



California ISO
Shaping a Renewed Future

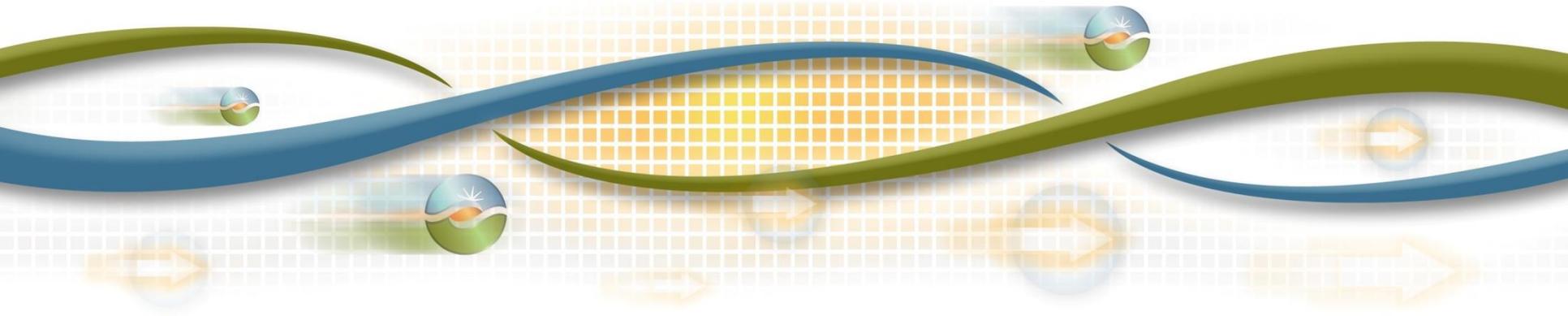
2016 and 2020 Draft LCR Study Results - Summary of Findings

Catalin Micsa

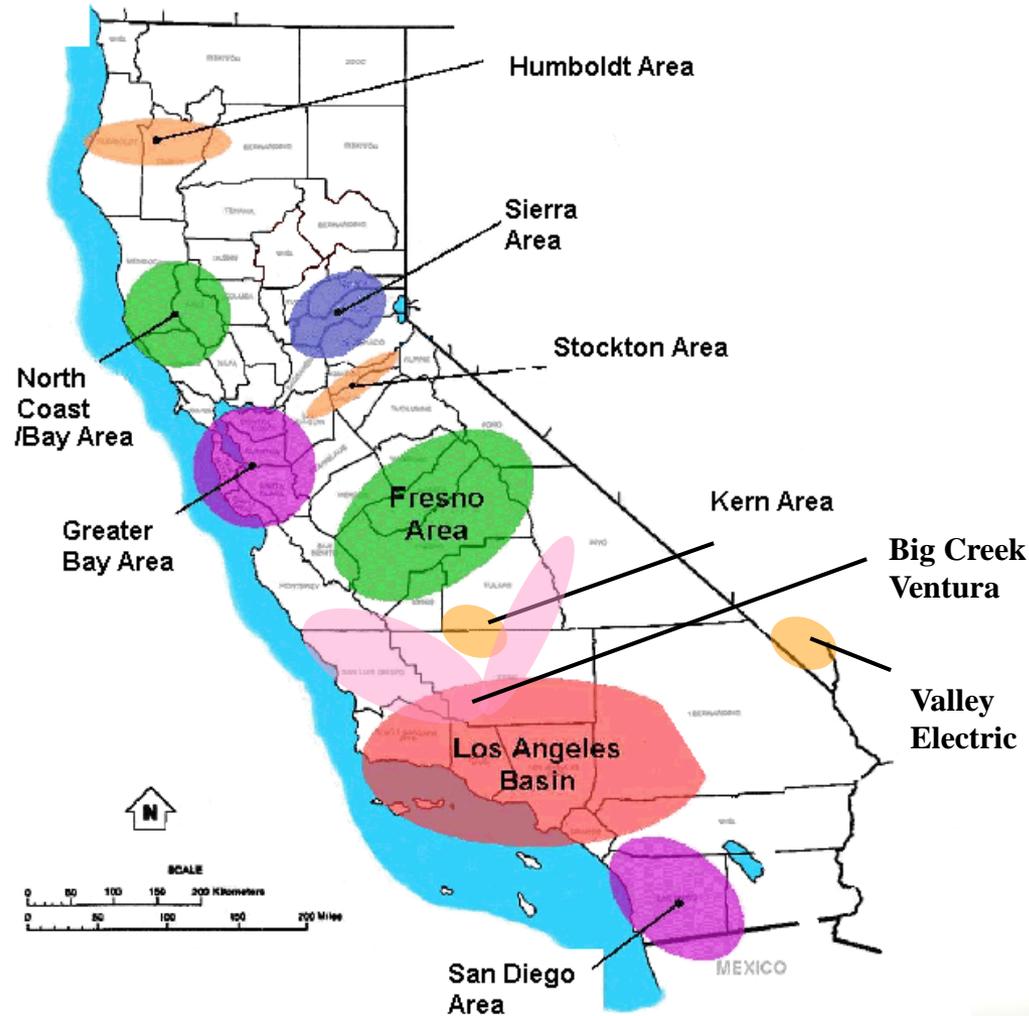
Lead Regional Transmission Engineer

Stakeholder Meeting

March 9, 2015



LCR Areas within CAISO



Input Assumptions, Methodology and Criteria

See October 30, 2014 stakeholder teleconference - for study assumptions, methodology and criteria. The latest information along with the 2016 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, 2016

