



2026 & 2030 Final LCR Study Results Kern Area

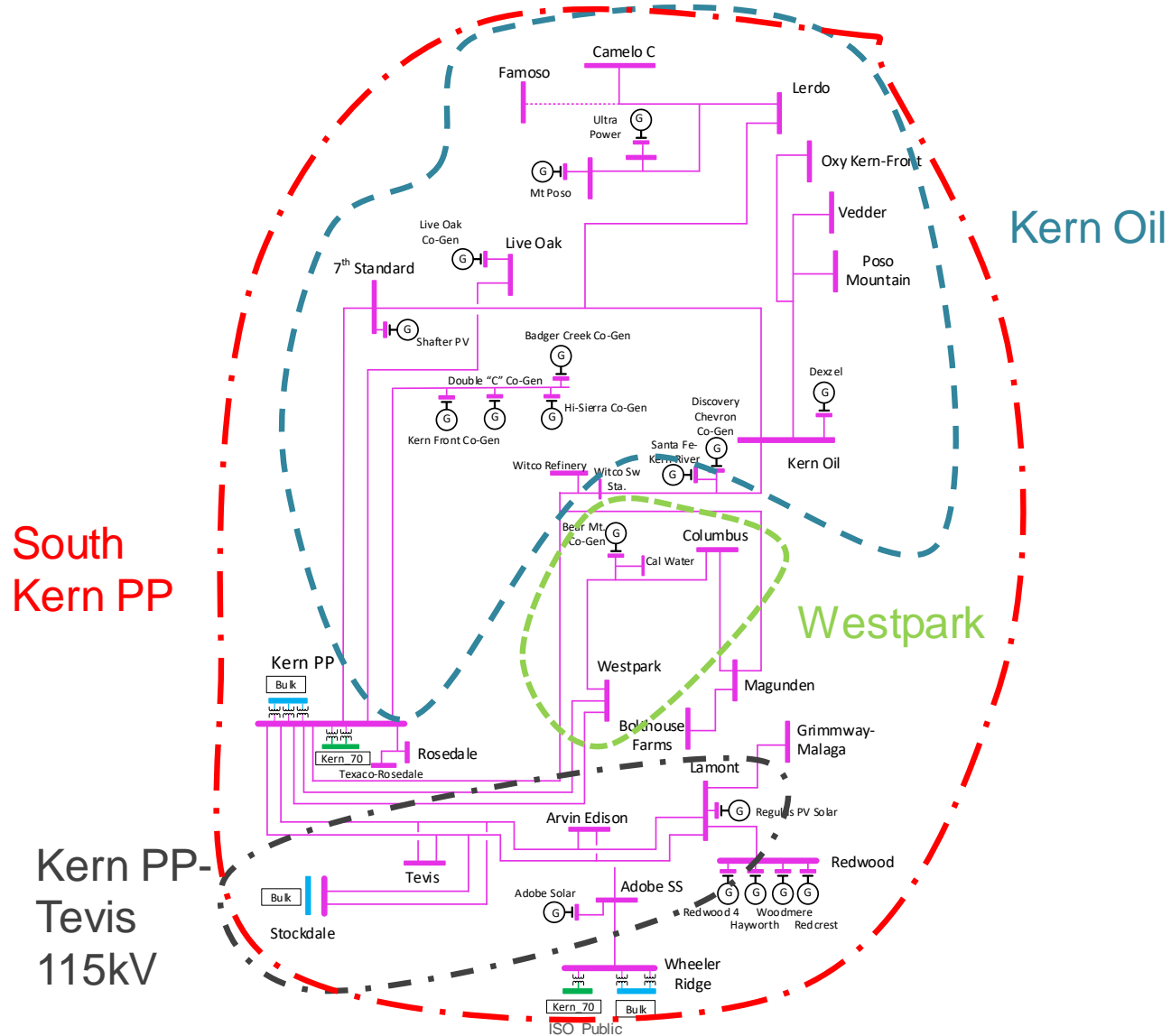
Yara Khalaf

Senior Regional Transmission Engineer

Stakeholder Call

April 10, 2025

Kern Area LCR Sub-Areas



Major new projects

Project Name	Expected ISD
Midway-Temblor 115 kV Line Reconductor & Voltage Support	October-2027
Bakersfield Nos. 1 and 2 230 kV Tap Lines Reconductoring	August-2027
Kern PP 115 kV Area Reinforcement	July- 2027
Wheeler Ridge Junction Station Project	Q4-2032

