



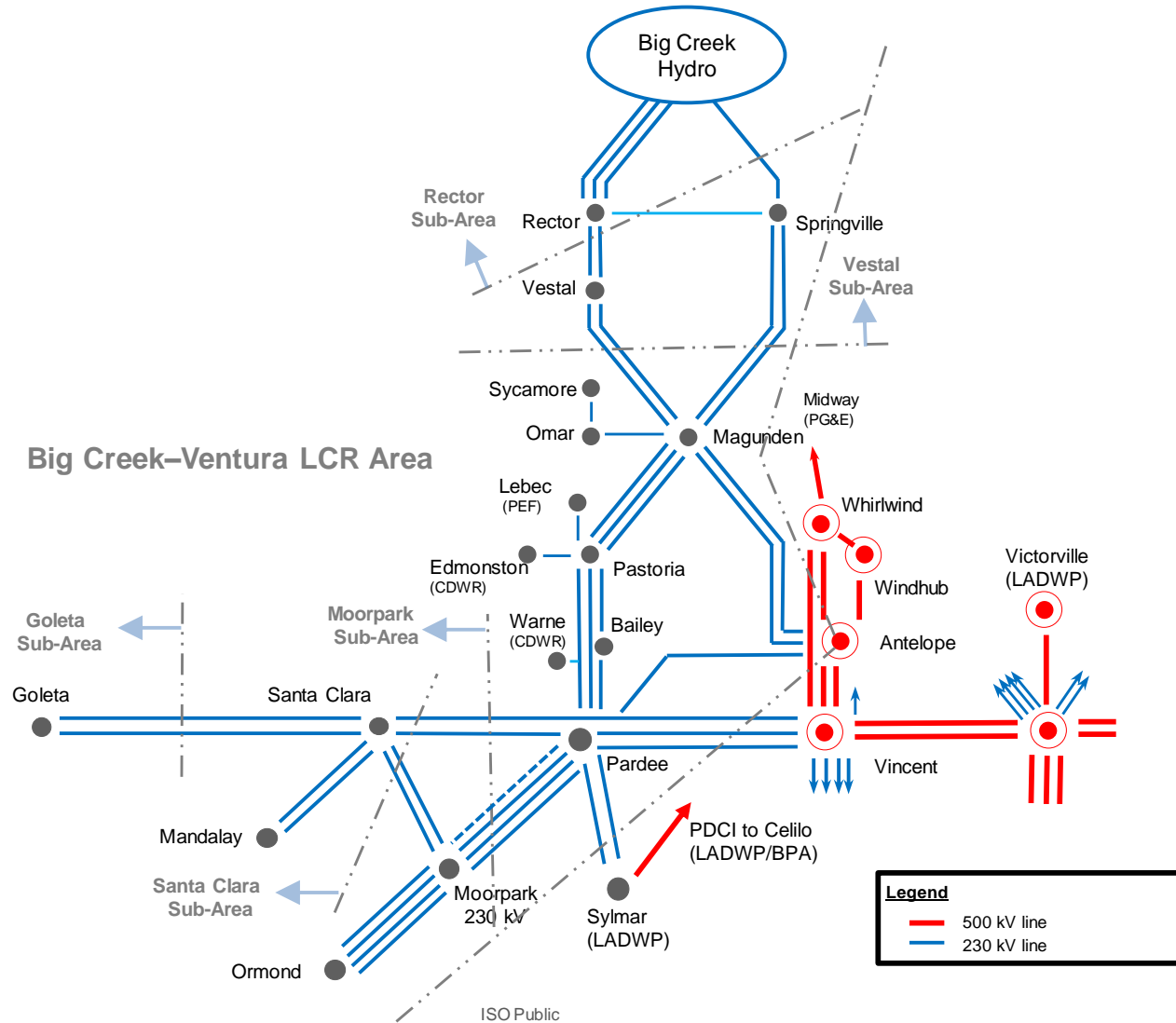
2024 & 2028 Draft LCR Study Results Big Creek/Ventura Area

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Stakeholder Call

March 9, 2023

Big Creek - Ventura Area Transmission System



Major Transmission Projects

- Pardee-Sylmar 230 kV Rating Increase Project (ISD - June 2025)

Resource Assumptions

- Ormond Beach is assumed to be unavailable in both 2024 and 2028.¹
- Sylmar Bank E is out of service through 2025

1. The Ormond Beach generation is recommended by SACCWIS to have three more years of OTC permit extension (through 12/31/2026). The State Water Board schedules a public meeting on March 7, 2023 regarding the SACCWIS-recommended extension.

