



California ISO
Shaping a Renewed Future

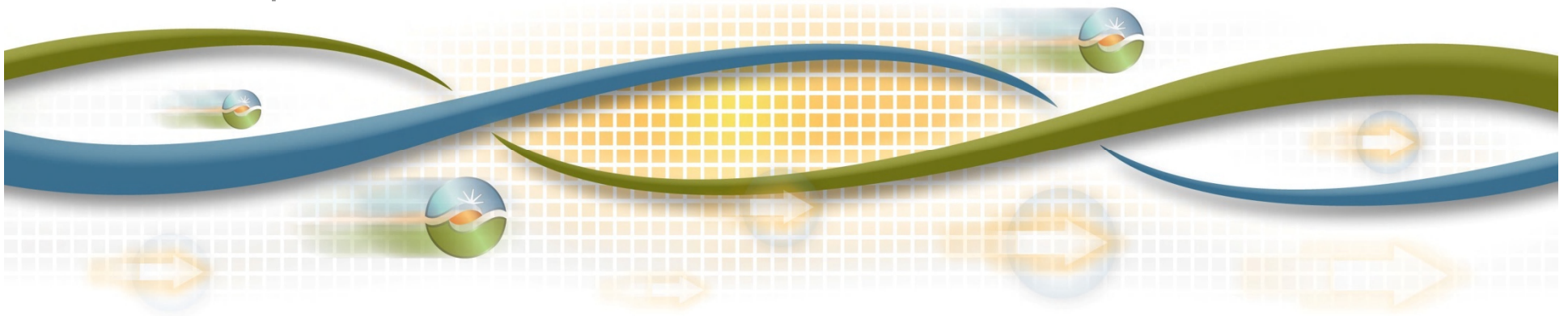
2014 and 2018 Final LCR Study Results - Summary of Findings

