2016 and 2020 Final LCR Study Results - Summary of Findings

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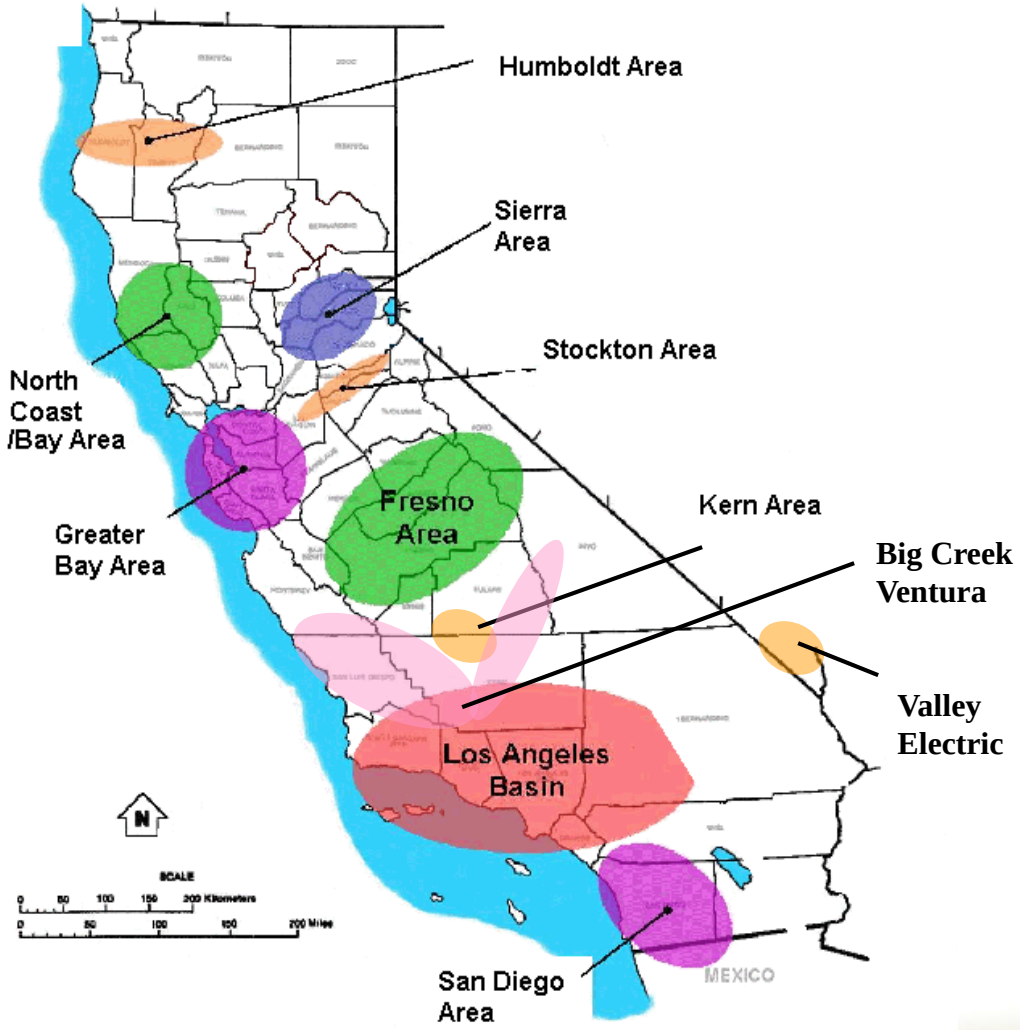
Stakeholder Teleconference

April 14, 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. **Updated NQC data.**
2. **Total LCR needs have decreased by 1,000 MW or ~ 3.9% (2016) and increased by 500 MW or ~2.2% (2020).**
3. **2016 LCR needs** decrease in: **Sierra and Bay Area** due to decrease in load forecast, **Kern and LA Basin** due to new transmission projects and **San Diego** due to load forecast and transmission projects.
4. **2016 LCR needs** increase in: **Humboldt, Stockton** and **Fresno** due to load growth, **North Coast/North Bay** due to lower Pittsburg/Oakland sub-area requirements, and **Big Creek/Ventura** due to decrease in LA Basin and San Diego/Imperial Valley 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 Final LCR Needs

	Qualifying Capacity			2016 LCR Need Based on Category B			2016 LCR Need Based on Category C with operating procedure		
Local Area Name	**QF/ Muni (MW)**	**Market (MW)**	**Total (MW)**	**Existing Capacity Needed**	**Deficiency**	**Total (MW)**	**Existing Capacity Needed****	**Deficiency**	**Total (MW)**
Humboldt	21	208	229	118	0	**118**	167	0	**167**
North Coast/ North Bay	132	750	882	611	0	**611**	611	0	**611**
Sierra	1195	831	2026	1139	16*	**1155**	1765	253*	**2018**
Stockton	160	434	594	357	0	**357**	422	386*	**808**
Greater Bay	1122	6435	7557	3790	0	**3790**	4218	131*	**4349**
Greater Fresno	282	2647	2929	2445	0	**2445**	2445	74*	**2519**
Kern	99	430	529	214	0	**214**	400	0	**400**
LA Basin	1710	9259	10969	7576	0	**7576**	8887	0	**8887**
Big Creek/Ventura	584	4951	5535	2141	0	**2141**	2398	0	**2398**
San Diego/ Imperial Valley	228	4687	4915	2850	0	**2850**	3112	72*	**3184**
Total	5533	30632	36165	21241	16	**21257**	24425	916	**25341**

Total 2020 Final LCR Needs

	Qualifying Capacity			2020 LCR Need Based on Category B			2020 LCR Need Based on Category C with operating procedure		
Local Area Name	**QF/ Muni (MW)**	**Market (MW)**	**Total (MW)**	**Existing Capacity Needed**	**Deficiency**	**Total (MW)**	**Existing Capacity Needed****	**Deficiency**	**Total (MW)**
Humboldt	21	208	229	121	0	**121**	170	0	**170**
North Coast/ North Bay	132	750	882	202	0	**202**	509	0	**509**
Sierra	1195	831	2026	1665	0	**1665**	1703	0	**1703**
Stockton	207	497	704	246	0	**246**	336	67*	**403**
Greater Bay	1122	5775	6897	3820	0	**3820**	4191	0	**4191**
Greater Fresno	282	2647	2929	1471	0	**1471**	1867	21*	**1888**
Kern	55	119	174	132	0	**132**	135	0	**135**
LA Basin	1710	9259	10969	7978	0	**7978**	9229	0	**9229**
Big Creek/Ventura	584	4951	5535	2598	0	**2598**	2598	0	**2598**
San Diego/ Imperial Valley	283	4493	4776	2868	0	**2868**	2868	10*	**2878**
Total	5591	29530	35121	21101	0	**21101**	23606	98	**23704**

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