



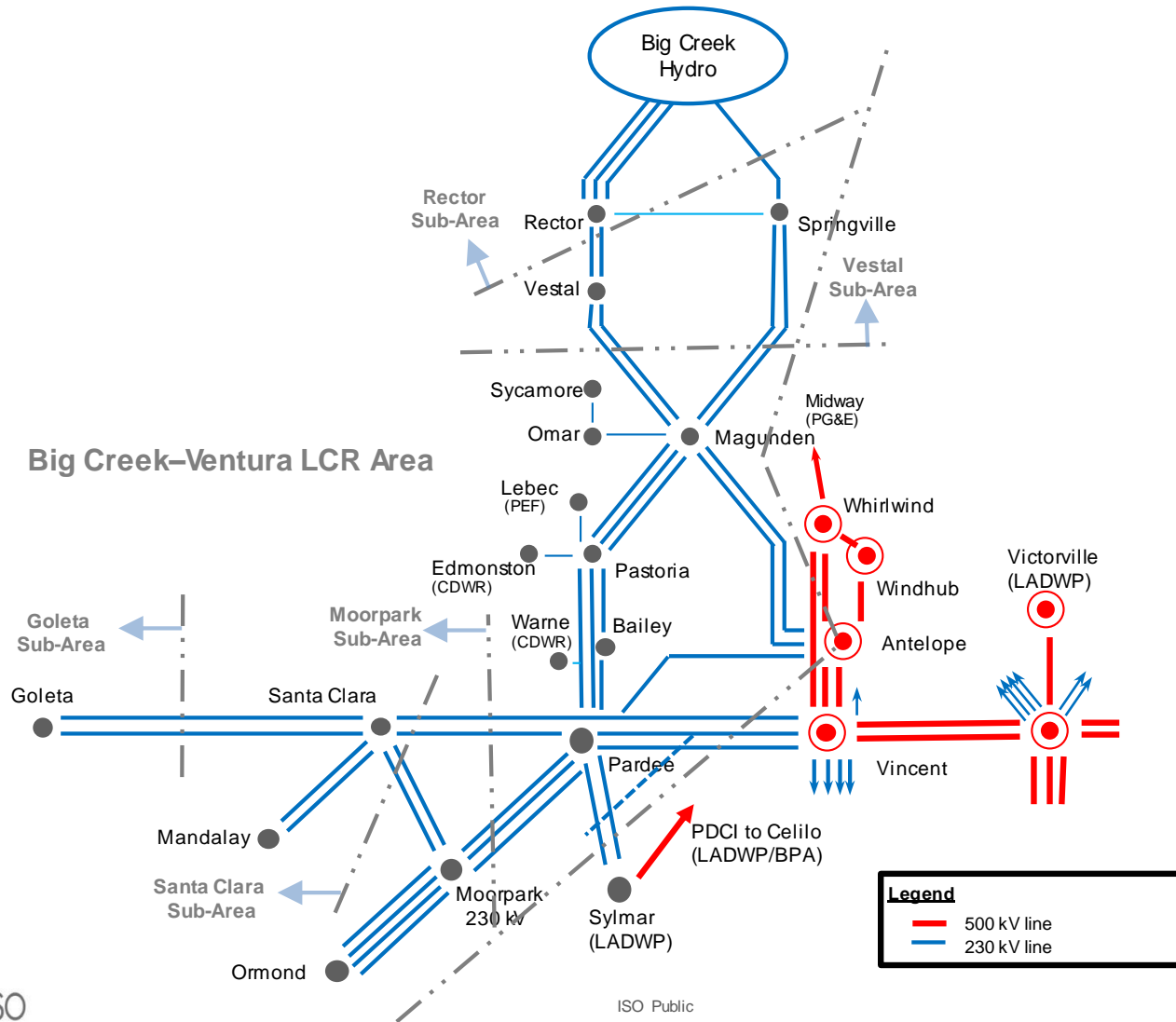
2025 & 2029 Draft LCR Study Results Big Creek/Ventura Area

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Regional Transmission Engineer

