

2017 Final LCR Study Results Kern

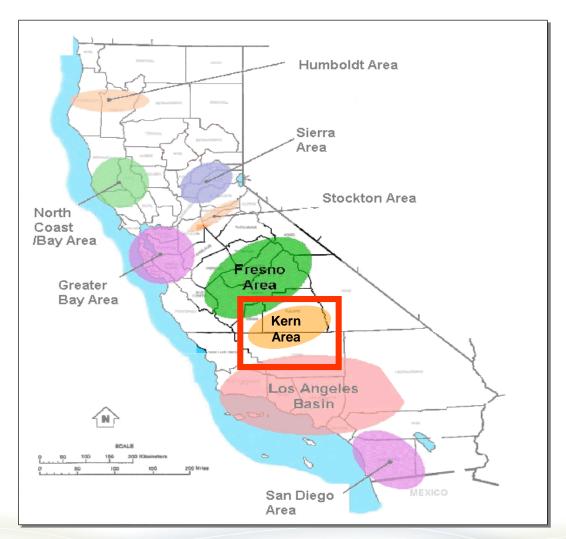
Chris Mensah-Bonsu

Regional Transmission Engineer Lead

Stakeholder Call

April 14, 2016

Fresno and Kern LCR Areas





Kern Load and Resources (MW)

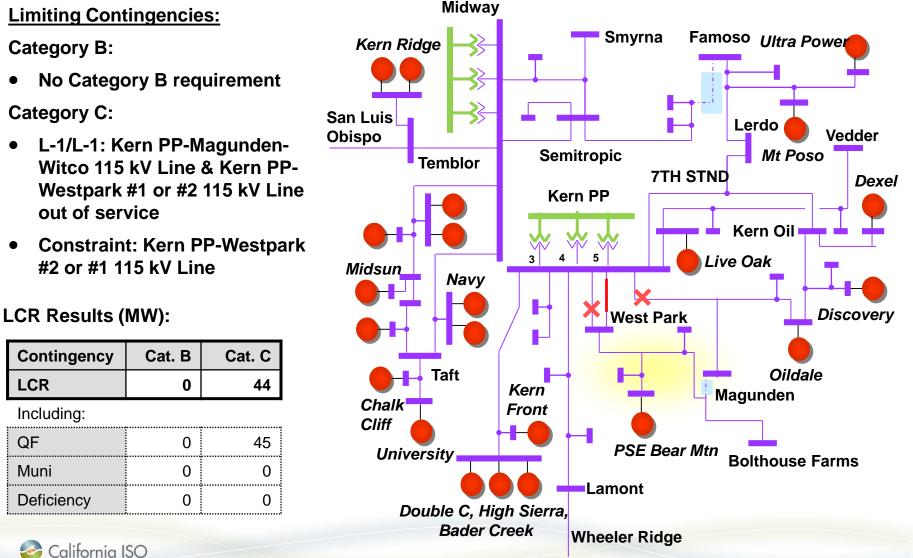
Year		2017
Load	=	1142
AAEE	=	-12
Transmission Losses	=	9
Total Load	=	1139
Market Generation/Net Seller	=	463
New Unit/Market Generation	=	28
Muni Generation	=	0
QF/Self Generation	=	60
Total Qualifying Capacity	=	551



Kern Area LCR 2017 West Park Sub-Area

•

QF



Kern Area LCR 2017 Kern Oil Sub-Area

Limiting Contingencies:

Category B:

- G-1/L-1: Kern PP-Magunden-Witco 115 kV Line with PSE Live Oak generation out of service
- Constraint: Kern PP-Live Oak 115 kV Ot