Kern Area Overall: Load and Resources

Load (MW)	2026	2030	Generation (MW)	2026	2030
Gross Load	1002	1063	Market/ Net Seller	368	368
AAEE	-15	-25	Battery	0	0
Behind the meter DG	-25	-31	MUNI/QF	12	12
Net Load	962	1007	Solar	71	71
Transmission Losses	9	9	Existing 20 minute DR	9	9
Pumps	0	0	Mothballed	0	0
Load + Losses + Pumps	971	1016	Total Qualifying Capacity	460	460

Kern Area LCR

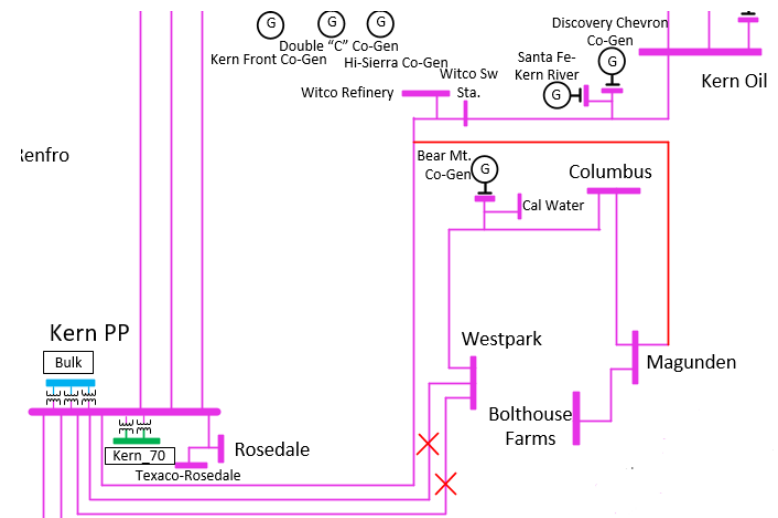
Kern Power-Tevis Sub-Area

Year	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2026	N/A	Not Binding		N/A
2030	N/A	Not Binding		N/A

