



California ISO

# 2019 & 23 Final LCR Study Results Summary of Findings

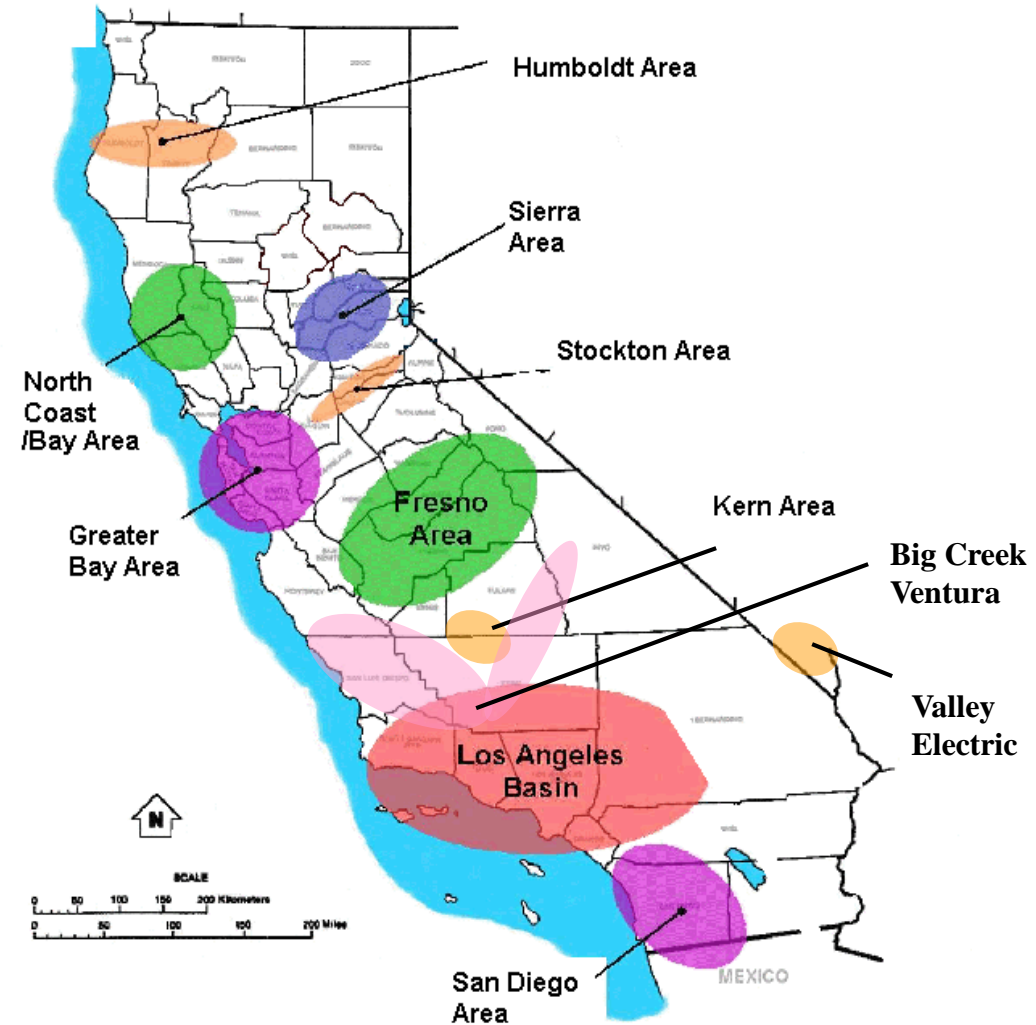
Catalin Micsa

Senior Advisor Regional Transmission Engineer

Stakeholder Call

May 1, 2018

# LCR Areas within CAISO



# Input Assumptions, Methodology and Criteria

See October 31, 2017 stakeholder teleconference - for study assumptions, methodology and criteria. The latest information along with the 2019 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, 2019

Generation – all-generation with COD up to June 1, 2019

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 2018 NQC data.**
2. **LCR results herein use CEC 8760 load forecast.**
3. **Total 2019 LCR needs have increased by 37 MW or ~ 0.0%.**
4. **2019 LCR needs** decrease in: **Humboldt** due to load forecast decrease, **Bay Area** due to new transmission projects, **Fresno** due to decrease in load forecast and due to new transmission projects, **San Diego** due to downward trend for load combined with an increase due loss of NQC at the most effective location in mitigating the most limiting contingency.
5. **2019 LCR needs** increase in: **North Coast/North Bay, Stockton, Big Creek/Ventura, LA Basin** due to load forecast increase and **Sierra** due to load and resource distribution, **Kern** due to change in limiting line section.

