

## 2019 & 23 Final LCR Study Results Kern Area

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Stakeholder Call

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ISO Public

#### Kern LCR Area





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#### Kern Load and Resources (MW)

Kern Area	2019	2023
Load	1157	1183
AAEE	-18	-44
BTM DG	-60	-9
Transmission Losses	9	10
Total Load	1088	1140
Market Generation/Net Seller	462	462
Muni Generation	0	0
QF/Self Generation	13	13
Total Qualifying Capacity	475	475



## Kern Area LCR Westpark Sub-Area

**Category B** 

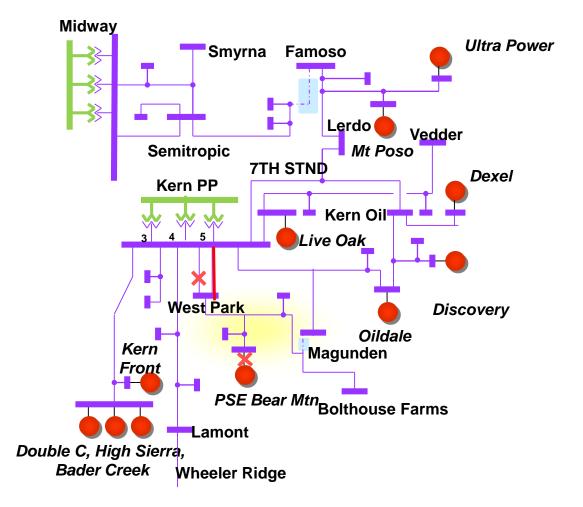
G-1/L-1 : PSE-Bear and Kern-West Park # 1 or # 2

Constraint: Kern-West Park # 2 or # 1

LCR Results (MW):

	2019		20	23
Contingency	Cat. B	Cat. C	Cat. B	Cat. C
LCR	51	51	51	51

Includes Deficiency 2019 & 2023 : 6 MW





## Kern Area LCR Kern Oil Sub-Area

#### **Limiting Contingencies:**

Category B (NERC Cat. P1):

• G-1/L-1: Kern PP-7th Standard 115 kV lines & Mount Poso Offline

Constraint: Kern PP-Magunden-Witco 115 kV Line (Kern PP-Kern Water section)

Category C (NERC Cat. P6):

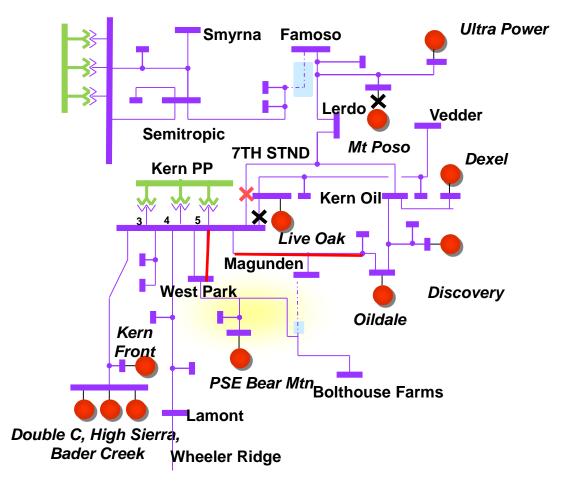
- L-1/L-1: Kern PP-7th Standard 115 kV lines & Kern PP-Live Oak 115 kV Line
- Constraint: Kern PP-Magunden-Witco 115 kV Line ( Kern PP-Kern Water section)

#### LCR Results (MW):

	2019		20	23
Contingency	Cat. B	Cat. C	Cat. B	Cat. C
LCR	103	116	107	131

2023 Cat C Includes Deficiency : 2 MW

Based on TPP 17-18, Kern PP 115 kV reinforcement has now the in-service date of December 2023.





## Kern Area LCR South Kern PP Sub-Area

#### Limiting Contingencies:

Category B:

G-1/L-1 :Midway-Kern PP # 3 230 kV line & High Sierra Generation

Constraint: Midway-Kern PP 230 kV # 1 230 kV line

Category C:

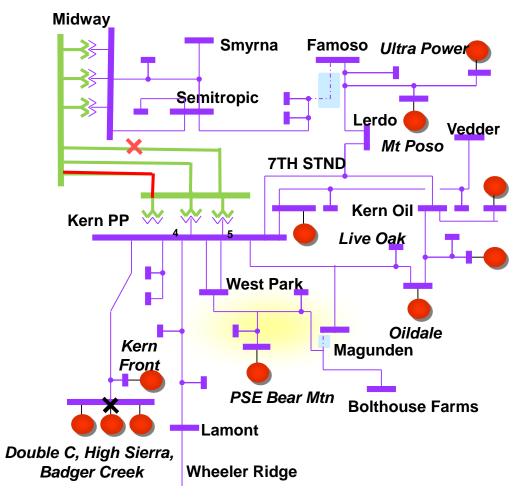
L-1/L-1: Midway-Kern PP # 3 & # 4 230 kV lines

Constraint: Midway-Kern PP 230 kV # 1 230 kV line( Midway-Stockdale J1)

LCR Results (MW):

	2019		2023
Contingency	Cat. B	Cat. C	Cat. B & Cat. C
LCR	106	472	Less than Combined Kern Oil & West Park sub-Area Requirement

LCR Requirements for this sub pocket are greatly reduced in 2023 due to Midway-Kern PP 230 kV line capacity increase & Kern PP 230 kV reinforcement projects.





## 2019-23 Kern Area Overall Summary

2019 Limiting Contingencies:

Category B: Kern Oil + Westpark

Category C: South Kern PP

2023 Limiting Contingencies:

Category B: Kern Oil + Westpark Category C: Kern Oil + Westpark

	2019		20	23
Contingency	Cat. B	Cat. C	Cat. B	Cat. C
LCR	154	478	158	182

2019 Cat B & Cat C includes deficiency of 6 MW.

2023 Cat B includes deficiency of 6 MW and Cat C includes deficiency of 8 MW.





#### Since last year:

- 1) Updated NQC
- 2) 2019 area load has increased by 221 MW due to definition change, with no impact to local area designation for any resource. Using last years area definition the load forecasts has decreased by 32 MW and the LCR has increased by 25 MW vs. 2018. The higher LCR requirement is attributed to change in the line section for the same worst contingency.
- 3) 2023 area load has increased by 255 MW due to definition change, with no impact to local area designation for any resource. Using last years area definition the load forecast has decreased by 9 MW and the LCR has increased by 59 MW mainly due to new Westpark sub-area needs.

#### Since last stakeholder meting:

- 1) Updated NQC
- 2) Load totals due to new definition (with no impact to local resources designation or need)



# THANK YOU

Your comments and questions are welcome.

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