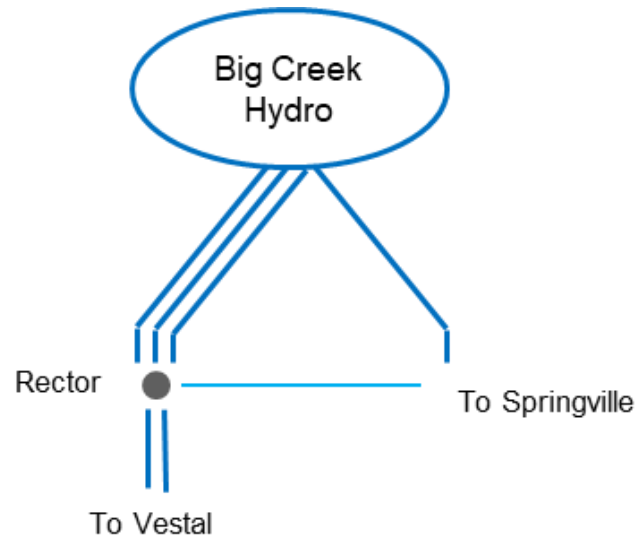
Load and Resources

Load (MW)			Generation August NQC (MW)*		
	2024	2028		2024	2028
Gross Load	4149	4323	Market/Net Seller	2535	2535
AAEE	-39	-79	Solar	475	475
Behind the meter PV	0	0	Muni	307	307
Net Load	4110	4244	QF	100	100
Transmission Losses	79	86	Battery storage	503	722
Pumps	390	390	Demand Response	63	63
Load+Losses+Pumps	4579	4720	Total Qualifying Capacity	3983	4203

* 2024 and 2028 generation capacity excludes Ormond Beach.

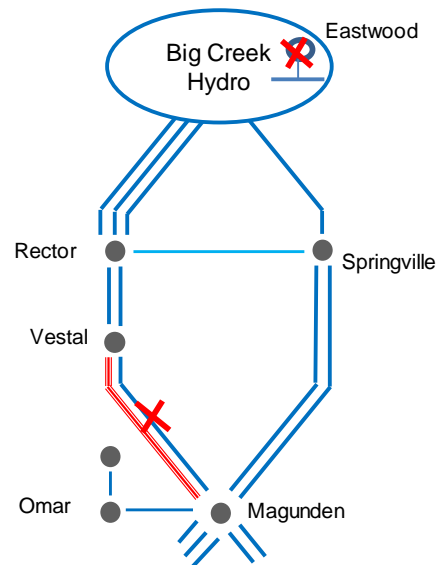
Rector Sub-Area Requirements

Category	Limiting Facility	Contingency	LCR (MW)	
			2024	2028
LCR for Rector is satisfied by the LCR of the larger Vestal sub-area				

