availability and performance for demand response (DR), DMM supports the development of a performance based UCAP approach. The ISO proposal would assess the performance based UCAP at the provider level, which DMM agrees will incentivize improved portfolio-level performance. DMM agrees that the ISO should not replace the work the California Energy Commission (CEC) and the California Public Utilities Commission (CPUC) are undertaking in their development of a new DR accreditation methodology that would replace the DR load impact protocols (LIP). The performance based UCAP for DR would be the default value, whereas the CEC and CPUC DR accreditation methodology will take precedent for CPUC-jurisdictional contracted DR.

Lastly, for resource accounting, DMM recommends the ISO reconsider the current rule for resources partially shown by multiple LSEs that are subject to different local regulatory authority (LRA) accreditation programs. Currently, the NQC provided to the resource is the highest NQC value provided by the different LRAs. This provision could incentivize a resource to freely sell additional capacity if the valuations vary widely. For example, take a 100 MW storage resource that has a valuation of 75 MW under the ISO's default ELCC values, but 95 MW under the CPUC's UCAP. The resource would then be able to freely sell an additional 20 MW of RA to a CPUC jurisdictional LSE if they were already supplying 75 MW of RA to an LRA under the ISO's default values. DMM recommends exploring a method to weigh RA accreditation across LRAs to avoid this issue of gaming LRA rules for RA.

Accounting for RA resource capabilities during peak conditions

The ISO has proposed to account for ambient derates separately from the UCAP accounting framework. DMM continues to support this approach.⁴ DMM previously recommended the ISO require resources to self-report their available capacity after accounting for ambient derates from their known

⁴ *Ibid.*

thermodynamic limits.⁵ The ISO is proposing to calculate the ambient derates from the outage management system (OMS), which is also self-reported data, and aligns with this recommendation. Additionally, if the resource is taking overlapping outages, and there is no available OMS data, the ISO is proposing the scheduling coordinator (SC) can submit their own qualifying capacity values.⁶

Currently, the CAISO tariff includes a must-offer obligation (MOO) for resources up to their shown RA capacity values. DMM understands the resulting NQC of a resource after ambient derate accounting and UCAP will be the result of taking deliverable qualifying capacity, adjusting to reflect ambient derates, and then the UCAP percentage adjustment will be made.

If ambient derate accounting does not reflect real-time conditions, and a resource must take an ambient derate above the derated capacity accounted for in this policy, the ISO should make explicit the interaction with the UCAP mechanism and the additional derate. In these conditions, the resource will be unable to meet their MOO, and thus there could be a potential UCAP impact of the additional derate.

As a part of the interdependencies in the RAMPD stakeholder initiative, if the resource has misrepresented their maximum operating limit, and cannot reach their true maximum output, the resource would owe availability or performance payments. Sufficiently strong availability or performance penalties would dissuade resources from misrepresenting their available capacity. This includes maintaining the current MOO, which requires the resource to bid the resource to their shown RA value. The interdependent outage policies from a well-designed UCAP mechanism—and availability or performance incentives—would incentivize accurate self-reporting of available capacity. Furthermore, maintaining incentives to perform beyond a resource’s shown RA (i.e., MOO) will encourage resources to perform at their maximum capability.

⁵ *Comments on Resource Adequacy Modeling and Program Design Issue Paper*, Department of Market Monitoring, December 6, 2024: <https://www.caiso.com/documents/dmm-comments-on-resource-adequacy-modeling-and-program-design-issue-paper-dec-06-2024.pdf>

⁶ *Resource Adequacy Modeling, Default Rules, and Ambient Derates (Track 1) Straw Proposal*, California ISO, June 6, 2025: <https://stakeholdercenter.caiso.com/InitiativeDocuments/Track1StrawProposal-ResourceAdequacyModelingandProgramDesign-June62025.pdf>