



California ISO

2021 & 2025 Final LCR Study Results Summary of Findings

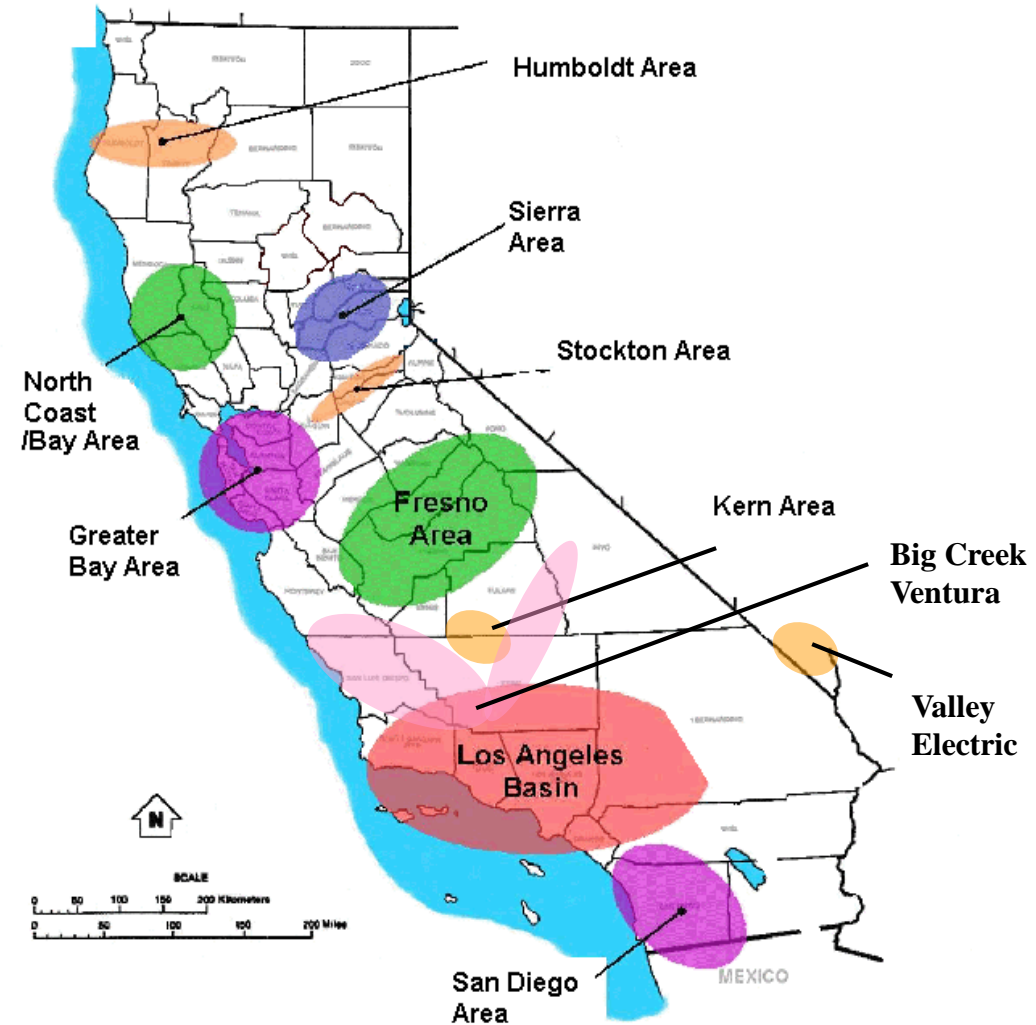
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Stakeholder Call

April 13, 2020

LCR Areas within CAISO



Input Assumptions, Methodology and Criteria

See October 31, 2019 stakeholder teleconference - for study assumptions, methodology and criteria. The latest information along with the 2021 LCR Manual can be found at:

<http://www.caiso.com/informed/Pages/StakeholderProcesses/LocalCapacityRequirementsProcess.aspx>.

Transmission system configuration – all-projects with EDRO up to June 1, 2021

Generation – all-generation with COD up to June 1, 2021

Load Forecast – 1 in 10 local area peak (based on latest CEC forecast)

Criteria – most stringent of all mandatory standards (NERC, WECC, ISO)

Methodology

1. Maximize Imports Capability into the local area
2. Maintain path flows
3. Maintain deliverability for deliverable units
4. Load pocket – fix definition

Retain Deficiency Calculation

1. ISO has eliminated the “Deficiency” from the summary tables.
2. Due to stakeholder requests ISO decided to continue calculating “Deficiency”.
3. Still estimated by using the most effective resource.
4. Deficiency is only presented in the detailed section of the report
 - calculated vs. available NQC and,
 - calculated vs. available capacity at peak.