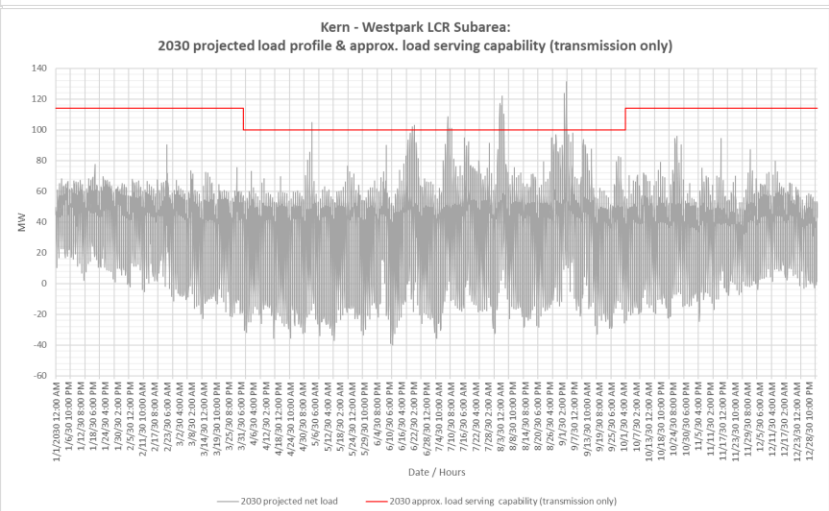
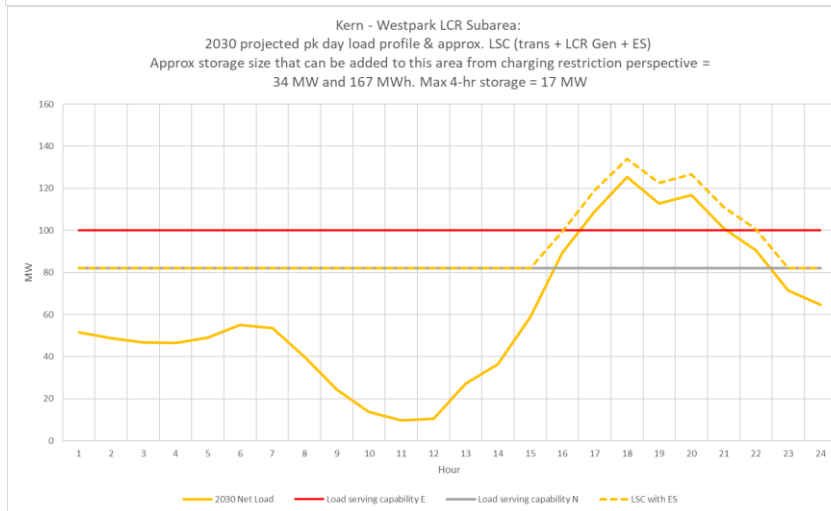
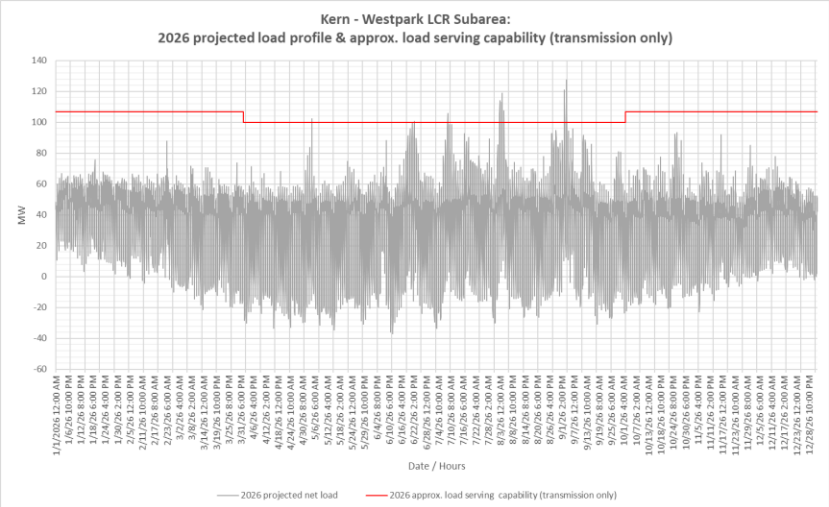
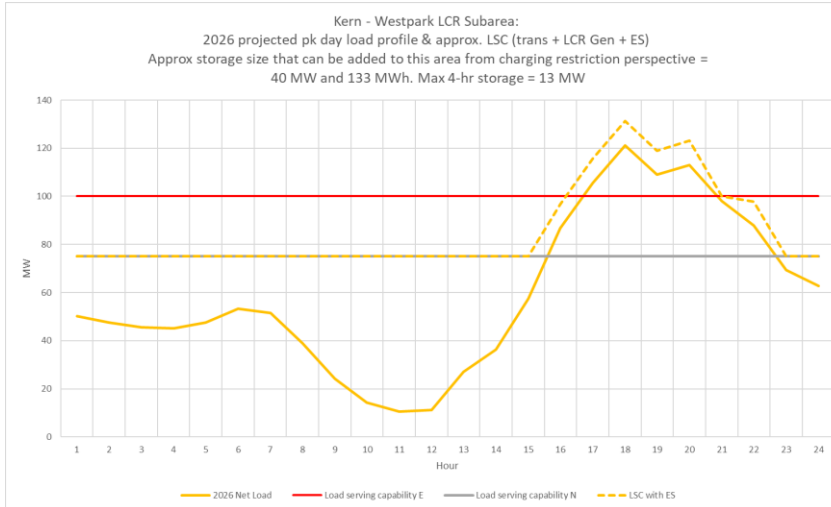
Kern Area LCR