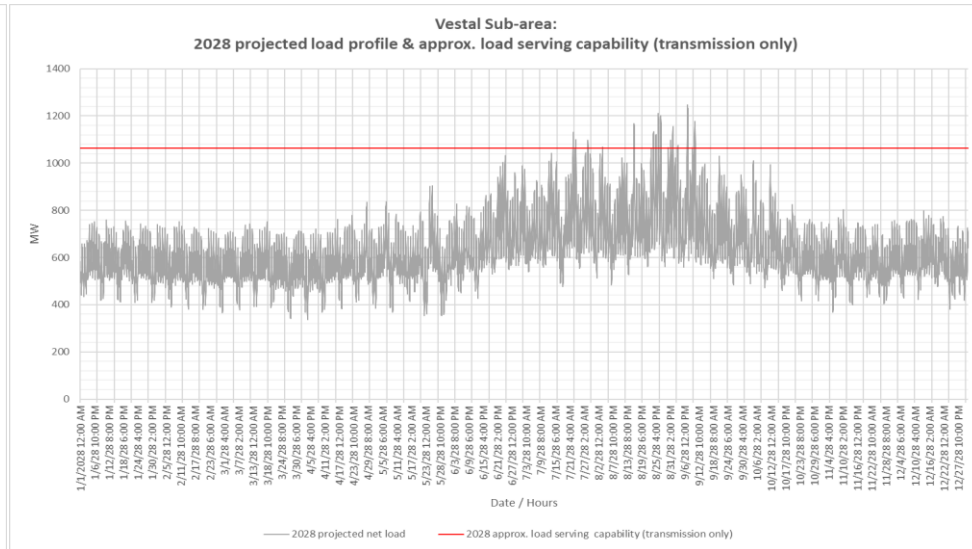
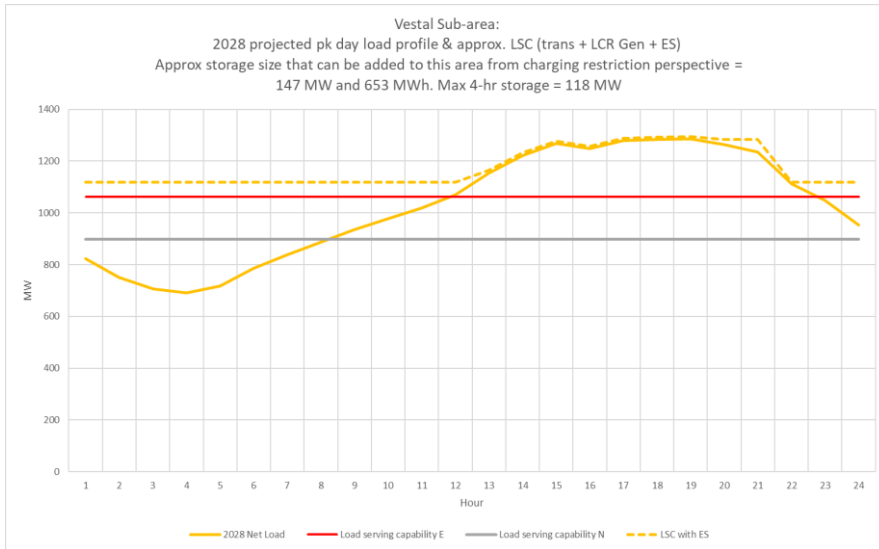
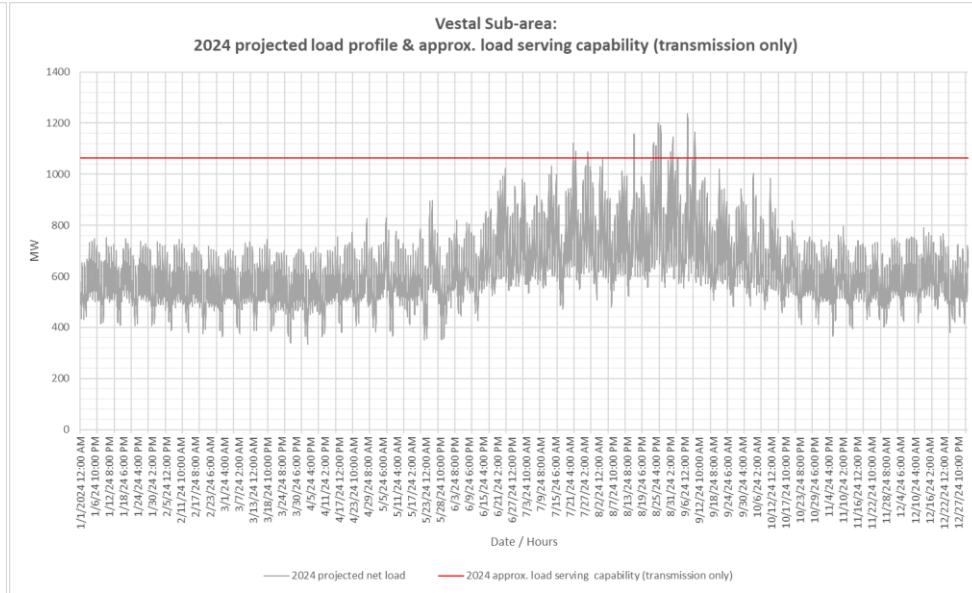
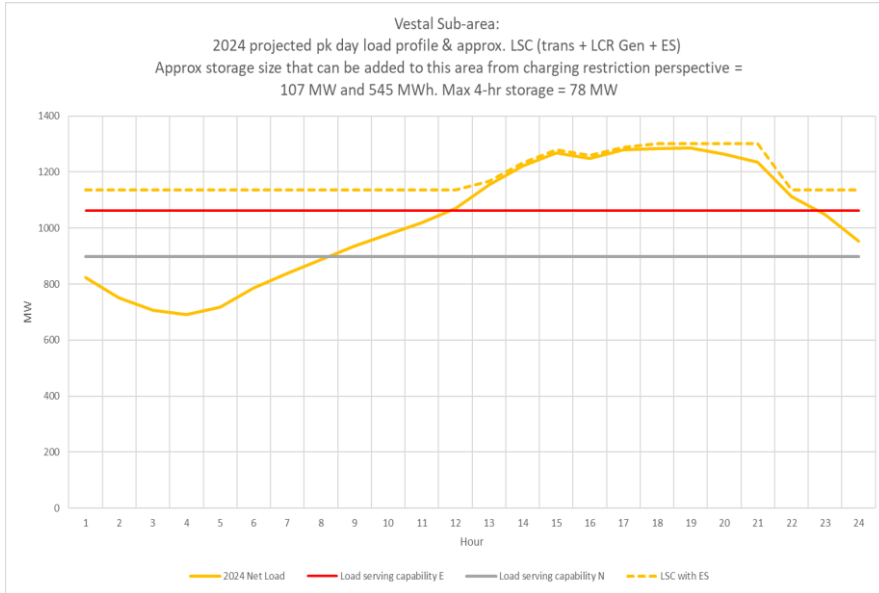


Vestal Sub-Area Requirements

Category	Limiting Facility	Contingency	LCR (MW)	
			2024	2028
P3/P6	Magunden–Vestal #1 230 kV line	Magunden–Vestal #2 230 kV line with Eastwood out of service	345	367

