

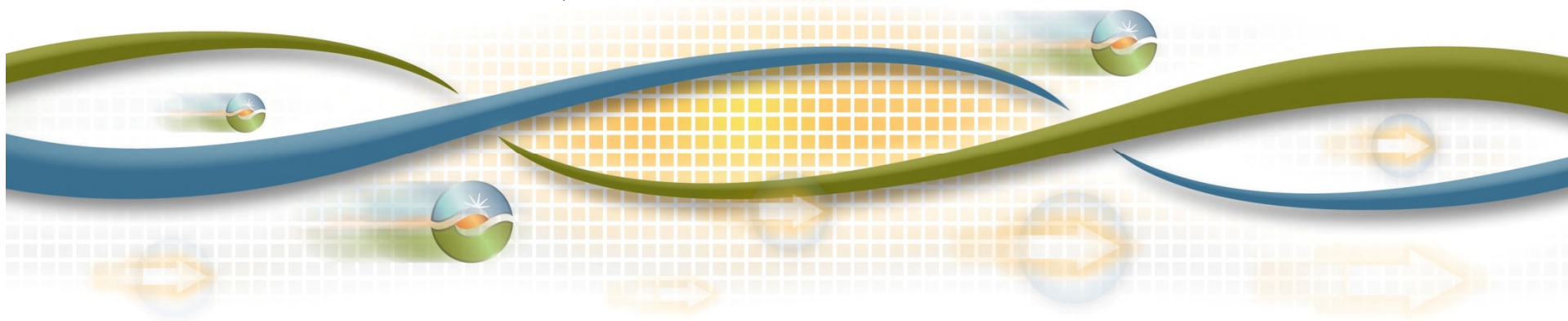
2012 Draft LCR Study Results Big Creek/Ventura and LA Basin

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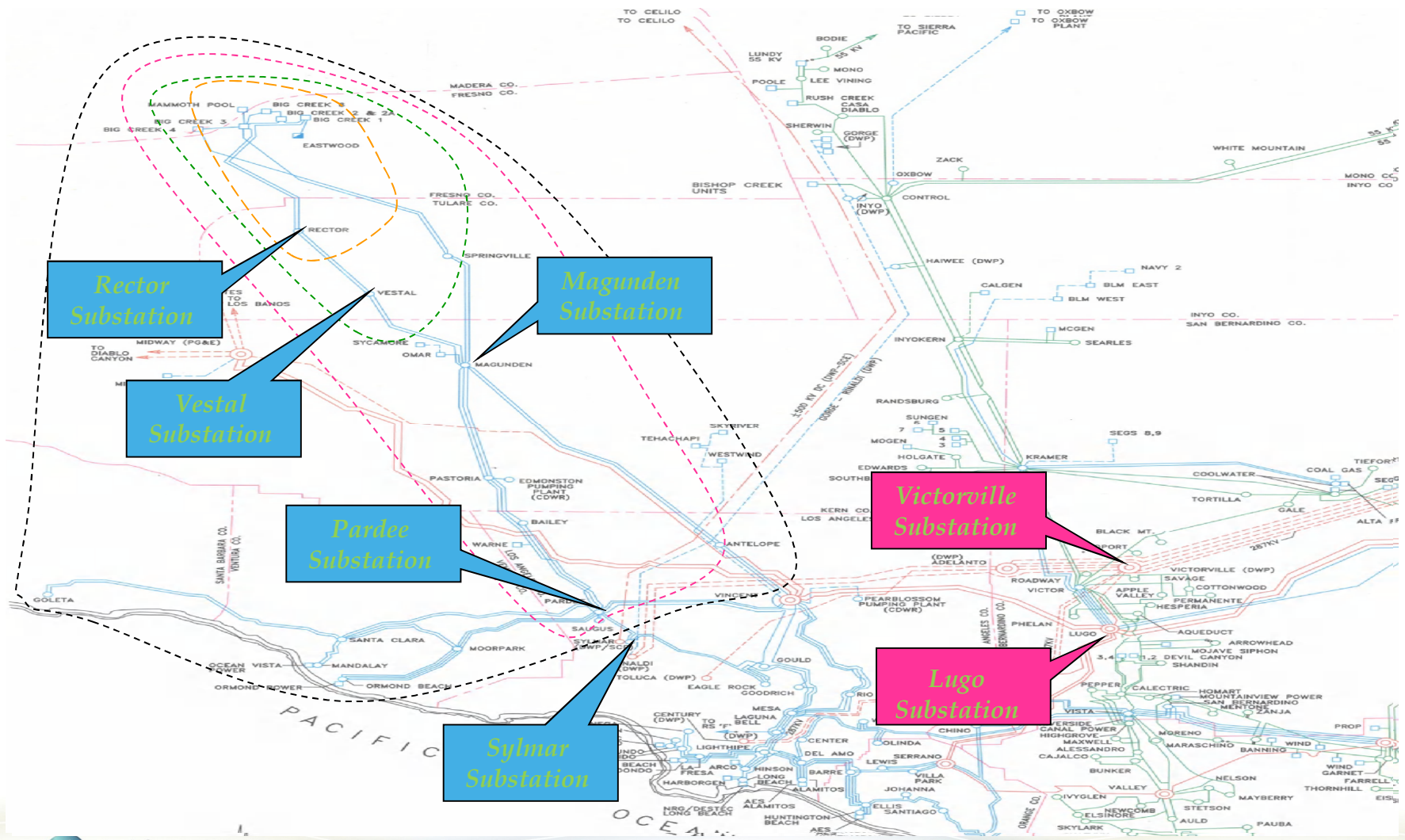
Sr. Regional Transmission Engineer

