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Panel 3: Stakeholder Working Group Process and Path Forward

December 3, 2021



Qualifying Capacity

- Qualifying Capacity (QC): Maximum capacity eligible for Resource Adequacy
- Methodologies for QC valuation
 - Natural Gas Power Plant: Nameplate capacity
 - Wind and Solar: Effective Load Carrying Capability (ELCC)
 - Demand Response: Demand reduction predicted using Load Impact Protocols (LIP)



DR QC History

- California ISO moved to require all DR on supply plans
- CPUC agreed, subject to conditions:
 - DR permitted to bid variably and exempt from CAISO penalty
- ISO agreed, subject to conditions on QC methodology:
 - DR's contribution to reliability as a variable-output resource
 - Interactive effects with other similarly-situated resources

See CAISO PRR 1280, CPUC D.21-06-029



CPUC Request to CEC

Develop actionable recommendations for several DR QC issues:

1. Bid-informed ELCC (CAISO)
 2. LIP-informed ELCC (PG&E)
 3. Other proposals
 4. Alignment of operational and planning spaces
 5. Intra-cycle adjustments to DR QC during RA compliance year
 6. Phasing of modifications to DR QC methodology
 7. Reflecting changes to DR adders in DR QC methodology
- QC Methodologies**
Initial working group focus

See CPUC D.21-06-029



CEC Working Group Approach

Robust stakeholder process with weekly meetings including utilities, DR and storage providers, energy consultants, agencies, and the ISO

Phase 1: Parallel Working Groups

1. **Principles:** Develop set of principles used to assess proposals
2. **Methodologies:** Catalog, compare, and contrast proposals

Phase 2: Combined Working Group

- Recent focus on possibility of interim solutions for 2023
- Assess proposed methodologies using Principles



Identified DR Issues

1. **Crediting:** Majority of IOU DR resources are not subject to CAISO's rules for ensuring reliability
2. **QC Methodology:** Current approach imprecisely values contribution to reliability
3. **Incentive Mechanisms:** Penalties for falling short of commitments were not designed for DR
4. **Settlements:** Baseline methods do not accurately account for weather-sensitive resources
5. **Process:** Load Impact Protocols and QC assignment process are onerous, expensive, and opaque

IOU = Investor-Owned Utility



Proposed Principles from Working Group 1-5

The QC methodology should:

1. Be transparent and understandable.
2. Use best available information regarding resource capabilities, including recent historical performance and participant enrollment and composition projections.
3. Allow DR providers to quickly determine or update QC values.
4. Be consistent and compatible with the resource adequacy program.
5. Account for any use limitations, availability limitations, and variability in output of DR resources.



Proposed Principles from Working Group 6-9

The QC methodology should:

6. Translate a DR resource's load reduction capabilities into its contribution to reliability.
7. Include methods to determine delivered capacity (ex-post) that are compatible with the determination of qualifying capacity (ex-ante).
8. Not present a substantial barrier to participation in the RA program.
9. Flexibly account for the reliability contribution of a resource given the other resources on the system.

RA = Resource Adequacy



Methodology Library

1. Load Impact Protocols *Status Quo*
2. Effective Load Carrying Capability
3. Market-based Bidding Approach
4. Enhancements to Load Impact Protocols



Stakeholder Proposals

PJM/NYISO-informed Market-based Approach

Luke Tougas, California Efficiency + Demand Management Council

LIP + ELCC

Gil Wong, Pacific Gas & Electric



Thank You