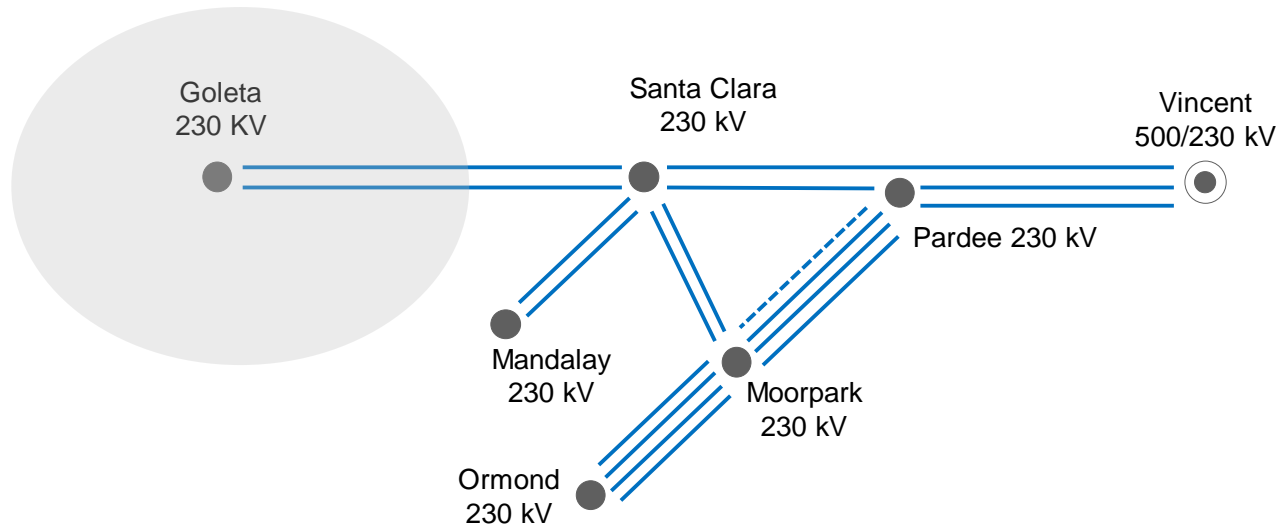


Vestal Sub-Area Load Profiles



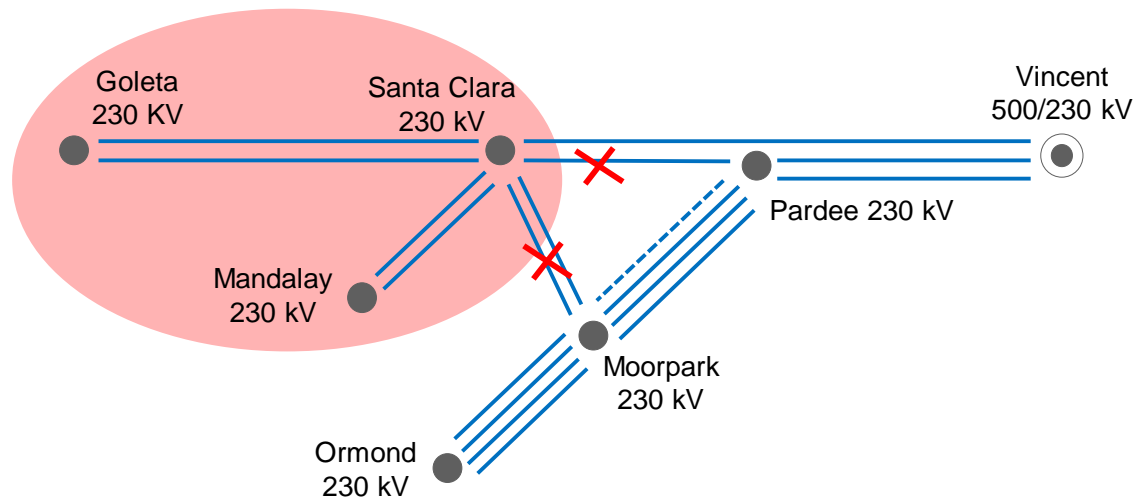
Goleta Sub-Area Requirements

Category	Limiting Facility	Contingency	LCR (MW)	
			2024	2028
LCR for Goleta is satisfied by the LCR of the larger Santa Clara sub-area				