Westpark Sub-Area

Year	Cat	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2026	P7	MAGUNDEN - MAGUDN J 115 kV line	Kern PP- Westpark No. 1 & 2 115 kV Lines	26
2030	P7	MAGUNDEN - MAGUDN J 115 kV line	Kern PP- Westpark No. 1 & 2 115 kV Lines	28

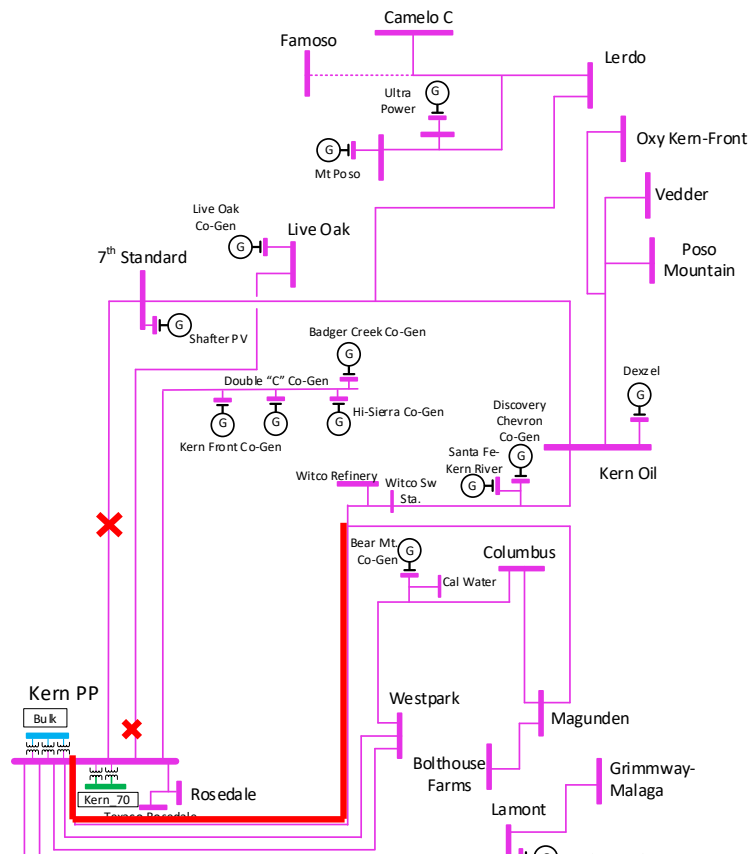


