



Decision on Resource Adequacy Modeling & Program Design Track 1: Modeling and Default Rules

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Management proposes changes to the ISO's default capacity counting rules and planning reserve margin

- Introducing a new annual process that will better reflect characteristics of the resource fleet and changing load needs
- Default values will be developed with our probabilistic analysis planning capabilities, which includes the summer assessment
 - provides an assessment of the ISO balancing authority area's ability to meet a 1-in-10 loss of load expectation

Background: Resource adequacy rules and requirements are determined by local regulatory authorities

Key elements of resource adequacy rules:

- **Planning reserve margin:** the extra generation capacity that must be procured by load serving entities above the median forecasted monthly peak demand to ensure reliability
 - Expressed as the percentage of extra capacity procurement required beyond the forecast
- **Qualifying capacity criteria:** defined methods for determining how much of a resource's capacity can be credited towards meeting a load serving entity's procurement obligation

Background: Need for updated ISO default resource adequacy rules

- **Default rules:** ISO tariff contains default resource adequacy rules, including qualifying capacity criteria and a planning reserve margin
 - Applies to a local regulatory authority if it has not set its own resource adequacy rules
 - Serves as advisory information for local regulatory authorities
- **Outdated standards:**
 - Default rules last updated in 2006
 - Not aligned with current industry best practices
 - If followed, would not result in a reliable capacity portfolio

Management proposes updating default qualifying capacity methodology and planning reserve margin

- Default qualifying capacity criteria methodologies
 - Average effective load carrying capability (ELCC) for wind, solar, storage, and hydro, with resource-specific adjustment factors
 - Unforced capacity (UCAP) for dispatchable thermal, nuclear and pumped storage hydro
 - Three-year average generation for non-dispatchable thermal
 - Performance based on average load curtailment for supply-side demand response
 - Average demand reduction per dispatch event for participating load
- Monthly default planning reserve margins to achieve a 0.1 loss of load expectation (LOLE)
- Annual process to review, refine inputs, and publish default qualifying capacity values and planning reserve margin

Stakeholder feedback

Topic	Details	Response
Annual process concerns	<p>Local regulatory authorities expressed concerns about volatility from annual updates to default planning reserve margin (PRM) and qualifying capacity (QC) values</p>	<p>Management believes an annual update would provide for a more reliable and accurate assessment of the reliability needs and reliability contributions of different resource types</p> <p>Local regulatory authorities retain authority to set their own qualifying capacity and planning reserve margins to address volatility, but will have information that can inform contracting and requirements</p>
Default QC criteria	<p>Stakeholders urged ISO to align with CPUC's QC framework.</p> <p>Debate continues over design details, including which forced outage types to include in thermal QC criterion</p>	<p>Will revisit our approach regularly to align as needed and ensure aligns with industry best practices</p>
Intersection with other ISO RA policies	<p>Stakeholders raised related issues—the ISO's resource adequacy incentive mechanism and bidding requirements</p>	<p>Issues are being addressed through Track 2 of the ISO's RA Modeling and Program Design initiative to harmonize with local regulatory authority RA programs, not just the default rules</p>

Ongoing stakeholder engagement and next steps

- Proposal includes an annual stakeholder process to review default qualifying capacity (QC) criteria, values, and default planning reserve margins (PRMs)
- Management remains committed to collaboration and will seek opportunities to align inputs and assumptions where appropriate
 - 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

Updated ISO default rules should demonstrate default procurement requirements that would ensure a reliable bulk electric system

- If proposed updated default rules were adopted by all local regulatory authorities within the ISO balancing authority area, the resulting compliant load serving entity capacity portfolios would meet a 1-in-10 loss of load expectation, a common industry reliability standard
- Proposed default rules, along with recently strengthened ISO modeling capabilities, would help assess the reliability of the ISO balancing authority area

Management recommends approval of Resource Adequacy Modeling and Program Design Track 1

- Updates the ISO default RA rules to ensure the defaults reflect relative contribution of resources to meet reliability needs and a planning reserve margin that meets at least a 0.1 loss of load expectation
- Provides transparent and timely information about resources needed to meet reliability