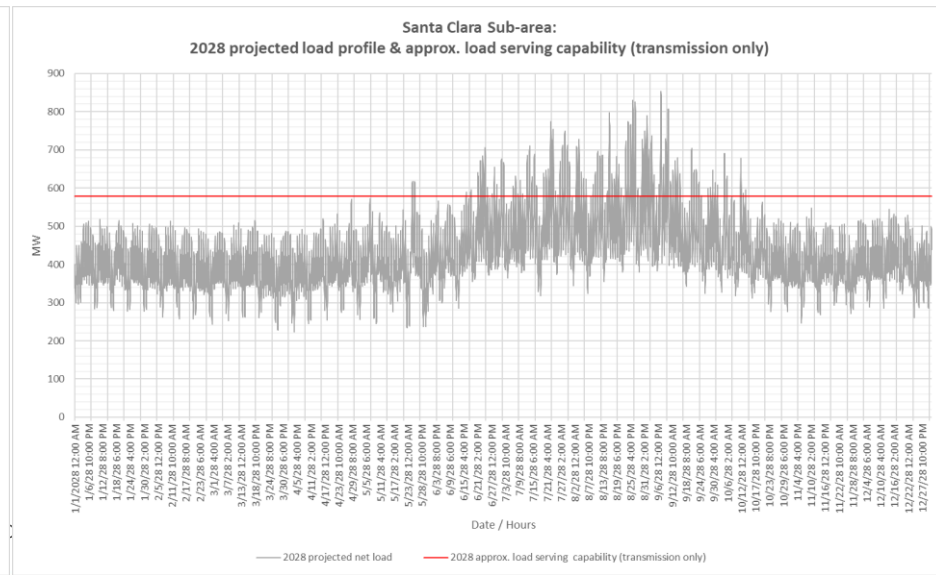
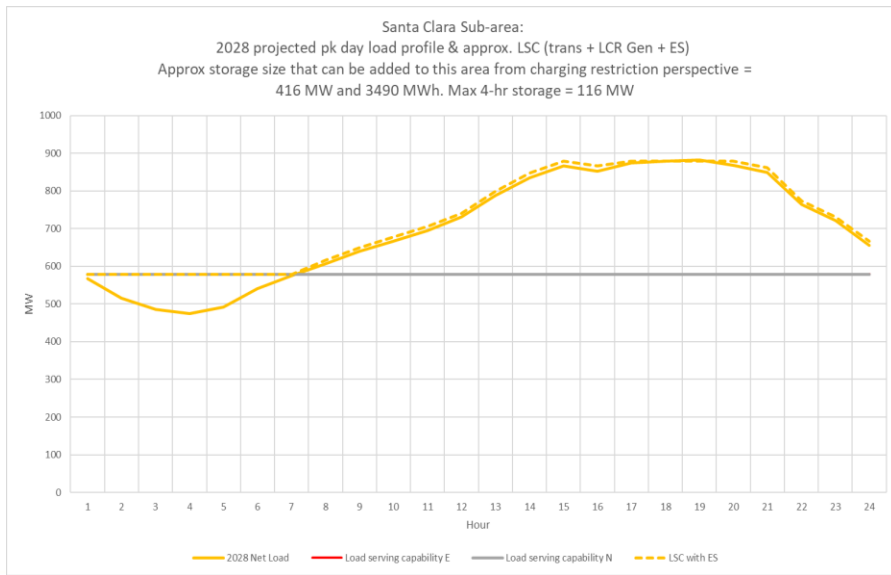
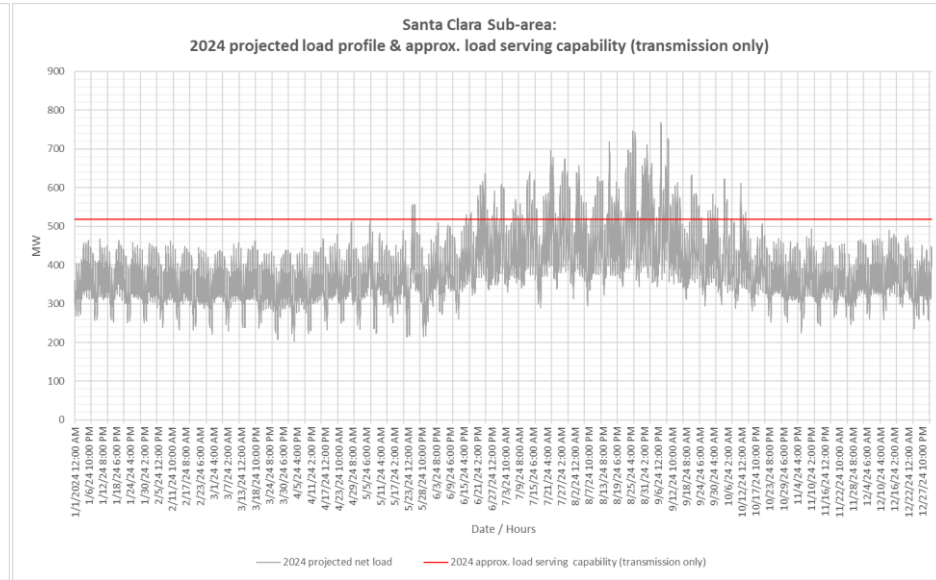
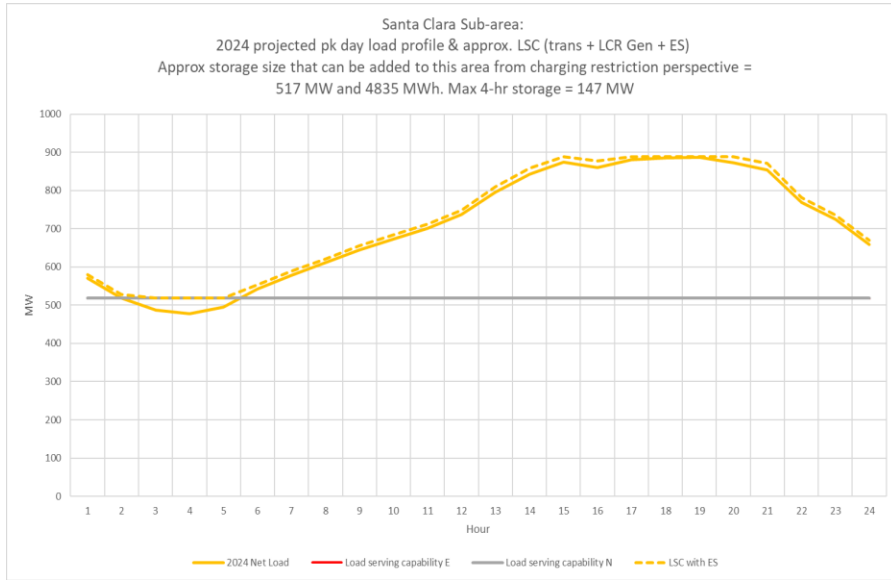