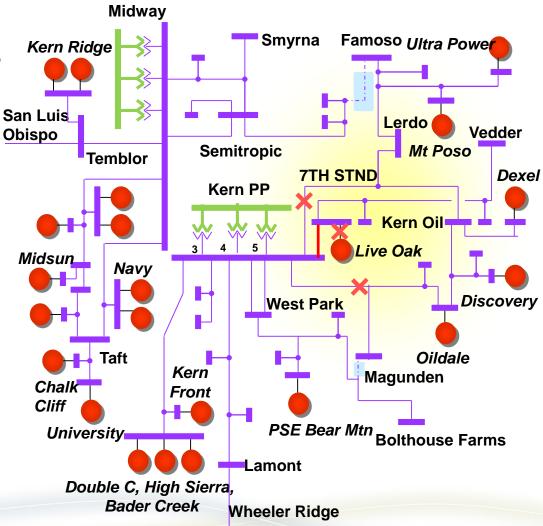
Category C:

- L-1/L-1: Kern PP-Magunden-Witco & Kern PP-7th Standard 115 kV lines
- Constraint: Kern PP-Live Oak 115 kV Line

LCR Results (MW):

Contingency	Cat. B	Cat. C
LCR	137	148
Including:		
QF	15	15
Muni	0	0
Deficiency	0	0

California ISO



Kern Area LCR 2017 South Kern PP Sub-Area

Limiting Contingencies:

Category B:

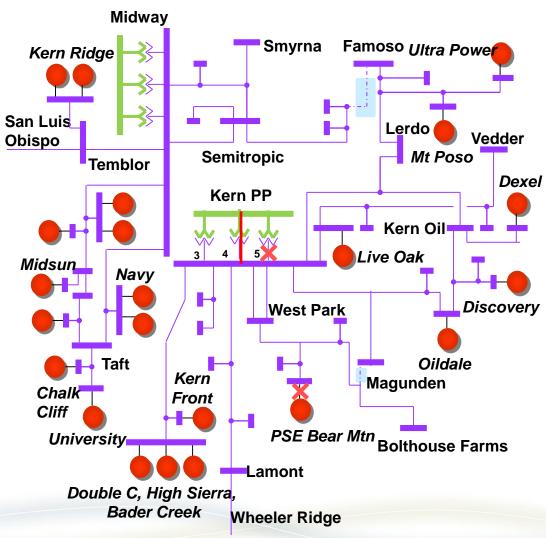
- T-1: Kern PP #5 230/115 kV Bank
- Constraint: Kern #4 230/115 kV Bank

Category C:

- G-1/T-1 PSE Bear Unit #1 & Kern PP #5 230/115 kV Bank
- Constraint: Kern PP #4 230/115 kV Bank

LCR Results (MW):

Contingency	Cat. B	Cat. C
LCR	61	106
Including:		
QF	60	60
Muni	0	0
Deficiency	0	0





Kern Area LCR 2017 Kern PP Overall

Limiting Contingencies:

Category B:

- G-1/L-1: Midway-Kern PP #3 230 kV Line with High Sierra out of service
- Constraint: Midway-Kern PP #1 230 kV Line
- No requirement beyond Kern Oil sub-area

Category C:

- L-1/L-1 Midway-Kern PP #3 & Midway-Kern PP #4 230 kV Lines
- Constraint: Midway-Kern PP #1 230 kV Line

LCR Results (MW):

Contingency	Cat. B	Cat. C
LCR	137	492

Including:

QF	60	60
Muni	0	0
Deficiency	0	0



Changes

Since last year:

- 1) Westpark sub-area has been re-established due to automatic transfer of Magunden substation for the loss of Kern-Magunden-Witco 115 kV
- 2) 2017 area load forecast remains about same from 2016
- 3) 2017 LCR has increased by 92 MW from 2016 mostly due to Kern PP #3 & #4 230/115 kV transformer capacity upgrades and additional load (about 280 MW) triggered by re-definition to account for the 3 new Midway 230 kV binding constraint lines.

Since last stakeholder meting:

1) Updated NQC.

Your comments and questions are welcome.

For written comments, please send to: <u>RegionalTransmission@caiso.com</u>

