

2010 LCR Study Big Creek/Ventura and LA Basin



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Stakeholder Meeting

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Big Creek/Ventura Area



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Big Creek/Ventura Boundary Transmission Lines

- Vincent-Antelope 230 kV Line
- Mesa-Antelope 230 kV Line
- Sylmar-Pardee #1 230 kV Line
- Sylmar-Pardee #2 230 kV Line
- Eagle Rock-Pardee #1 230 kV Line
- Antelope-Pardee 230 kV Line
- Vincent-Santa Clara 230 kV Line



Big Creek/Ventura Area 2010 Load & Resources

Load

Load	Pump Load	Transmission Losses	Total
(MW)	(MW)	(MW)	(MW)
4744	405	107	5256

Available Generation

	QF/Wind	Muni	Nuclear	Market	Max. Qualifying Capacity
	(MW)	(MW)	(MW)	(MW)	(MW)
Available Gen	909	22	0	4229	5160



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: 687 MW (includes 15 MW of QF/Wind 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: 810 MW (includes 122 MW of QF/Wind generation)

All resources in Rector apply towards the LCR need in Vestal 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: 3451 MW (includes 836 MW of QF, 22 MW of Muni and 73 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: 3596 MW (includes 836 MW of QF, 22 MW of Muni and 73 MW of wind generation)



Changes since the 2009 LCR study

Total Big Creek/Ventura LCR need has increased

- Load forecast is up by 319 MW
- One new peaker is modeled in this area
- Overall the LCR has increased by 418 MW



LA Basin Area



LA Basin Area Boundary Transmission Lines

- San Onofre San Luis Rey #1, #2, & #3 230 kV Lines
- San Onofre Talega #1 & #2 230 kV Lines
- Lugo Mira Loma #2, #3 500 kV Lines
- Lugo Rancho Vista #1 500 kV Lines
- Sylmar Eagle Rock 230 kV Line
- Sylmar Gould 230 kV Line
- Vincent Mesa Cal 230 kV Line
- Antelope Mesa Cal 230 kV Line
- Vincent Rio Hondo #1 & #2 230 kV Lines
- Eagle Rock Pardee 230 kV Line
- Devers Palo Verde 500 kV Line
- Mirage Coachelv 230 kV Line
- Mirage Ramon 230 kV Line
- Mirage Julian Hinds 230 kV Line



LA Basin Area 2010 Load & Resources

Load

Load	Pump Load	Transmission Losses	Total
(MW)	(MW)	(MW)	(MW)
19526	20	519	20065

Available Generation

	QF/Wind	Muni	Nuclear	Market	Max. Qualifying
	(MW)	(MW)	(MW)	(MW)	Capacity (MW)
Available Gen	908	788	2246	8259	12201



Western LA Basin Sub-area

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: 4909 MW (includes 491 MW of QF/Wind, 383 MW of Muni and 2246 MW of nuclear generation)



LA Basin Overall

Contingency: Palo Verde-Devers 500 kV line with SONGS #2 unit out of service

Limiting Component: South of Lugo operating rating (6400 MW with new Rancho Vista 500kV substation)

LCR Need: 9735 MW (includes 908 MW of QF/Wind, 788 MW of Muni and 2246 MW of nuclear generation)



Changes since the 2009 LCR study

Total La Basin LCR need is steady

- Load forecast is up by 230 MW
- Two new peakers modeled in the area
- Remove Barre sub-area
- Add Western LA Basin sub-area
- The total LCR need has increased by 8 MW



Stakeholder Comments



Your comments and questions are welcome

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