# 2019 Final LCR Needs

Local Area Name	Qualifying Capacity			2019 LCR Need Based on Category B			2019 LCR Need Based on Category C with operating procedure		
	QF/ Muni (MW)	Market (MW)	Total (MW)	Existing Capacity Needed	Deficienc y	Total (MW)	Existing Capacity Needed**	Deficienc y	Total (MW)
Humboldt	0	202	202	116	0	<b>116</b>	165	0	<b>165</b>
North Coast/ North Bay	119	771	890	689	0	<b>689</b>	689	0	<b>689</b>
Sierra	1146	1004	2150	1362	0	<b>1362</b>	1964	283*	<b>2247</b>
Stockton	144	489	633	405	5*	<b>410</b>	427	350*	<b>777</b>
Greater Bay	628	6448	7076	3670	0	<b>3670</b>	4461	0	<b>4461</b>
Greater Fresno	340	3177	3517	1406	0	<b>1406</b>	1670	1*	<b>1671</b>
Kern	13	462	475	148	6*	<b>154</b>	472	6*	<b>478</b>
LA Basin	1445	9421	10866	7968	0	<b>7968</b>	8116	0	<b>8116</b>
Big Creek/Ventura	424	4649	5073	2333	0	<b>2333</b>	2614	0	<b>2614</b>
San Diego/ Imperial Valley	106	4285	4391	4026	0	<b>4026</b>	4026	0	<b>4026</b>
<b>Total</b>	4365	30908	35273	22123	11	<b>22134</b>	24604	640	<b>25244</b>

# Major Changes from last year studies

1. **Total 2023 LCR needs have decreased by about 414 MW or ~1.7%.**
2. **2023 LCR needs** decrease in: **Humboldt** due to decrease in load forecast and **Bay Area, Sierra and Stockton** due to new transmission projects, **Fresno** and **San Diego/Imperial Valley** due to load forecast decrease and new transmission projects.
3. **2023 LCR needs** increase in: **North Coast/North Bay, Big Creek /Ventura** and **LA Basin** due to load forecast increase, **Kern** due to new sub-area needs.

## **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

# 2023 Final LCR Needs

Local Area Name	Qualifying Capacity			2023 LCR Need Based on Category B			2023 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	202	202	111	0	111	169	0	169
North Coast/North Bay	119	771	890	553	0	553	553	0	553
Sierra	1146	1004	2150	1268	0	1268	1924	0	1924
Stockton	144	540	684	225	20*	245	333	106*	439
Greater Bay	627	6427	7054	3676	0	3676	4752	0	4752
Greater Fresno	340	3177	3517	1688	0	1688	1688	0	1688
Kern	13	462	475	152	6*	158	174	8*	182
LA Basin	1443	6868	8311	6793	0	6793	6793	0	6793
Big Creek/Ventura	424	3082	3506	2212	0	2212	2690	102*	2792
San Diego/Imperial Valley	106	4414	4520	4132	0	4132	4132	0	4132
<b>Total</b>	4362	26947	31309	20810	26	20836	23208	216	23424

# Near-Term LCR Study Schedule

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

- Criteria, methodology and assumptions meeting Oct. 31, 2017
- Submit comments by November 14, 2017
- Posting of comments with ISO response by the December 12, 2017
- Base case development started in December 2017
- Receive base cases from PTOs January 2018
- Publish base cases January 19, 2018 – comments by Feb. 2<sup>nd</sup>
- Receive and incorporate CEC load forecast February 21-28<sup>th</sup>
- Draft study completed by March 28, 2018
- ISO Stakeholder meeting April 9, 2018 – comments by the 16<sup>th</sup>
- ISO receives new operating procedures April 16, 2018
- Validate op. proc. – publish draft final report April 23, 2018
- ISO Stakeholder call May 1, 2018 – comments by the 8<sup>th</sup>
- Final 2019 LCR report May 15, 2018





# 2018 ISO Procurement Schedule

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

- Final LCR Report May 15, 2018
- LSE self-guided local allocation; third week in May, 2018
- Receive new CEC coincident load forecast June 30, 2018
- ISO or CPUC to send out final local allocation; middle of July, 2018
- For any current RMR resource; LSEs to submit showings by Sept. 14, 2018
- ISO to decide on retaining units under RMR by October 1, 2018
- Final LSE showings TBD – Usually last week of October, 2018
- ISO to send a market notice out stating deficiencies in procurement (3 weeks after final showing) - about November 21, 2018
- 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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