Stakeholder Call

March 6, 2024

Big Creek - Ventura Area Transmission System



Major Transmission Projects

- Pardee-Sylmar 230 kV Rating Increase Project (ISD - October 2027)

Resource Assumptions

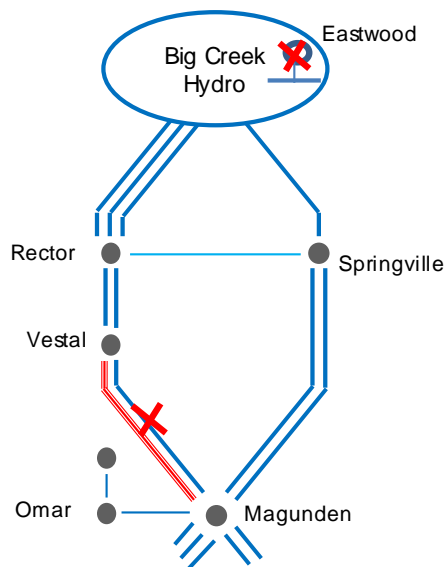
- Sylmar Bank E is out of service through 2026

Load and Resources

Load (MW)			Generation August NQC (MW)*		
	2025	2029		2025	2029
Gross Load	4663	4791	Market/Net Seller	2607	2607
AAEE	-45	-93	Battery	776	776
Behind the meter PV	0	0	Muni/QF	406	406
Net Load	4618	4698	Solar	265	265
Transmission Losses	67	96	Demand Response	63	63
Pumps	390	390	Mothballed	0	0
Load+Losses+Pumps	5075	5184	Total Qualifying Capacity	4117	4117

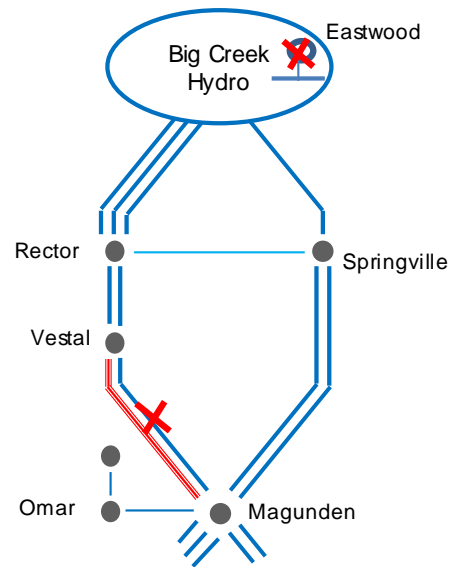
Rector Sub-Area Requirements

Category	Limiting Facility	Contingency	LCR (MW)	
			2025	2029
P3/P6	Voltage collapse	Magunden–Vestal #2 230 kV line with Eastwood out of service	NA	245