Major Changes from last year studies

1. **New 2020 NQC data.**
2. **LCR results herein use CEC load forecast posted on 3/4/2020.**
3. **Total 2021 LCR capacity needed has increased by 517 MW or ~ 2.2%.**
4. **2021 LCR needs decrease in: Big Creek/Ventura and San Diego** due to load forecast decrease, **LA Basin** due to new transmission projects, **Stockton** due to changes in the LCR criteria, **Kern** due to decrease in available Qualifying Capacity, **Fresno** and **Humboldt** requirement is the same.
5. **2021 LCR needs increase in: North Coast/North Bay** due to change in the LCR criteria, **Bay Area** and **Sierra** due to load forecast increase and change in the LCR criteria.

2021 Final LCR Needs

Local Area Name	August Qualifying Capacity				Capacity Available at Peak	2021 LCR Need
	QF/ Muni (MW)	Non-Solar (MW)	Solar (MW)	Total (MW)	Total (MW)	Capacity Needed
Humboldt	0	191	0	191	191	130
North Coast/ North Bay	119	723	0	842	842	842*
Sierra	1183	920	5	2108	2103	1821*
Stockton	139	445	12	596	584	596*
Greater Bay	604	6806	8	7418	7418	6353
Greater Fresno	216	2815	361	3392	3191	1694*
Kern	5	330	78	413	335	413*
Big Creek/ Ventura	424	4454	250	5128	5128	2296
LA Basin	1197	8456	11	9664	9664	6127
San Diego/ Imperial Valley	2	4003	356	4361	4005	3888
Total	3889	29143	1081	34113	33461	24160

Major Changes from last year studies

1. **Total 2025 LCR capacity need has increased by about 153 MW or ~0.7%.**
2. **2025 LCR needs decrease in: Stockton** due to new transmission projects and changes to the LCR criteria, **Big Creek/Ventura** and **San Diego** due to load forecast decrease and new transmission projects, **Humboldt** requirement is the same.
3. **2025 LCR needs increase in: North Coast/North Bay** and **Fresno** due to change in the LCR criteria, **Bay Area**, **Sierra** and **Kern** due to load forecast increase and changes to the LCR criteria, **LA Basin** due to CEC and SCE reallocation of substation loads resulting in a higher amount in Western LA Basin.

Role and Purpose of sub-area LCR needs:

- Provide detail local procurement information
- Need to be satisfied in order to minimize ISO back-stop
- Sum of the parts may not equal the overall need

2025 Final LCR Needs

	August Qualifying Capacity				Capacity Available at Peak	2025 LCR Need
Local Area Name	QF/ Muni (MW)	Non-Solar (MW)	Solar (MW)	Total (MW)	Total (MW)	Capacity Needed
Humboldt	0	191	0	191	191	132
North Coast/ North Bay	119	723	0	842	842	837
Sierra	1183	920	5	2108	2103	1367*
Stockton	116	491	12	619	607	619*
Greater Bay	604	6732	8	7344	7344	6110*
Greater Fresno	216	2815	361	3392	3191	1971*
Kern	5	330	78	413	335	186*
Big Creek/ Ventura	424	2963	250	3637	3637	1002
LA Basin	1197	6215	11	7423	7423	6309
San Diego/ Imperial Valley	2	4438	378	4818	4440	3557
Total	3866	25818	1103	30787	30113	22090

Near-Term LCR Study Schedule

CPUC and the ISO have determined overall timeline

- Criteria, methodology and assumptions meeting Oct. 31, 2019
- Submit comments by November 14, 2019
- Posting of comments with ISO response by the December 12, 2019
- Base case development started in December 2019
- Receive base cases from PTOs January 2020
- Publish base cases January 15, 2020 – comments by Jan 29th
- Receive and incorporate CEC load forecast February 5-12th
- Draft study completed by March 9, 2020
- ISO Stakeholder meeting March 16, 2020 – comments by the 30th
- ISO receives new operating procedures March 30, 2020
- Validate op. proc. – publish draft final report April 7, 2020
- ISO Stakeholder call April 13, 2020 – comments by the 27th
- Final 2021 LCR report May 1, 2020



2020 ISO Procurement Schedule

Per ISO Tariff and BPM - overall timeline

- Final LCR Report May 1, 2020
- LSE self-guided local allocation; May-June, 2020
- Receive new CEC coincident load forecast June 30, 2020
- ISO or CPUC to send out final local allocation; middle of July, 2020
- For any current RMR resource; LSEs to submit showings by 9/6/2020
- ISO to decide on retaining units under RMR by October 1, 2020
- Final LSE showings TBD – Usually last week of October, 2020
- ISO to send a market notice out stating deficiencies in procurement – about 3 weeks after final showing - about November 21, 2020
- ISO receives additional showing (30 days after market notice)
- ISO to enter back-stop procurement for local reasons (if needed)