

## 2019 & 23 Draft LCR Study Results Kern Area

Abhishek Singh

Regional Transmission Engineer Lead

Stakeholder Meeting

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ISO Public

#### Kern LCR Area





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#### Kern Load and Resources (MW)

Kern Area	2019	2023
Load	885	906
AAEE	-12	-30
BTM DG	-46	-7
Transmission Losses	8	8
Total Load	835	876
Market Generation/Net Seller	488	488
Muni Generation	0	0
QF/Self Generation	12	12
Total Qualifying Capacity	500	500



### Kern Area LCR Westpark Sub-Area

**Category B** 

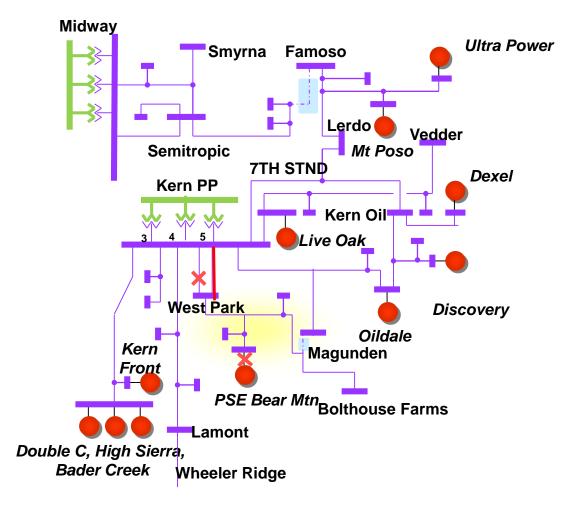
G-1/L-1 : PSE-Bear and Kern-West Park # 1 or # 2

Constraint: Kern-West Park # 2 or # 1

LCR Results (MW):

	2019		2023	
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):

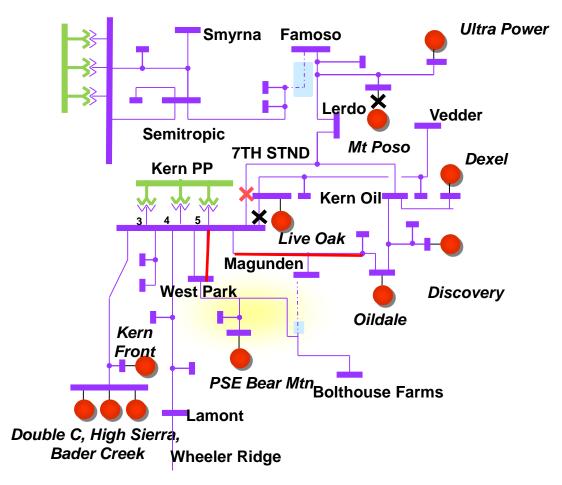
- L-1/L-1: Kern PP-7th Standard 115 kV lines & Kern PP-Live Oak 115 kV Line
- Constraint: Kern PP-Magunden-Witco 115 kV Line ( Kern PP-Kern Water section)

#### LCR Results (MW):

	2019		2023	
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

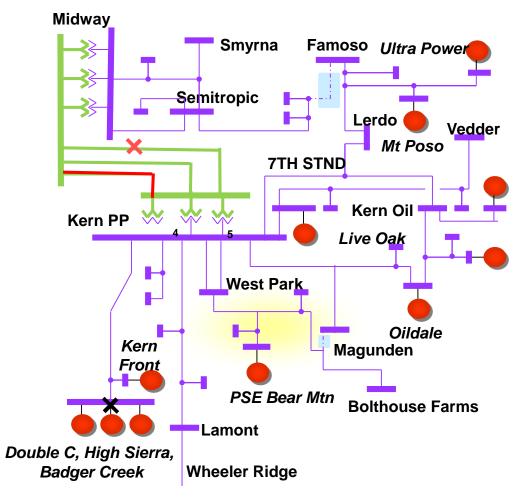
Constraint: Midway-Kern PP 230 kV # 1 230 kV line( Midway-Stockdale J1)

#### LCR Results (MW):

	2019		2023	
Contingency	Cat. B	Cat. C	Cat. B	Cat. C
LCR	106	472	NA	NA

LCR Requirements for this sub pocket go away in 2023 due to Midway-Kern PP 230 kV line capacity increase project. Kern Oil Subarea 2023 Category C requirement drives overall Kern requirement.

As compared to 2018, Category B requirements have reduced due to higher ratings of Kern 230 /115 kV Transformers in 2019 cases.





### 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		2023	
Contingency	Cat. B	Cat. C	Cat. B	Cat. C
LCR	154	478	158	182

2019 Cat C Includes Deficiency : 6 MW 2023 Cat C Includes Deficiency : 8 MW





#### Since last year:

- 1) Updated NQC
- 2) 2019 area 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 forecast has decreased by 9 MW 2022 and the LCR has increased by 59 MW mainly due to new Westpark sub-area needs.



# THANK YOU

Your comments and questions are welcome.

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

