2022 & 26 Final LCR Study Results Summary of Findings

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Stakeholder Call

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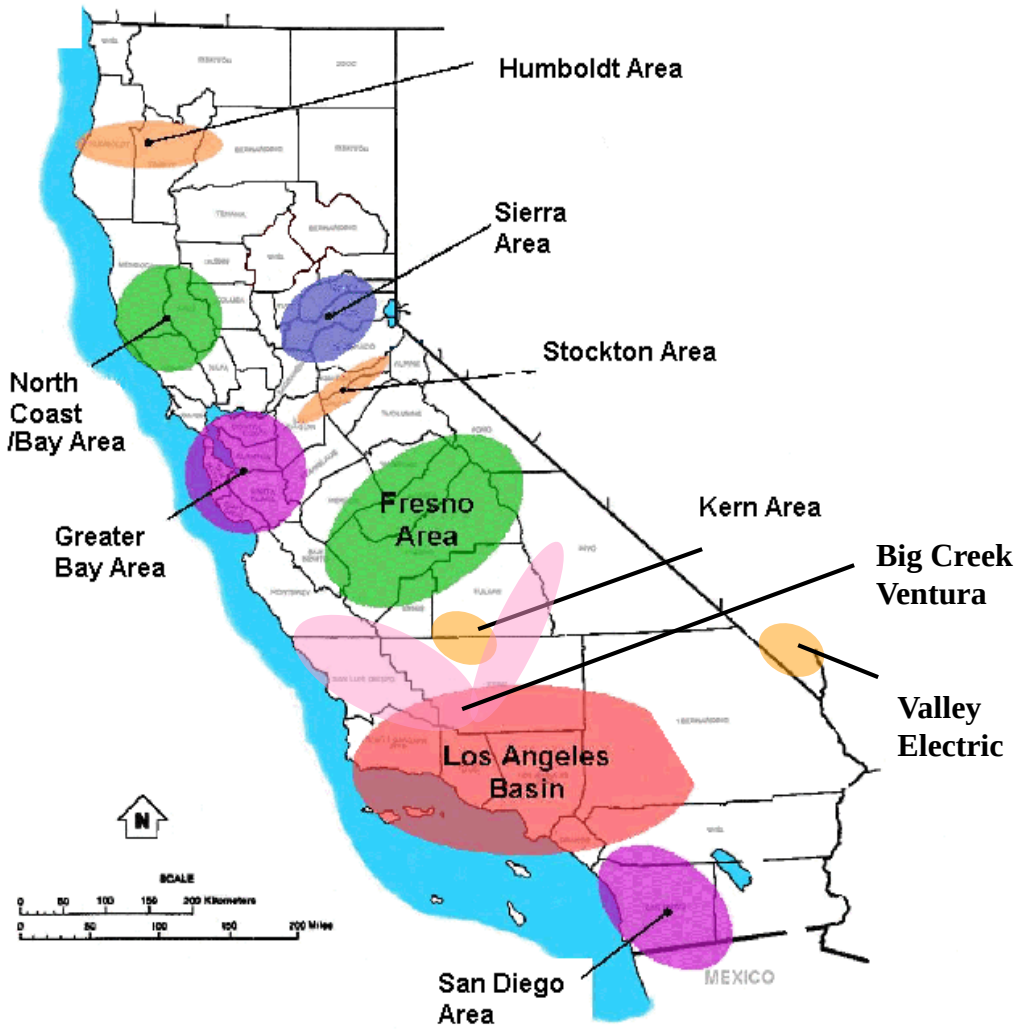
LCR Areas within CAISO



Input Assumptions, Methodology and Criteria

See November 3, 2020 stakeholder teleconference - for study assumptions, methodology and criteria. The latest information along with the 2022 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, 2022

Generation – all-generation with COD up to June 1, 2022

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

Major Changes from last year studies

1. **New 2021 NQC data.**
2. **LCR results herein use CEC load forecast posted on 1/29/2021.**
3. **Total 2022 LCR capacity needed has increased by 953 MW or ~ 3.9%.**
4. **2022 LCR needs decrease in**: **Humboldt, Kern** and **Big Creek/Ventura** due to load forecast decrease, **Sierra** due to load forecast decrease and new transmission projects.
5. **2022 LCR needs increase in**: **North Coast/North Bay** and **Fresno** due to load forecast increase, **Bay Area** due to load increase in San Jose (SVP)**, San Diego-Imperial Valley** due to load forecast increase and higher imports from IID area, **Stockton** due to lower rating for the limiting equipment, and **LA Basin** due to splitting the Mesa 230 kV bus for fault duty mitigation.