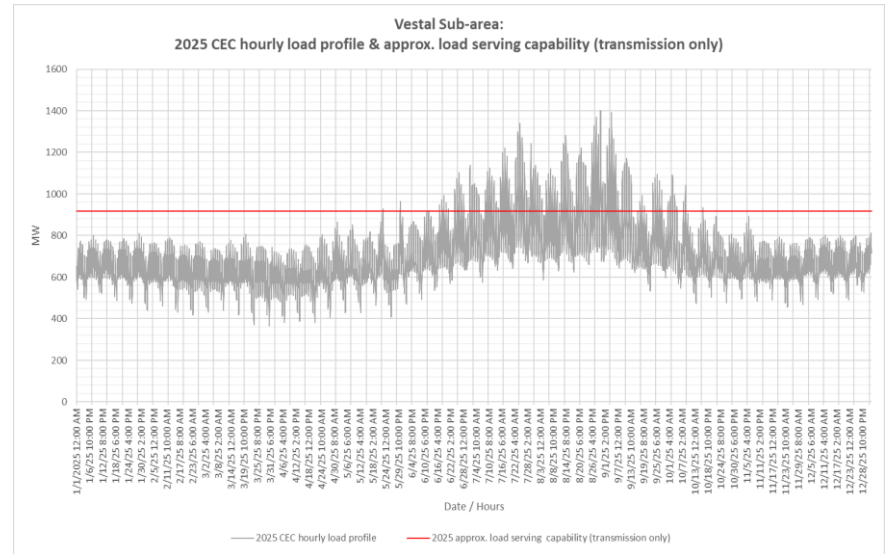
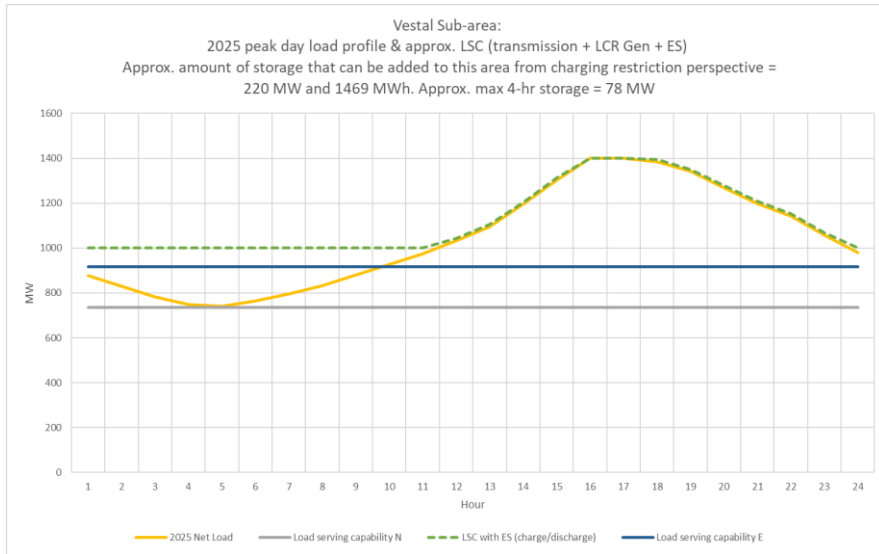


Vestal Sub-Area Requirements

Category	Limiting Facility	Contingency	LCR (MW)	
			2025	2029
P3/P6	Magunden–Vestal #1 230 kV line	Magunden–Vestal #2 230 kV line with Eastwood out of service	485	517



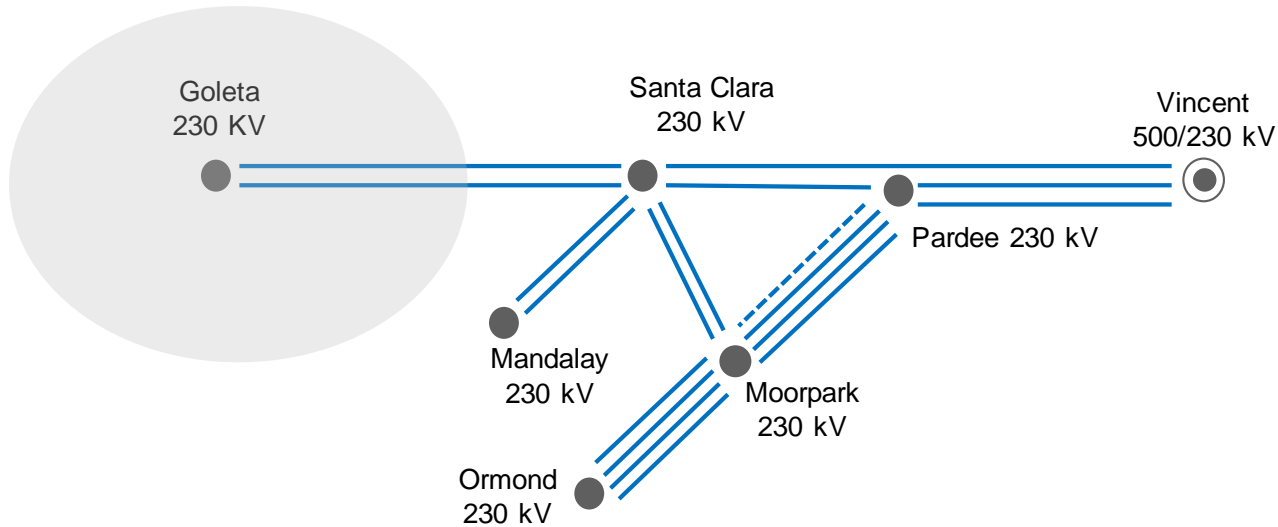
Vestal Sub-Area Load Profiles



Energy Storage analysis for 2029 is in progress and will be provided with final LCR results.

