



# 2020 & 24 Draft LCR Study Results Summary of Findings

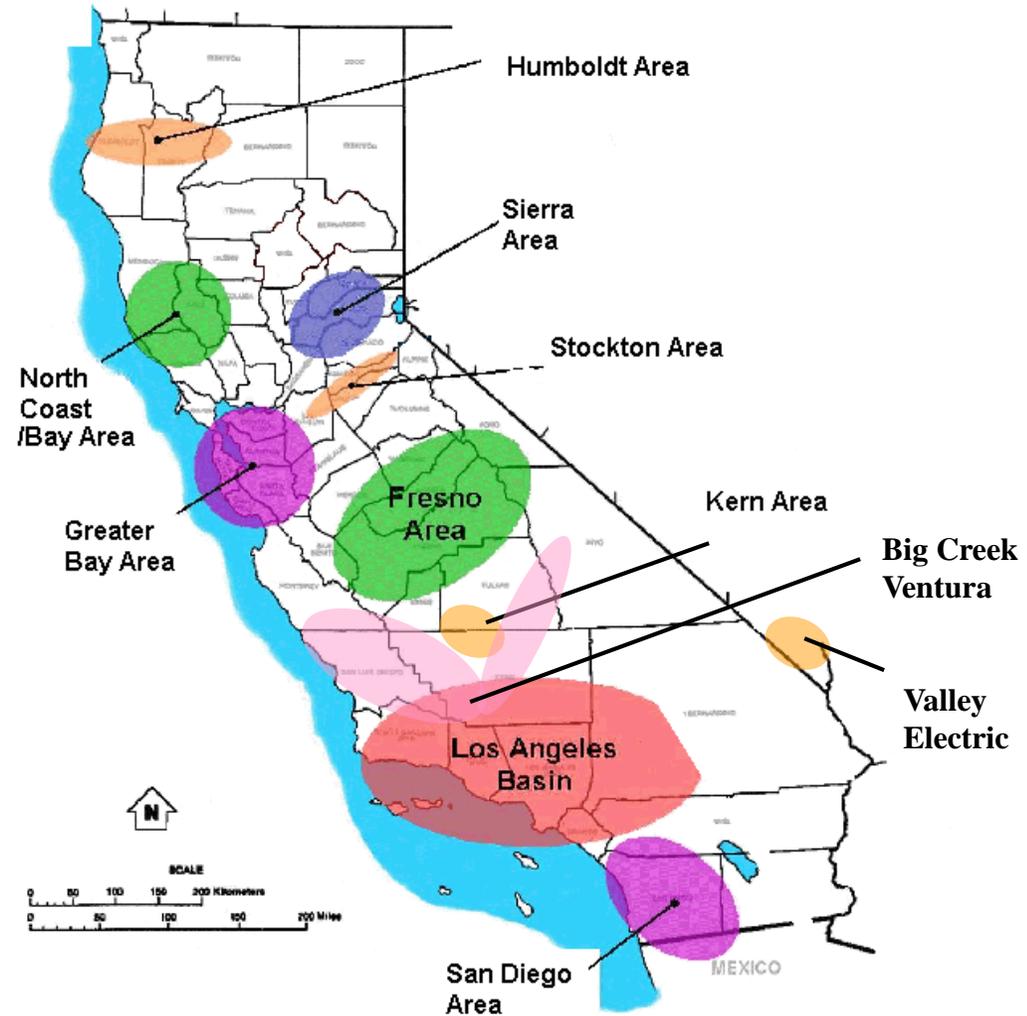
Catalin Micsa

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Stakeholder Meeting

March 14, 2019

# LCR Areas within CAISO



# Input Assumptions, Methodology and Criteria

See October 31, 2018 stakeholder teleconference - for study assumptions, methodology and criteria. The latest information along with the 2020 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, 2020

Generation – all-generation with COD up to June 1, 2020

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

Criteria – see report for details

## Methodology

1. Maximize Imports Capability into the local area
2. Maintain path flows
3. Maintain deliverability for deliverable units
4. Load pocket – fix definition
5. Performance levels B & C (if equal category B is most stringent)

# Major Changes from last year studies

1. **New 2019 NQC data.**
2. **LCR results herein use CEC load forecast posted on 2/5/2019.**
3. **Total 2020 LCR needs have increased by 84 MW or ~ 0.3%.**
4. **2020 LCR needs decrease in: Humboldt and Big Creek/Ventura** due to load forecast decrease, **LA Basin** due to decrease in load forecast and solar unavailability at 8 PM, **Sierra** due to new transmission projects.
5. **2020 LCR needs increase in: North Coast/North Bay, Bay Area, Stockton, Fresno and Kern** due to load forecast increase, **San Diego/Imperial Valley** due to load forecast increase and unavailability of solar at 8 PM.