Santa Clara Sub-Area Requirements

Category	Limiting Facility	Contingency	LCR (MW)	
			2024	2028
P1+P7	Voltage Collapse	Pardee–Santa Clara 230 kV line followed by Moorpark–Santa Clara #1 and #2 230 kV DCTL	199	242

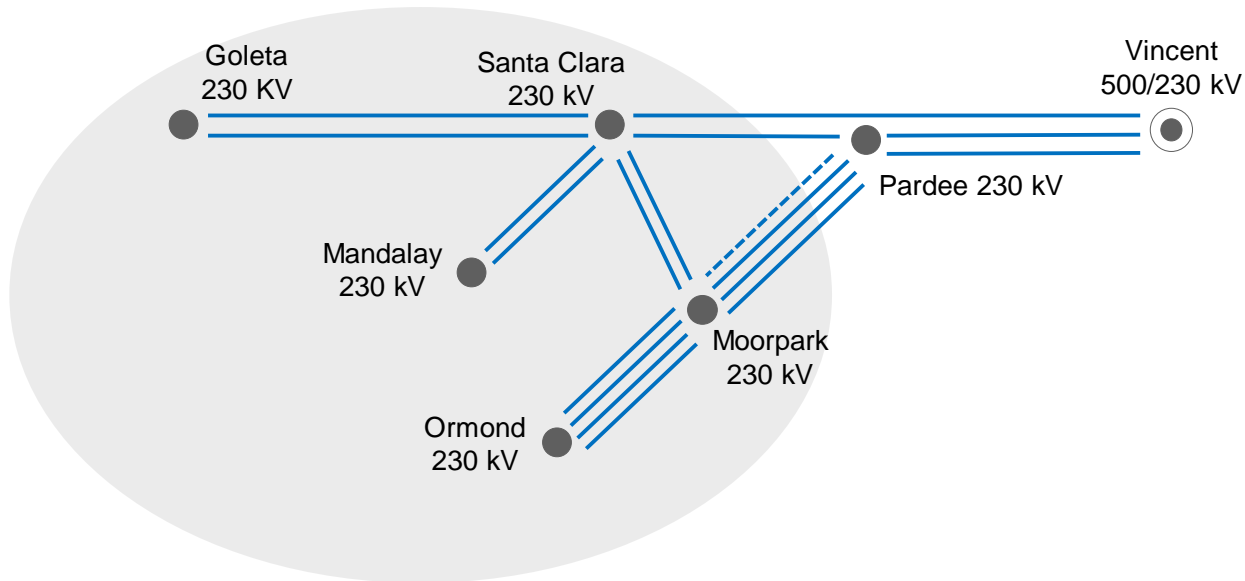


Santa Clara Sub-Area Load Profiles



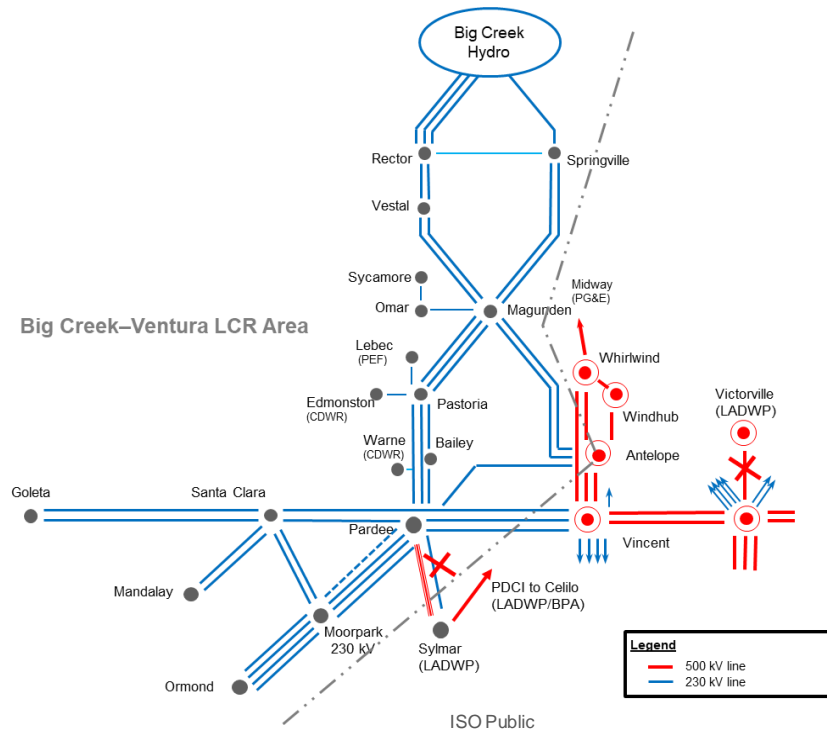
Moorpark Sub-Area Requirements

Category	Limiting Facility	Contingency	LCR (MW)	
			2024	2028
No LCR requirement identified				