Stakeholder Meeting

March 9, 2011



Big Creek/Ventura Area



Big Creek/Ventura Area 2012 Loads & Resources

Load

Load (MW)	Pump Load (MW)	Transmission Losses (MW)	Total (MW)
4448	355	71	4874

Available Generation

	QF/Wind (MW)	Muni (MW)	Nuclear (MW)	Market (MW)	Max. Qualifying Capacity (MW)
Available Gen	1012	184	0	4110	5306

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: 573 MW (includes 30 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: 830 MW (includes 156 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: 346 MW (includes 171 MW of QF generation)

Moorpark:

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

Limiting components: Voltage collapse

LCR Need: 606 MW (includes 201 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: 3258 MW (includes 962 MW of QF, 184 MW of Muni and 50 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: 3169 MW (includes 962 MW of QF, 184 MW of Muni and 50 MW of wind generation)

Changes

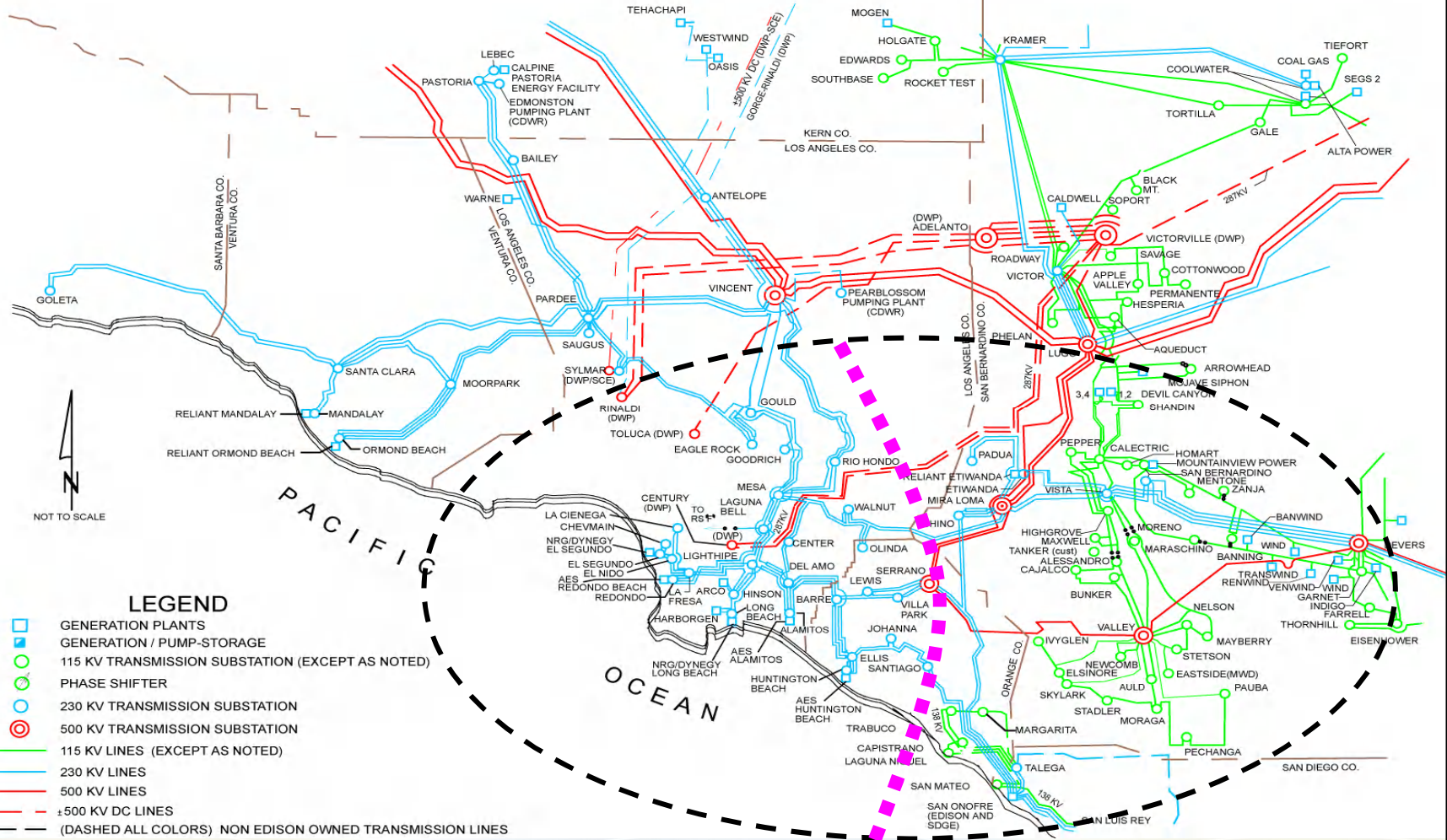
Since last year:

- 1) Load forecast is up by 226 MW
- 2) Overall LCR has increased by 472 MW

Your comments and questions are welcome.

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

I A Basin Area



LA Basin Area 2012 Loads & Resources

Load

Load (MW)	Pump Load (MW)	Transmission Losses (MW)	Total (MW)
19036	27	122	19185

Available Generation

	QF/Wind (MW)	Muni (MW)	Nuclear (MW)	Market (MW)	Max. Qualifying Capacity (MW)
Available Gen	1163	797	2246	8103	12309

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: 500 MW (includes 32 MW of QF)

El Nido Sub-area

Category C LCR:

Contingency: Two contingencies cause the same LCR need

1. The loss of the La Fresa – Redondo #1 and #2 230 kV lines

Limiting components: overload the La Fresa – Hinson 230 kV line

2. 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: 560 MW (includes 105 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: 5867 MW (includes 828 MW of QF, 8 MW of Wind, 392 MW of Muni and 2246 MW of nuclear generation)

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 with Rancho Vista 500kV substation)

LCR Need: 10293 MW (includes 1127 MW of QF, 36 MW Wind, 797 MW of Muni and 2246 MW of nuclear generation)

Changes

Since last year:

- 1) Load forecast is down by 469 MW
- 2) Total overall LCR decreased by 353 MW

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