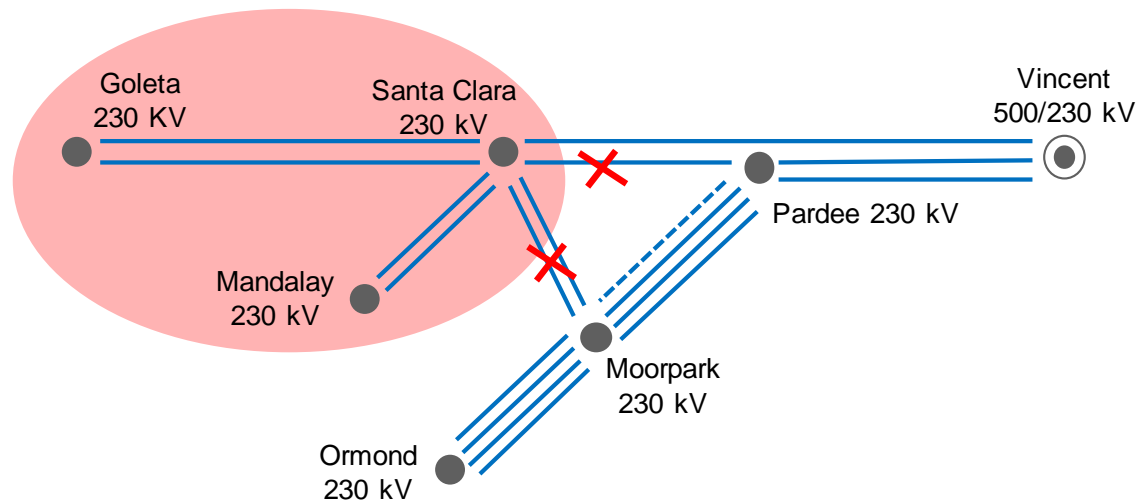
Goleta Sub-Area Requirements

Category	Limiting Facility	Contingency	LCR (MW)	
			2025	2029
LCR for Goleta is satisfied by the LCR of the larger Santa Clara sub-area				

