



California ISO

Local Capacity Technical Study Criteria proposal

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Local capacity technical (LCT) study criteria needs to be updated to align with current mandatory standards.

- Current LCT study criteria:
 - Initially developed prior to the start of the resource adequacy program.
 - Established before North America Electric Reliability Corporation (NERC) standards were mandatory

Updates to category definitions are needed to align with current NERC standards.

- Currently, the NERC TPL-001-4 standard characterizes contingencies from P0 to P7 plus extreme contingencies.
- Previous standards categorized them from A to D – fewer and less comprehensive categories.
- ISO proposes to replace old references with new references and characterization

Stakeholder feedback:

- General agreement

Update bulk electric system (BES) voltage level definition and align application of non-BES criteria accordingly.

- NERC BES definition has changed in recent years and now generally includes:
 - Extra High Voltage (> 300 kV) and
 - High Voltage (generally > 100 kV and < 300 kV).
- Generally, elements < 100 kV are not considered BES and are planned to meet ISO Planning standards
- For non-BES facilities, the ISO Planning Standards will be used LCT studies as well as planning studies.

Stakeholder feedback: General agreement

Fully align LCT study criteria for BES with more stringent NERC mandatory standards:

- Provides greater transparency of all reliability needs to the resource adequacy program.
- Full criteria is already used in new transmission development and to retain existing resources under reliability must-run contracts.

Stakeholder feedback:

- Strong support

Partially relaxing an existing local capacity requirement:

- Current LCT study criteria requires mitigating all N-1 followed by L-2 contingencies that could cause voltage collapse or dynamic instability
- Mandatory standards only require that this “extreme event” be studied and mitigations considered based on the planners’ assessment of risk and consequences.
- Management proposes to modify this criteria to only require mitigation “if there is a risk of cascading” beyond a relatively small predetermined area, not to exceed 250 MW, directly affected by the outage.

Stakeholder feedback:

- General support

Management recommends the Board approve the update to the Local Capacity Technical study criteria.

- Proposed updates will:
 - Align category definitions with current standards
 - Adopt new definition for bulk electric system (BES) voltage level, and
 - Align the LCT study criteria with NERC, WECC and ISO mandatory standards
- Proposed updates are broadly supported by stakeholders