Generation – all-generation with COD up to June 1, 2016

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. **Same (old) NQC data – will be updated before next meeting.**
2. **Total LCR needs have decreased by 766 MW or ~ 2.9% (2016) and increased by 620 MW or ~2.7% (2020).**
3. **2016 LCR needs decrease in: LA Basin, Sierra** due to decrease in load forecast, **Bay Area** due to combination of decrease in load forecast and new sub area requirements and **San Diego** due to load forecast and transmission projects.
4. **2016 LCR needs increase in: Humboldt, Stockton, Fresno and Kern** due to load growth, **North Coast/North Bay** due to lower Pittsburg sub area requirements, and **Big Creek/Ventura** due to decrease in LA Basin 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

Total 2016 Draft LCR Needs

Local Area Name	Qualifying Capacity			2016 LCR Need Based on Category B			2016 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	36	171	207	118	0	118	167	0	167
North Coast/ North Bay	130	771	901	611	0	611	611	0	611
Sierra	1299	771	2070	1139	0	1139	1765	247*	2012
Stockton	197	392	589	357	0	357	426	372*	798
Greater Bay	1262	6243	7505	3790	0	3790	4204	135*	4339
Greater Fresno	316	2532	2848	2445	0	2445	2445	50*	2495
Kern	408	87	495	299	0	299	485	0	485
LA Basin	2208	8985	11193	7576	0	7576	8887	0	8887
Big Creek/Ventura	1160	4203	5363	2141	0	2141	2398	0	2398
San Diego/ Imperial Valley	219	4328	4547	2850	0	2850	3250	137*	3387
Total	7235	28483	35718	21326	0	21326	24638	941	25579

Total 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	Defici ency	Total (MW)	Existing Capacity Needed**	Defici ency	Total (MW)
Humboldt	36	171	207	121	0	121	170	0	170
North Coast/ North Bay	130	771	901	202	0	202	509	0	509
Sierra	1299	771	2070	1632	0	1632	1688	32*	1720
Stockton	295	392	687	246	0	246	338	63*	401
Greater Bay	1262	5589	6851	3820	0	3820	4191	0	4191
Greater Fresno	316	2532	2848	1471	0	1471	1867	7*	1874
Kern	225	87	312	132	0	132	135	0	135
LA Basin	2207	8985	11192	7978	0	7978	9229	0	9229
Big Creek/Ventura	1160	4203	5363	2598	0	2598	2598	0	2598
San Diego/ Imperial Valley	219	4004	4223	2868	0	2868	2868	101*	2969
Total	7149	27505	34654	21068	0	21068	23593	203	23796

2016 and 2020 LCR Study Schedule

CPUC and the ISO have determined overall timeline

- Criteria, methodology and assumptions web conf. Oct. 30, 2014
- Submit comments by November 13, 2014
- Posting of comments with ISO response by the December 1, 2014
- Base case development started in December 2014
- Receive base cases from PTOs January 3, 2015
- Publish base cases January 15, 2015 – comments by the 29th
- Draft study completed by March 3, 2015
- ISO Stakeholder Meeting March 9, 2015 – comments by the 23rd
- ISO receives new operating procedures March 23, 2015
- Validate op. proc. – publish draft final report April 7, 2015
- ISO Stakeholder Web Conf. April 14, 2015 – comments by the 28th
- Final 2016 LCR report April 30, 2015



2015 ISO Procurement Schedule

Per ISO Tariff and BPM - overall timeline

- Final LCR Report April 30, 2015
- LSE self-guided local allocation; first week in May, 2015
- Receive new CEC coincident load forecast June 30, 2015
- ISO or CPUC to send out final local allocation; middle of July, 2015
- If Oakland under contract; LSEs to submit showings by 9/15/2015
- ISO to decide on retaining units under RMR by October 1, 2015
- Final LSE showings TBD – Usually last week of October, 2015
- ISO to send a market notice out stating deficiencies in procurement – about 3 weeks after final showing - about November 21, 2015
- ISO receives additional showing (30 days after market notice)
- ISO to enter back-stop procurement for local reasons (if needed)

Your comments and questions are welcome.

For written comments, please send to: RegionalTransmission@caiso.com