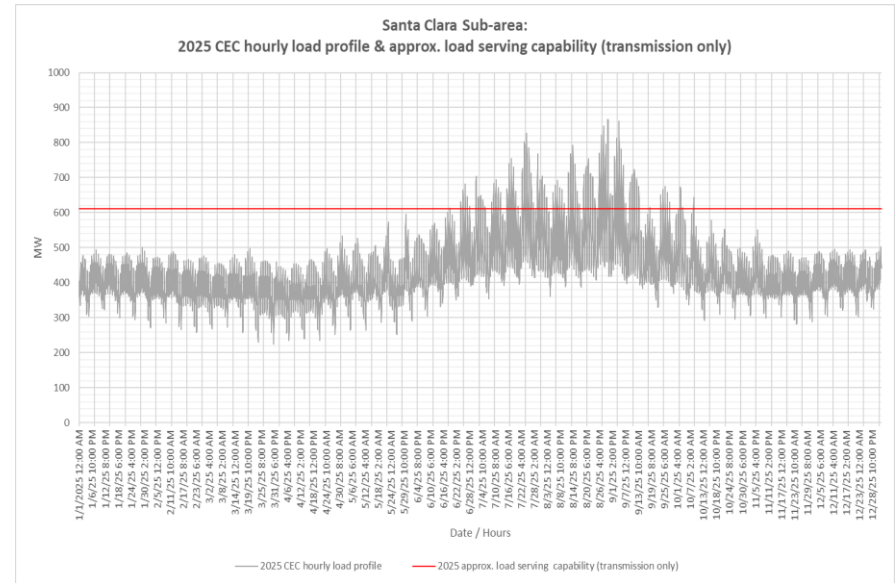
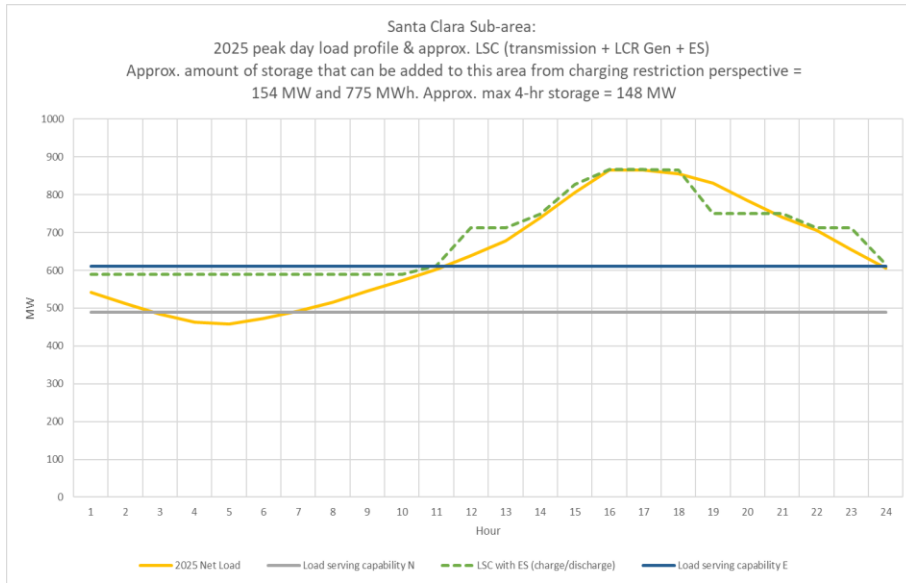


Santa Clara Sub-Area Requirements

Category	Limiting Facility	Contingency	LCR (MW)	
			2025	2029
P1+P7	Voltage Collapse	Pardee–Santa Clara 230 kV line followed by Moorpark–Santa Clara #1 and #2 230 kV DCTL	255	265



