

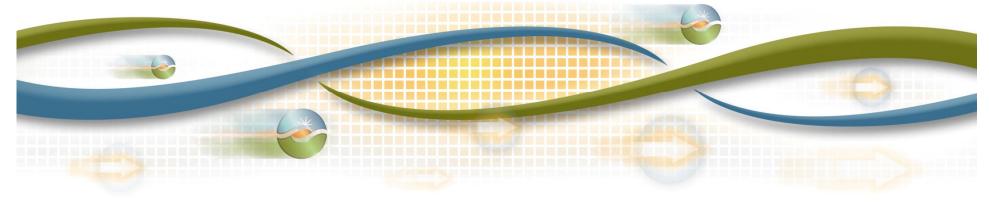
2013 Draft LCR Study Results Big Creek/Ventura and LA Basin

Yi Zhang

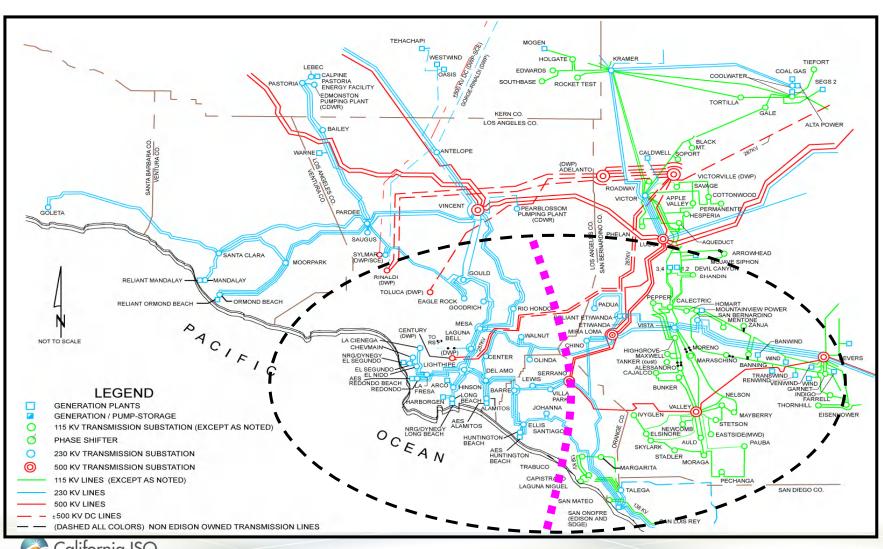
Senior Regional Transmission Engineer

Stakeholder Meeting

March 8, 2012



LA Basin Area



LA Basin Area 2013 Loads & Resources

Load

Load	Pump Load	Transmission Losses	Total
(MW)	(MW)	(MW)	(MW)
19300	27	133	19460

Available Generation

	QF/Wind	Muni	Nuclear	Market	Max. Qualifying
	(MW)	(MW)	(MW)	(MW)	Capacity (MW)
Available Gen	883	900	2246	8054	12083



Ellis Sub-area

Category C LCR:

Contingency: The loss of the Barre-Ellis 230 kV line (N-1) followed by the loss of Santiago-S.Onofre #1 and #2 230 kV lines (N-2)

Limiting components: Voltage collapse

LCR Need: 474 MW (includes 18 MW of QF)



El Nido Sub-area

Category C LCR:

Contingency:

The loss of the La Fresa – Hinson 230 kV line (N-1) followed by the loss of the La Fresa – Redondo #1 and #2 230 kV lines (N-2)

Limiting components: Voltage collapse

LCR Need: 362 MW (includes 27 MW of QF)



Western LA Basin Sub-area

Category C LCR:

Contingency: The loss of the Serrano – Villa Park #1 or #2 and Serrano – Lewis 230 kV lines

Limiting components: Thermal overload of the remaining Serrano – Villa Park #1 or #2 230 kV line

LCR Need: 5835 MW (includes 559 MW of QF, 6 MW of Wind, 387 MW of Muni and 2246 MW of nuclear generation)



Valley Sub-area

Category C LCR:

Contingency:

1. The loss of the Palo Verde – Devers 500 kV #1 and Valley – Serrano 500 kV #1 lines

Limiting components: Voltage collapse

LCR Need: 670 MW



LA Basin Overall

Category B LCR:

Contingency: Palo Verde-Devers 500 kV line with SONGS #3 unit out of service

Limiting Component: South of Lugo operating rating (6400 MW)

LCR Need: 10030 MW (includes 883 MW of QF/Wind, 900 MW of Muni and 2246 MW of nuclear generation)



Changes

Since last year:

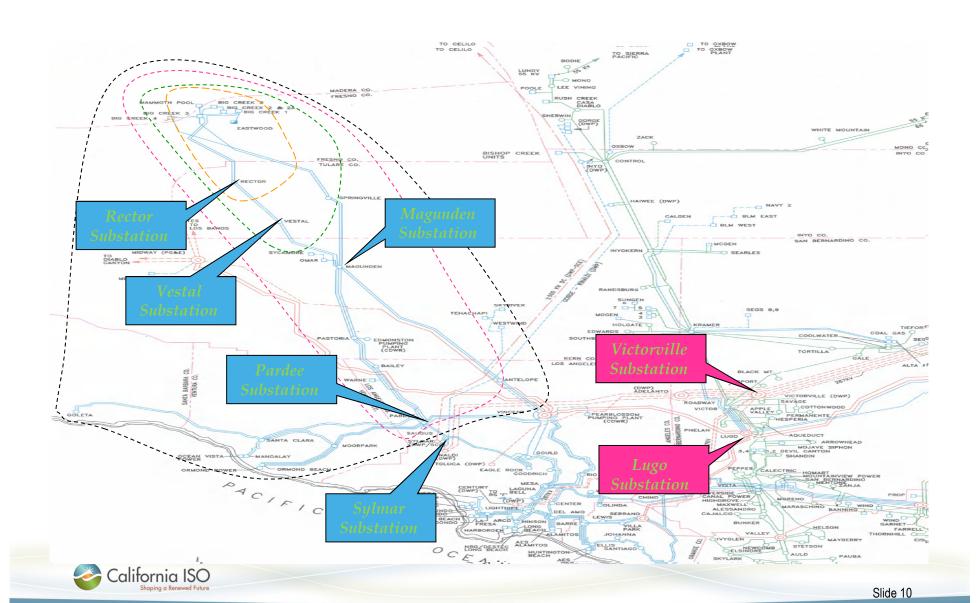
- 1) Load forecast is down by 497 MW
- 2) Total overall LCR decreased by 836 MW
- 3) Segments of TRTP project

Your comments and questions are welcome.

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



Big Creek/Ventura Area



Big Creek/Ventura Area 2013 Loads & Resources

Load

Load	Pump Load	Transmission Losses	Total
(MW)	(MW)	(MW)	(MW)
4164	355	77	4596

Available Generation

	QF/Wind	Muni	Nuclear	Market	Max. Qualifying Capacity
	(MW)	(MW)	(MW)	(MW)	(MW)
Available Gen	808	383	0	4041	5232



Rector and Vestal Sub-areas

Rector:

Contingency: Vestal-Rector #1 or #2 230 kV line with Eastwood unit out of service

Limiting component: thermal overload the remaining Vestal-Rector #1 or #2 230 kV line

LCR Need: 601 MW (includes 4 MW of QF generation)

Vestal:

Contingency: Magunden-Vestal #1 or #2 230 kV line with Eastwood unit out of service

Limiting components: thermal overload the remaining Magunden-Vestal #1 or #2 230 kV line

LCR Need: 801 MW (includes 88 MW of QF generation)

All resources in Rector apply towards the LCR need in Vestal sub-area.



Santa Clara and Moorpark Sub-areas

Santa Clara:

Contingency: Pardee – S.Clara 230 kV N-1 followed by Moorpark – S.Clara #1 and #2 230 kV lines N-2

Limiting component: Voltage collapse

LCR Need: 264 MW (includes 64 MW of QF generation)

Moorpark:

Contingency: Pardee – Moorpark 230 kV (N-1 followed by N-2)

Limiting components: Voltage collapse

LCR Need: 422 MW (includes 92 MW of QF generation)

All resources in Santa Clara apply towards the LCR need in Moorpark sub-area.



Big Creek/Ventura Overall

Category B LCR:

Contingency: Sylmar-Pardee #1 or #2 230 kV line with Ormond Beach #2 unit out of service

Limiting component: thermal overload the remaining Sylmar-Pardee #1 or #2 230 kV line

LCR Need: 2161 MW (includes 762 MW of QF, 383 MW of Muni and 46 MW of wind generation)

Category C LCR:

Contingency: Lugo-Victorville 500 kV followed by the loss of Sylmar-Pardee #1 or #2 230 kV line or vice versa

Limiting components: thermal overload the remaining Sylmar-Pardee #1 or #2 230 kV line

LCR Need: 2241 MW (includes 762 MW of QF, 383 MW of Muni and 46 MW of wind generation)



Changes

Since last year:

- 1) Load forecast is down by 97 MW
- 2) Overall LCR has decreased by 852 MW
- 3) Segments of TRTP project

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