2022 Final LCR Needs

	August Qualifying Capacity				Capacity Available at Peak	2022 LCR Need
Local Area Name	**QF/ Muni (MW)**	**Non-Solar (MW)**	**Solar (MW)**	**Total (MW)**	**Total (MW)**	**Capacity Needed**
Humboldt	0	181	0	**181**	**181**	**111**
North Coast/ North Bay	119	715	0	**834**	**834**	**834***
Sierra	1193	894	5	**2092**	**2087**	**1220***
Stockton	129	445	12	**586**	**574**	**562***
Greater Bay	611	7129	8	**7748**	**7748**	**7231***
Greater Fresno	194	2819	357	**3370**	**3172**	**1987***
Kern	4	333	81	**418**	**337**	**356***
Big Creek/ Ventura	424	4853	369	**5646**	**5646**	**2173**
LA Basin	1160	7603	11	**8774**	**8774**	**6646**
San Diego/ Imperial Valley	8	3985	369	**4362**	**3993**	**3993**
Total	3842	28957	1212	**34011**	**33346**	**25113**

Major Changes from last year studies

1. **Total 2026 LCR capacity need has increased by about 2289 MW or ~10.4%.**
2. **2026 LCR needs decrease in**: **San Diego** due to new transmission projects, **Humboldt** and **Big Creek/Ventura** requirements are about the same.
3. **2026 LCR needs increase in**: **North Coast/North Bay** due to change in limiting contingency and limiting element, **Sierra, Stockton** and **Kern** due to delay in transmission projects in-service dates, **Bay Area, Fresno** and **LA Basin** due to load forecast increase.

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

2026 Final LCR Needs

	August Qualifying Capacity				Capacity Available at Peak	2026 LCR Need
Local Area Name	**QF/ Muni (MW)**	**Non-Solar (MW)**	**Solar (MW)**	**Total (MW)**	**Total (MW)**	**Capacity Needed**
Humboldt	0	181	0	**181**	**181**	**128**
North Coast/ North Bay	119	715	0	**834**	**834**	**834***
Sierra	1193	894	5	**2092**	**2087**	**1690***
Stockton	129	445	12	**586**	**574**	**586***
Greater Bay	611	7055	8	**7674**	**7674**	**7674***
Greater Fresno	194	2819	357	**3370**	**3172**	**2314***
Kern	4	333	81	**418**	**337**	**418***
Big Creek/ Ventura	424	3362	369	**4155**	**4155**	**982**
LA Basin	1159	6223	11	**7393**	**7393**	**6359**
San Diego/ Imperial Valley	8	4676	391	**5075**	**4684**	**3394**
Total	**3841**	**26703**	**1234**	**31778**	**31091**	**24379**

Near-Term LCR Study Schedule

CPUC and the ISO have determined overall timeline

- Criteria, methodology and assumptions meeting Nov. 3, 2020
- Submit comments by November 17, 2020
- Base case development started in December 2020
- Receive base cases from PTOs January 2021
- Publish base cases January 15, 2021 – comments by Jan 29th
- Receive and incorporate CEC load forecast February 1-12th
- Draft study completed by March 9, 2021
- ISO Stakeholder meeting March 11, 2021 – comments by the 25th
- ISO receives new operating procedures March 25, 2021
- Validate op. proc. – publish draft final report April 1, 2021
- ISO Stakeholder call April 7, 2021 – comments by the 21th
- Final 2022 LCR report April 30, 2021

2021 ISO Procurement Schedule

Per ISO Tariff and BPM - overall timeline

- Final LCR Report April 30, 2021
- LSE self-guided local allocation; May-June, 2021
- Receive new CEC coincident load forecast June 30, 2021
- ISO or CPUC to send out final local allocation; middle of July, 2021
- For any current RMR resource; LSEs to submit showings by 9/6/2021
- ISO to decide on retaining units under RMR by October 1, 2021
- Final LSE showings TBD – Usually last week of October, 2021
- ISO to send a market notice out stating deficiencies in procurement – about 3 weeks after final showing - about November 21, 2021
- ISO receives additional showing (30 days after market notice)
- ISO to enter back-stop procurement for local reasons (if needed)