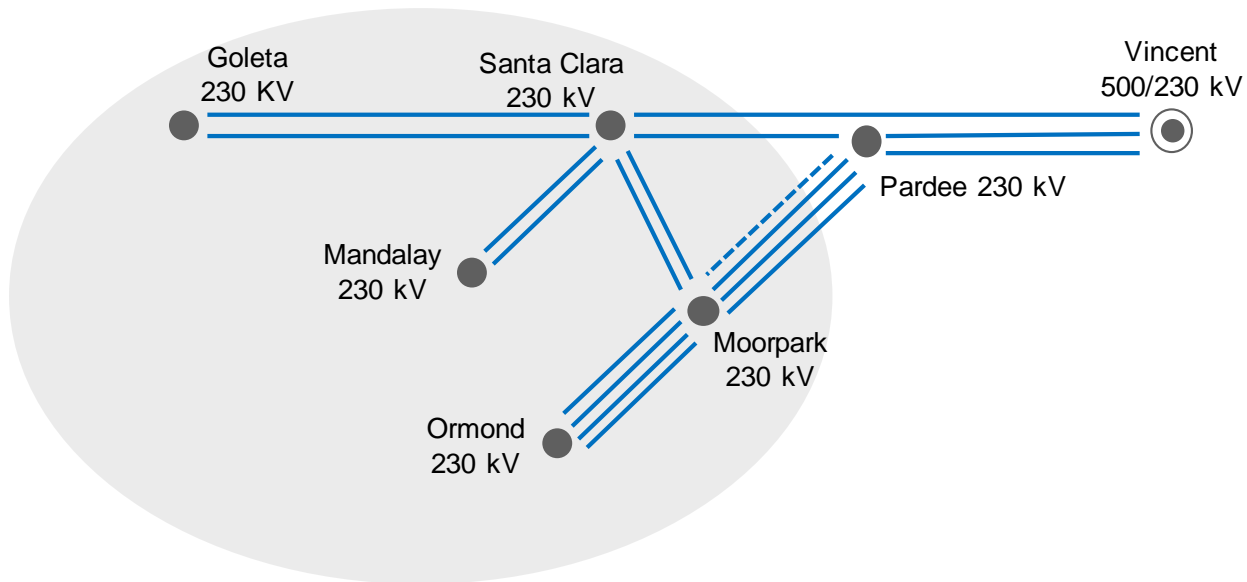
Santa Clara Sub-Area Load Profiles



Energy Storage analysis for 2029 is in progress and will be provided with final LCR results.

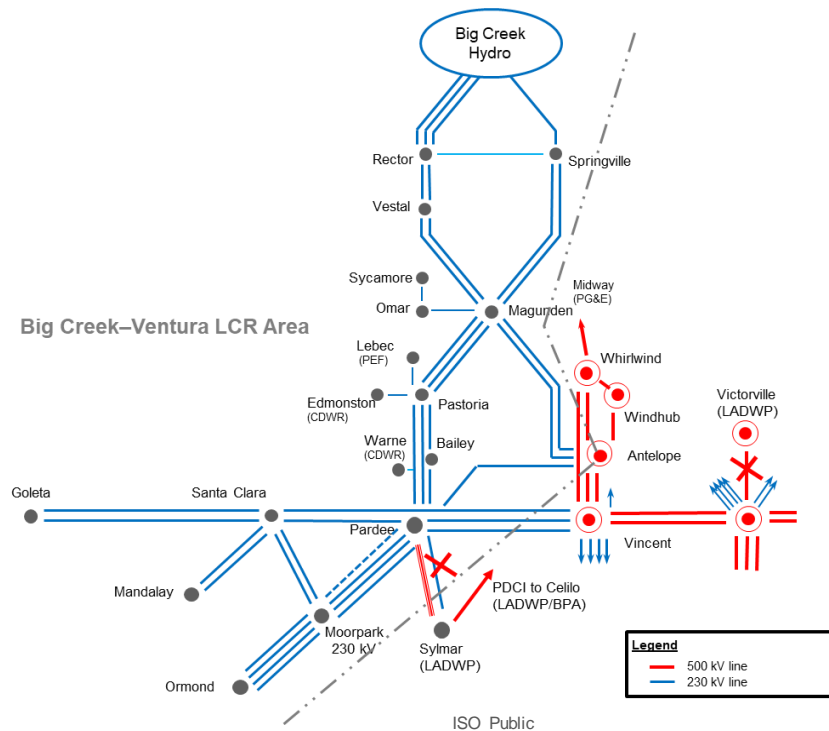
Moorpark Sub-Area Requirements

Category	Limiting Facility	Contingency	LCR (MW)	
			2025	2029
No LCR requirement identified				