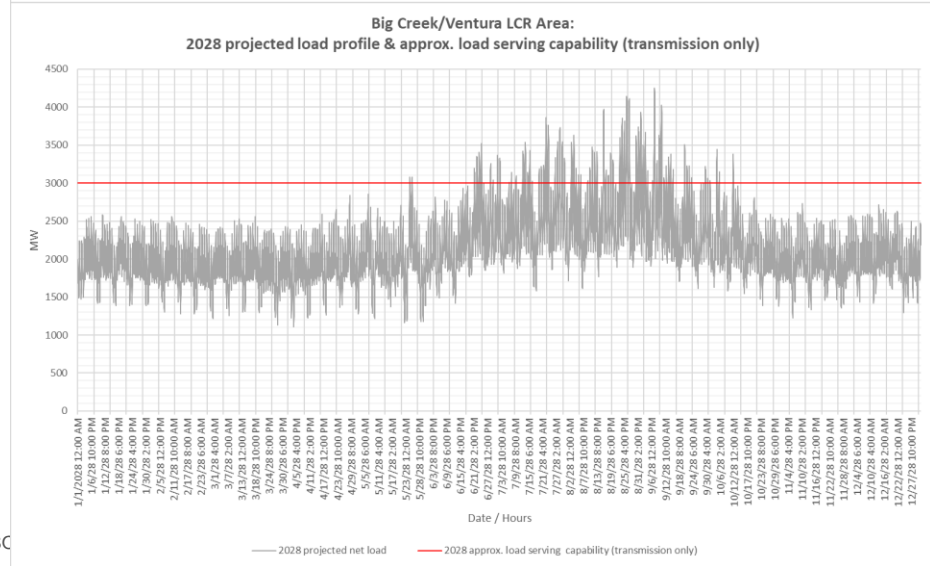
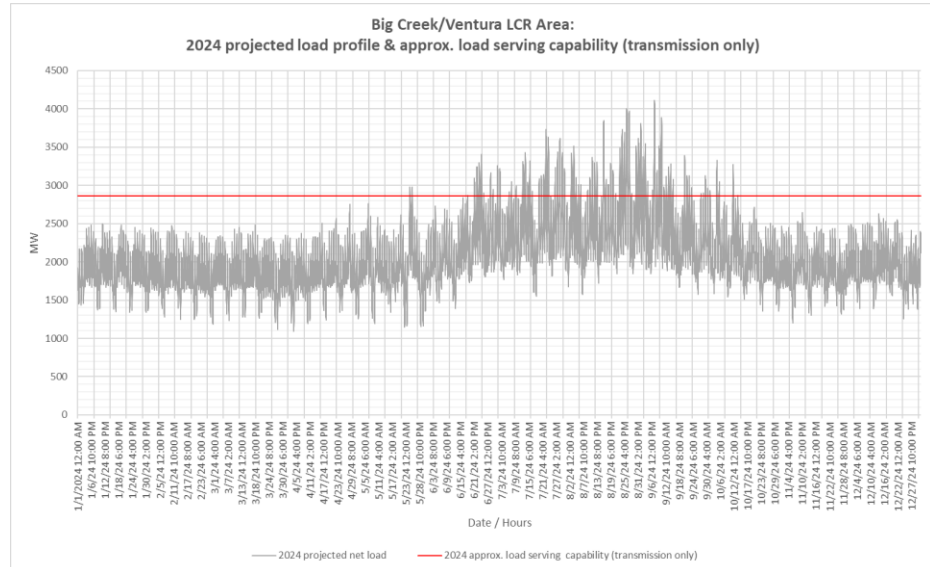
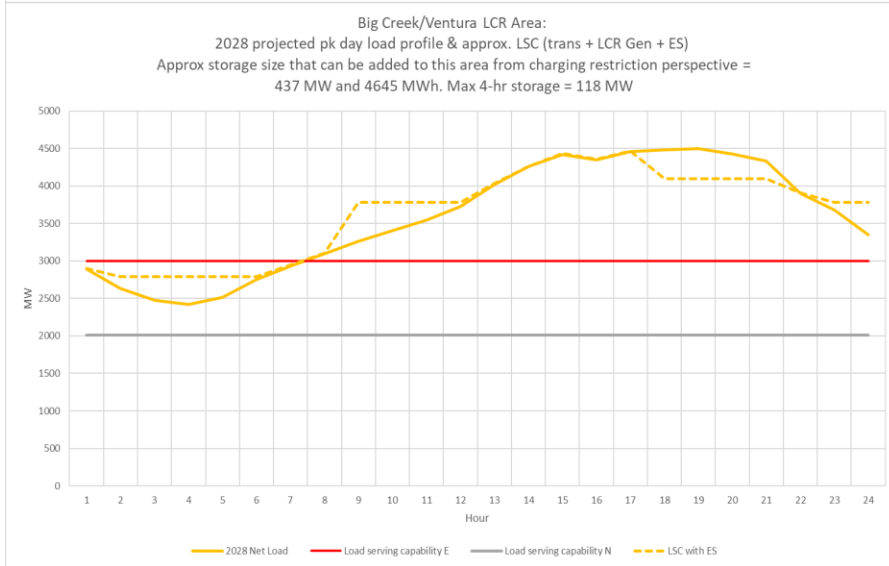
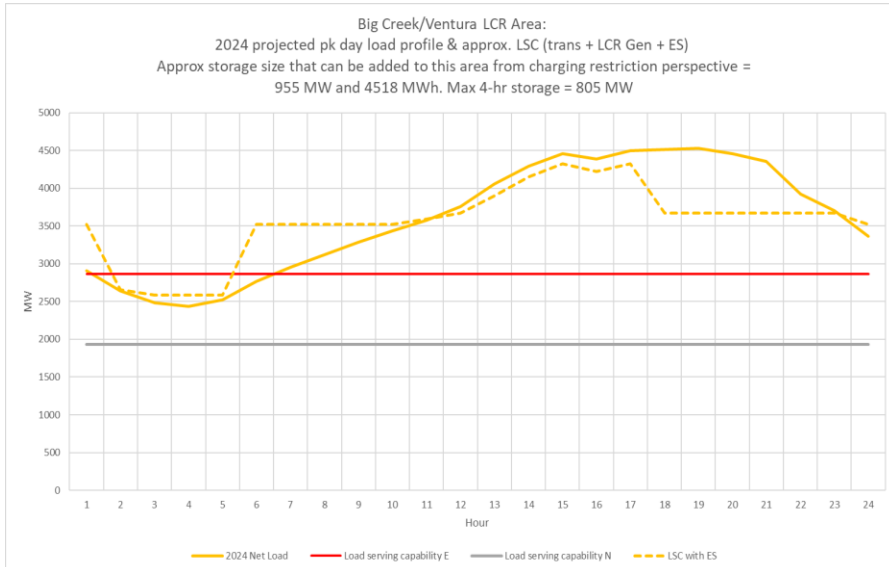