Catalin Micsa

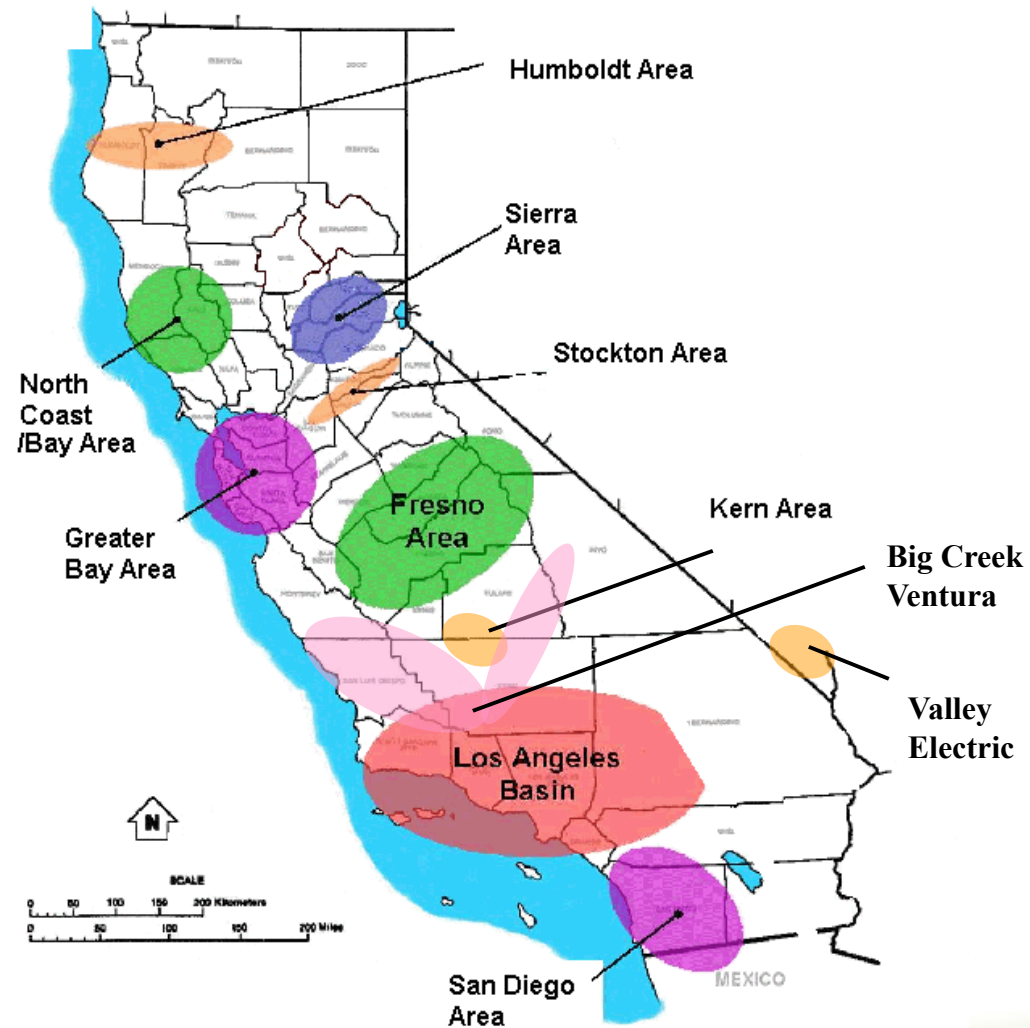
Lead Regional Transmission Engineer

Stakeholder Conference Call

April 4, 2013



LCR Areas within CAISO



Input Assumptions, Methodology and Criteria

See November 8, 2012 stakeholder meeting - for study assumptions, methodology and criteria. The latest information along with the 2014 LCR Manual can be found at:

<http://www.caiso.com/Documents/2014LocalCapacityRequirementsFinalStudyManual.pdf> .

Transmission system configuration – all-projects with EDRO up to June 1, 2014

Generation – all-generation with COD up to June 1, 2014

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 has increased by ~ 6% including deficiency or 3.4% else.
3. Big Creek/Ventura, North Coast/ North Bay and Valley Electric Association LCR needs are about the same as last year
4. Humboldt and Kern decrease due to new transmission projects and decrease in load forecast.
5. LCR needs increase in: Sierra, Stockton, Bay Area, LA Basin, Fresno and San Diego due to load growth.
6. San Diego LCR needs have increased significantly due to absence of SONGS
7. SONGS sensitivity applied to impacted local areas and sub-areas.

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 2014 Final LCR Needs

Local Area Name	Qualifying Capacity			2014 LCR Need Based on Category B			2014 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	70	173	243	145	0	145	195	0	195
North Coast/ North Bay	150	771	921	623	0	623	623	0	623
Sierra	1288	762	2050	1414	0	1414	1803	285*	2088
Stockton	212	392	604	354	25*	379	446	255*	701
Greater Bay	1336	6280	7616	3747	0	3747	4423	215*	4638
Greater Fresno	318	2510	2828	1857	0	1857	1857	0	1857
Kern	613	64	677	421	14*	435	421	41*	462
LA Basin	2242	9547	11789	10063	0	10063	10430	0	10430
Big Creek/Ventura	1112	4206	5318	2156	0	2156	2250	0	2250
Greater San Diego/ Imperial Valley ***	200	4506	4706	3605	167*	3772	3605	458*	4063
Total	7541	29211	36752	24385	206	24591	26053	1254	27307

Total 2018 Final LCR Needs

Local Area Name	Qualifying Capacity			2018 LCR Need Based on Category B			2018 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	70	173	243	149	0	149	197	0	197
North Coast/ North Bay	150	771	921	424	0	424	424	0	424
Sierra	1288	762	2050	864	26*	890	1114	39*	1153
Stockton	308	392	700	284	0	284	374	44*	418
Greater Bay	1426	6932	8358	3860	0	3860	4478	8*	4486
Greater Fresno	318	2510	2828	2110	0	2110	2110	0	2110
Kern	613	64	677	421	26*	447	421	53*	474
LA Basin	4488	9547	14035	9882	0	9882	11071	0	11071
Big Creek/Ventura	1112	4206	5318	2397	0	2397	2688	0	2688
Greater San Diego/ Imperial Valley	262	5914	6176	3310	2*	3312	3310	52*	3362
Total	10035	31271	41306	23701	54	23755	26187	196	26383

2014 and 2018 LCR Study Schedule

CPUC and the ISO have determined overall timeline

- Criteria, methodology and assumptions meeting Nov. 8, 2012
- Submit comments by November 22, 2012
- Posting of comments with ISO response by the January 15, 2013
- Base case development started in December 2012
- Receive base cases from PTOs January 3, 2013
- Publish base cases January 15, 2013 – comments by the 29th
- Draft study completed by March 4, 2013
- ISO Stakeholder meeting March 7, 2013
- ISO receives new operating procedures March 21, 2013
- Validate op. proc. – publish draft final report March 28, 2013
- ISO Stakeholder meeting April 4, 2013 – comments by the 18th
- Final 2014 LCR report May 1, 2013



2013 ISO Procurement Schedule

Per ISO Tariff and BPM - overall timeline

- Final 2014 LCR Report May 1, 2013
- LSE self-guided local allocation; first week in May, 2013
- Receive new CEC coincident load forecast June 30, 2013
- ISO or CPUC to send out final local allocation; middle of July, 2013
- If Oakland under contract; LSEs to submit showings by 9/13/2013
- ISO to decide on retaining units under RMR by October 1, 2013
- Final LSE showings TBD – Usually last week of October, 2013
- ISO to send a market notice out stating deficiencies in procurement – about 3 weeks after final showing - about November 22, 2013
- 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