Westpark Sub-area: Load Profiles



Kern Area LCR

Kern Oil Sub-Area



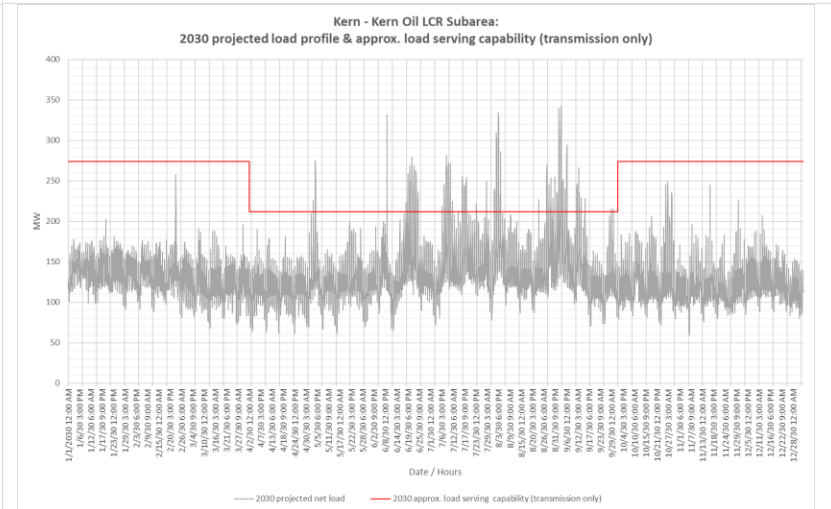
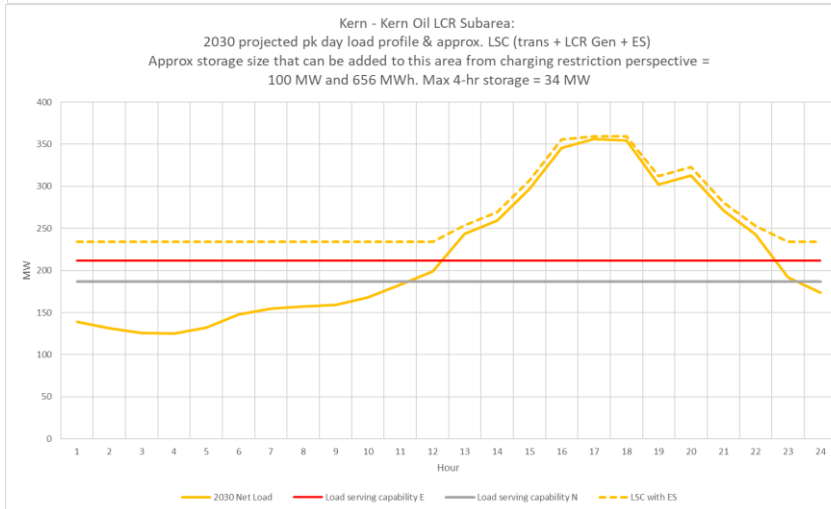
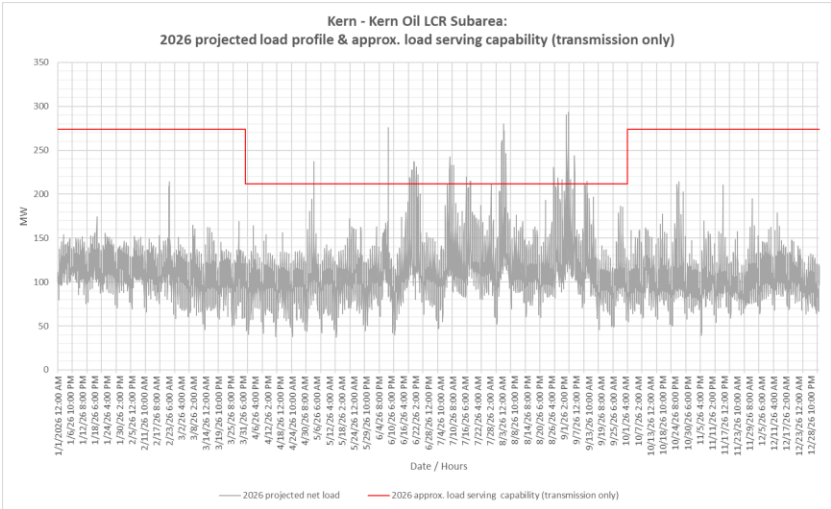
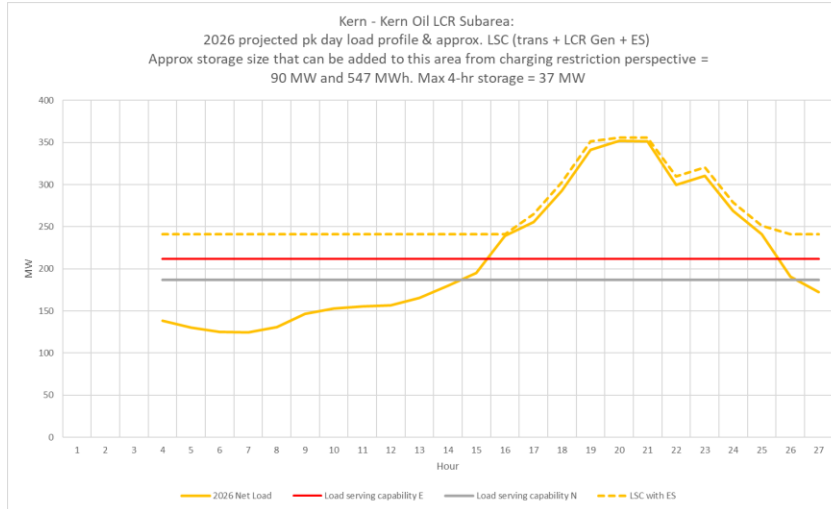
Kern Area LCR