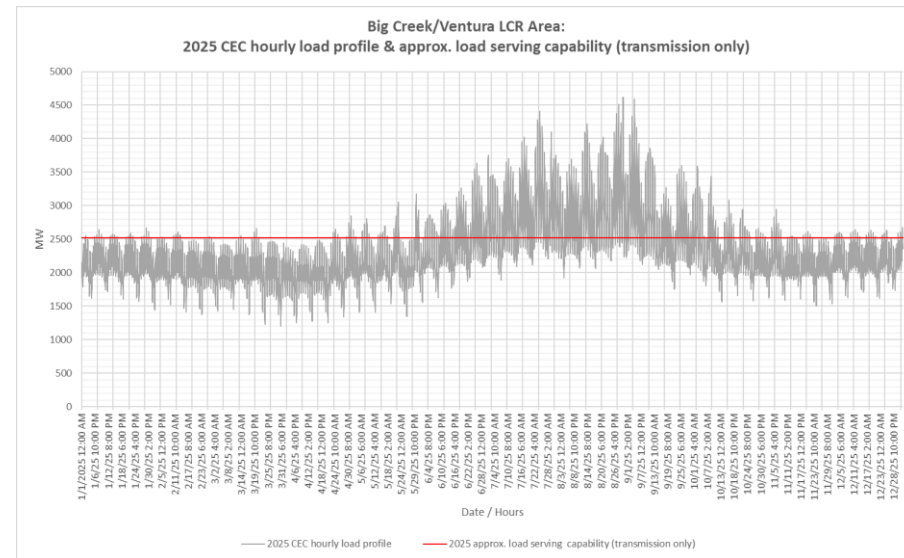
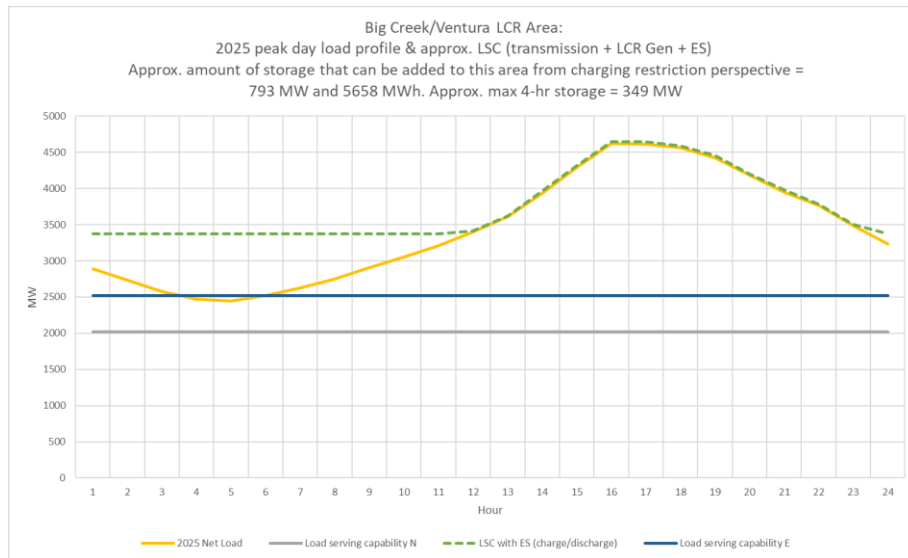


Overall Big Creek-Ventura Area Requirements

Category	Limiting Facility	Contingency	LCR (MW)	
			2025	2029
P6	Pardee-Sylmar #1 or #2 230 kV line	Overlapping outage of Lugo-Victorville 500 kV line and one Pardee-Sylmar 230 kV line	2,145	1,329



Overall Big Creek-Ventura Area Load Profiles



Energy Storage analysis for 2029 is in progress and will be provided with final LCR results.

Big Creek Area Total LCR Need

2025 LCR Need	Existing Generation Capacity Needed (MW)	Deficiency (MW)	Total MW Need
Category P6	2,145	0	2,145

2029 LCR Need	Existing Generation Capacity Needed (MW)	Deficiency (MW)	Total MW Need
Category P6	1,329	0	1,329

Changes Compared to Last Year's Results – 1 Year

Sub-Area	2025		2024		Possible reason for LCR change
	Load (MW)	LCR (MW)	Load (MW)	LCR (MW)	
Rector	859	-	739	-	No Change
Vestal	1,399	485	1,244	345	Load increased
Goleta	223	-	207	-	No change
Santa Clara	865	255	772	199	Load increased
Overall Big Creek Ventura	5,075	2,145	4,579	1,971	Load increased

Changes Compared to Last Year's Results – 5 Year

Sub-Area	2029		2028		Possible reason for LCR change
	Load (MW)	LCR (MW)	Load (MW)	LCR (MW)	
Rector	861	245	739	-	Voltage instability at Rector due to increase in load
Vestal	1,400	517	1,245	367	Load increased
Goleta	224	-	210	-	No change
Santa Clara	884	265	856	242	Load increase
Overall Big Creek Ventura	5,184	1,329	4,720	1,216	Load increase