# 2020 Draft LCR Needs

Local Area Name	Qualifying Capacity			2020 LCR Need Based on Category B			2020 LCR Need Based on Category C with operating procedure		
	QF/MUNI (MW)	Market (MW)	Total (MW)	Existing Capacity Needed	Deficiency	Total (MW)	Existing Capacity Needed	Deficiency	Total (MW)
Humboldt	0	197	197	83	0	<b>83</b>	130	0	<b>130</b>
North Coast / North Bay	118	715	833	742	0	<b>742</b>	742	0	<b>742</b>
Sierra	1168	992	2160	1091	0	<b>1091</b>	1764	304	<b>2068</b>
Stockton	155	498	653	598	89	<b>687</b>	625	616	<b>1240</b>
Greater Bay	617	6450	7067	3970	0	<b>3970</b>	4550	0	<b>4550</b>
Greater Fresno	222	3030	3252	1694	0	<b>1694</b>	1694	0	<b>1694</b>
Kern	8	457	465	181	9	<b>190</b>	467	125	<b>592</b>
LA Basin	1303	9387	10690	7712	0	<b>7712</b>	7712	0	<b>7712</b>
Big Creek/Ventura	405	4672	5077	2139	0	<b>2139</b>	2390	0	<b>2390</b>
San Diego/ Imperial Valley	4	4472	4476	4042	0	<b>4042</b>	4042	0	<b>4042</b>
<b>Total</b>	4000	30870	34870	22252	98	<b>22350</b>	24116	1045	<b>25160</b>

# Major Changes from last year studies

1. **Total 2024 LCR needs have decreased by about 776 MW or ~3.3%.**
2. **2024 LCR needs** decrease in: **Humboldt** and **Big Creek/Ventura** due to decrease in load forecast, **LA Basin** due to decrease in load forecast and solar unavailability at 8 PM, **Sierra** and **Kern** due to new transmission projects, **Bay Area** due to load forecast decrease and new transmission projects.
3. **2024 LCR needs** increase in: **North Coast/North Bay** due to load forecast increase and decrease in requirements in the Bay Area (Pittsburg-Ames-Oakland subarea), **Stockton** and **Fresno** due to load forecast increase, **San Diego/Imperial Valley** due to load forecast increase and solar unavailability at 8PM.

## **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

# 2024 Draft LCR Needs

Local Area Name	Qualifying Capacity			2024 LCR Need Based on Category B			2024 LCR Need Based on Category C with operating procedure		
	QF/MUNI (MW)	Market (MW)	Total (MW)	Existing Capacity Needed	Deficiency	Total (MW)	Existing Capacity Needed	Deficiency	Total (MW)
Humboldt	0	197	197	83	0	<b>83</b>	132	0	<b>132</b>
North Coast / North Bay	118	715	833	706	0	<b>706</b>	706	0	<b>706</b>
Sierra	1168	992	2160	761	0	<b>761</b>	1304	0	<b>1304</b>
Stockton	155	544	699	388	29	<b>417</b>	671	338	<b>1009</b>
Greater Bay	617	7023	7640	3494	0	<b>3494</b>	4395	0	<b>4395</b>
Greater Fresno	222	3030	3252	1711	0	<b>1711</b>	1711	0	<b>1711</b>
Kern	8	457	465	0	0	<b>0</b>	103	49	<b>152</b>
LA Basin	1303	7035	8338	6260	0	<b>6260</b>	6260	0	<b>6260</b>
Big Creek/Ventura	405	3102	3507	2077	17	<b>2094</b>	2567	117	<b>2684</b>
San Diego/ Imperial Valley	4	4859	4863	4295	0	<b>4295</b>	4295	0	<b>4295</b>
<b>Total</b>	4000	27954	31954	19775	46	<b>19821</b>	22144	504	<b>22648</b>

# Deficiency Calculation

1. Deficiency is estimated by using the most effective resource.
2. Deficiency was always calculated vs. available NQC.
3. Deficiency can also be calculated vs. available resources at time of peak, creating greater confusion.
4. Original scope was to incentivize new resource development in “Deficient” areas and sub-area. Last 10 years of LCR reports have about the same areas and deficiencies as started with.
5. ISO proposal is to eliminate the “Deficiency” calculation.
6. Going forward we propose to provide: Total NQC available, Resources available at peak and LCR requirement – not to exceed the lower of the first two.
7. If required the ISO can state the fact that a certain area or sub-area is deficient in the detailed write-up without including the deficiency numbers in the total calculation.

# Near-Term LCR Study Schedule

## **CPUC and the ISO have determined overall timeline**

- Criteria, methodology and assumptions meeting Oct. 31, 2018
- Submit comments by November 14, 2018
- Posting of comments with ISO response by the December 12, 2018
- Base case development started in December 2018
- Receive base cases from PTOs January 2019
- Publish base cases January 14, 2019 – comments by Jan 28<sup>th</sup>
- Receive and incorporate CEC load forecast February 5-12<sup>th</sup>
- Draft study completed by March 7, 2019
- ISO Stakeholder meeting March 14, 2019 – comments by the 28<sup>th</sup>
- ISO receives new operating procedures March 26, 2019
- Validate op. proc. – publish draft final report April 3, 2019
- ISO Stakeholder call April 10, 2019 – comments by the 24<sup>th</sup>
- Final 2020 LCR report May 1, 2019



# 2019 ISO Procurement Schedule

## **Per ISO Tariff and BPM - overall timeline**

- Final LCR Report May 1, 2019
- LSE self-guided local allocation; May-June, 2019
- Receive new CEC coincident load forecast June 30, 2019
- ISO or CPUC to send out final local allocation; middle of July, 2019
- For any current RMR resource; LSEs to submit showings by 9/6/2019
- ISO to decide on retaining units under RMR by October 1, 2019
- Final LSE showings TBD – Usually last week of October, 2019
- ISO to send a market notice out stating deficiencies in procurement – about 3 weeks after final showing - about November 21, 2019
- ISO receives additional showing (30 days after market notice)
- ISO to enter back-stop procurement for local reasons (if needed)

# THANK YOU

Your comments and questions are welcome.

For written comments, please send to: [RegionalTransmission@caiso.com](mailto:RegionalTransmission@caiso.com)

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