Kern Oil Sub-Area

Year	Cat	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2026	P6	Kern Oil - Kern Water 115 kV Line	Kern PP-7th Standard 115 kV lines & Kern PP-Live Oak 115 kV Line	125 (3 Peak)

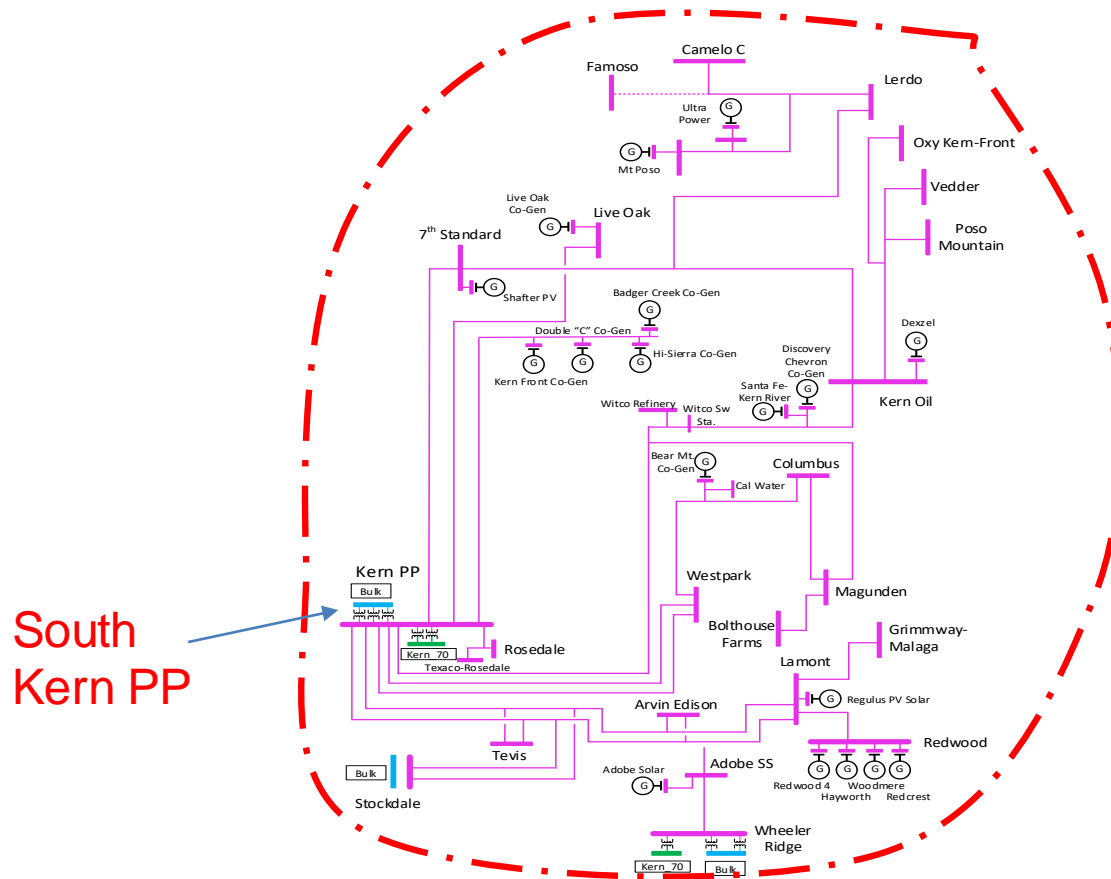
Year	Cat	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2030	P6	Kern Oil - Kern Water 115 kV Line	Kern PP-7th Standard 115 kV lines & Kern PP-Live Oak 115 kV Line	144 (15 NQC) (22 Peak)