Overall Big Creek-Ventura Area Requirements

Category	Limiting Facility	Contingency	LCR (MW)	
			2024	2028
P6	Pardee-Sylmar #1 or #2 230 kV line	Overlapping outage of Lugo–Victorville 500 kV line and one Pardee-Sylmar 230 kV line	1,971	1,216



Overall Big Creek-Ventura Area Load Profiles



Big Creek Area Total LCR Need

2024 LCR Need	Existing Generation Capacity Needed (MW)	Deficiency (MW)	Total MW Need
Category P6	1,971	0	1,971

2028 LCR Need	Existing Generation Capacity Needed (MW)	Deficiency (MW)	Total MW Need
Category P6	1,216	0	1,216

Changes Compared to Last Year's Results - 2023

Sub-Area	2024		2023		Possible reason for LCR change
	Load (MW)	LCR (MW)	Load (MW)	LCR (MW)	
Rector	729	-	736	-	No change
Vestal	1,226	345	1,187	344	Load increased
Goleta	205	-	208	-	No change
Santa Clara	775	199	772	184	Load increased
Moorpark	1,439	-	1,454	-	No change
Overall Big Creek Ventura	4,111	1,971	4,362	2,240	Load decreased

* Load values do not include losses

Changes Compared to Last Year's Results - 2028

Sub-Area	2028		2027		Possible reason for LCR change
	Load (MW)*	LCR (MW)	Load (MW)*	LCR (MW)	
Rector	726	-	727	-	No change
Vestal	1,225	367	1,174	330	Load increased
Goleta	209	-	208	-	No change
Santa Clara	853	242	853	241	No change
Moorpark	1,526	-	1,528	-	No change
Overall Big Creek Ventura	4,245	1,216	4,440	1,126	Load distribution changes within the area

* Load values do not include losses

Summary

	Load, MW	LCR, MW	Approximate maximum energy storage		Approximate 4-hour energy storage	Remark
			Capacity (MW)	Energy (MWh)	Capacity (MW)	
2024						
Rector	729	-	N/A	N/A	N/A	No LC requirement
Vestal	1,226	345	107	545	78	No gas-fired LC requirement
Goleta	205	-	N/A	N/A	N/A	No LC requirement
Santa Clara	775	199	332	1,328	147	195 MW/780 MWh of existing/contracted ES
Moorpark	1,439	-	N/A	N/A	N/A	No LC requirement
Big Creek–Ventura	4,111	1,971	955	4,518	805	827 MW/3308 MWh of existing/contracted storage in area
2028						
Rector	726	-	N/A	N/A	N/A	No LC requirement
Vestal	1,225	367	147	653	118	No gas-fired LC requirement
Goleta	209	-	N/A	N/A	N/A	No LC requirement
Santa Clara	853	242	350	1397	116	195 MW/780 MWh of ES procured
Moorpark	1,526	-	N/A	N/A	N/A	No LCR requirement
Big Creek–Ventura	4,245	1,216	437	4,645	118	No gas-fired LC requirement; 933 MW of existing/contracted storage