Kern Oil Sub-area: Load Profiles



Kern Area LCR

South Kern PP Sub-Area



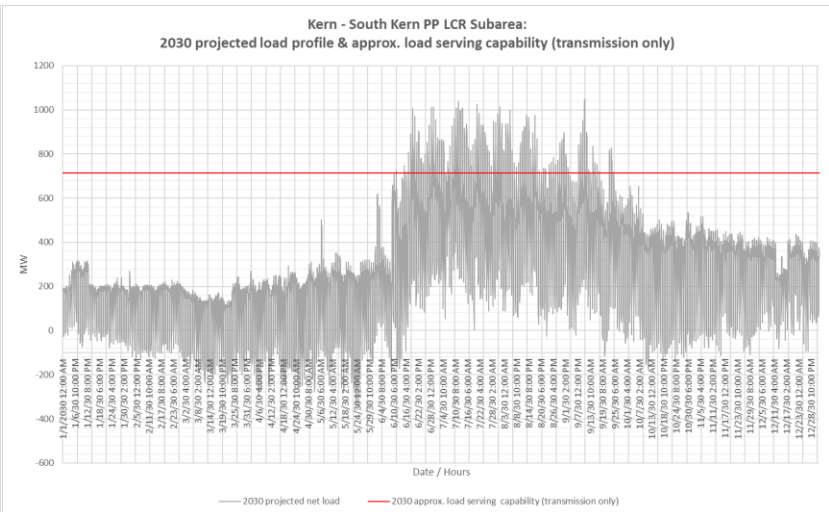
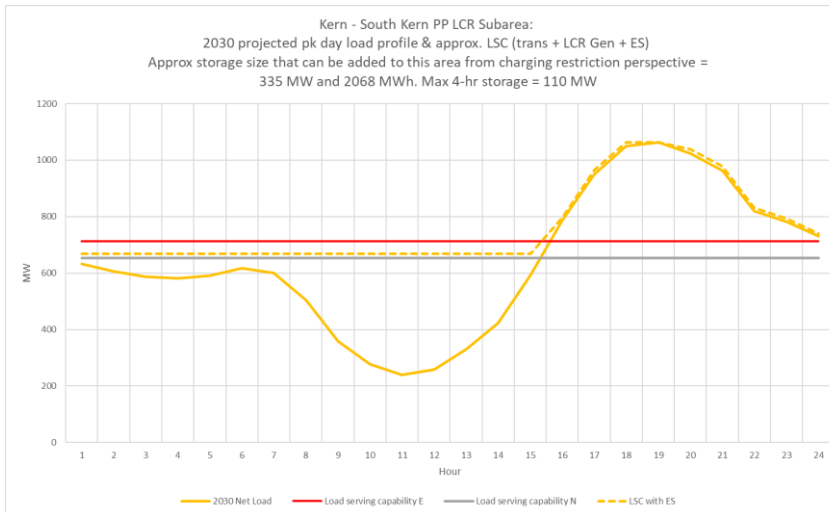
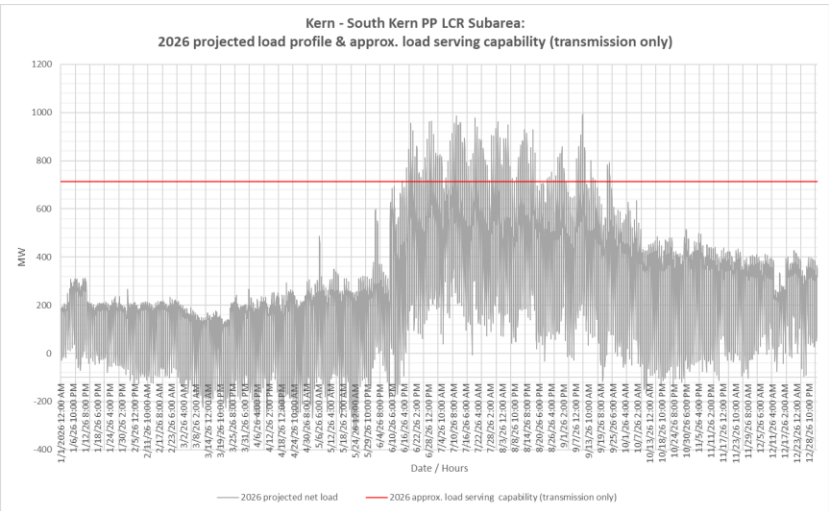
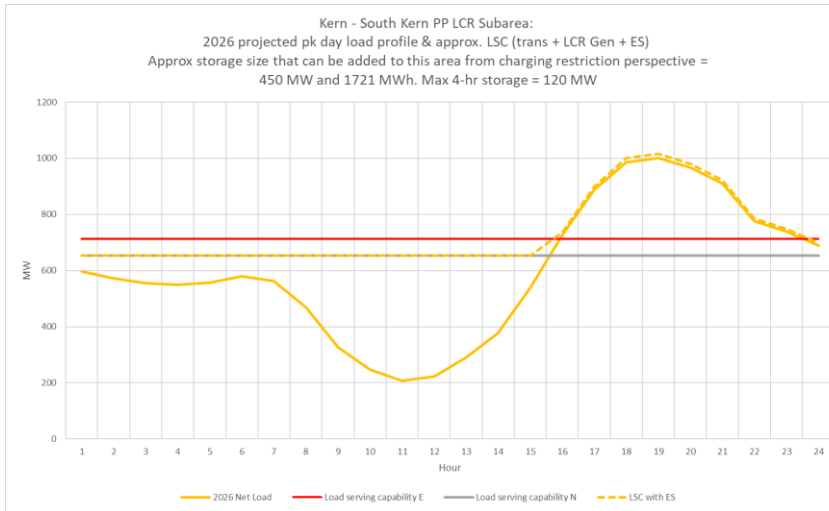
Kern Area LCR

South Kern PP Sub-Area

Year	Cat	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2026	P6	Kern 230/115 kV T/F # 5	Kern 230/115 kV T/F # 3 & Kern 230/115 kV T/F # 4	452 (63 Peak)

Year	Cat	Limiting Facility*	Contingency	LCR (MW) (Deficiency)
2030	P6	Kern 230/115 kV T/F # 5	Kern 230/115 kV T/F # 3 & Kern 230/115 kV T/F # 4	346

South Kern: Load Profiles



Kern Total LCR Need

2026 LCR Need	Existing Generation Capacity Needed (MW)	NQC Deficiency (MW)	Total MW Need
P6	452	0	452 (63 Peak)

2030 LCR Need	Existing Generation Capacity Needed (MW)	NQC Deficiency (MW)	Total MW Need
P6	346	15	361

Changes Compared to Previous LCR Requirements

Sub-area	2025		2026		2029		2030	
	Net Load	LCR	Net Load	LCR	Net Load	LCR	Net Load	LCR
Westpark	130	39	115	26	123	33	118	28
Kern Oil	318	110	334	125 (3 Peak)	299	100	347	144 (15 NQC) (22 Peak)
KernPP- Tevis 115 kV	136	0	144	0	128	0	146	0
South Kern	952	434	1001	452 (63 Peak)	902	241	1007	346

The 2026 and 2030 overall increase in LCR needs are mainly due to an increase in load forecast.