



2026 & 2030 Draft LCR Study Results San Diego Non-Bulk Sub-Areas

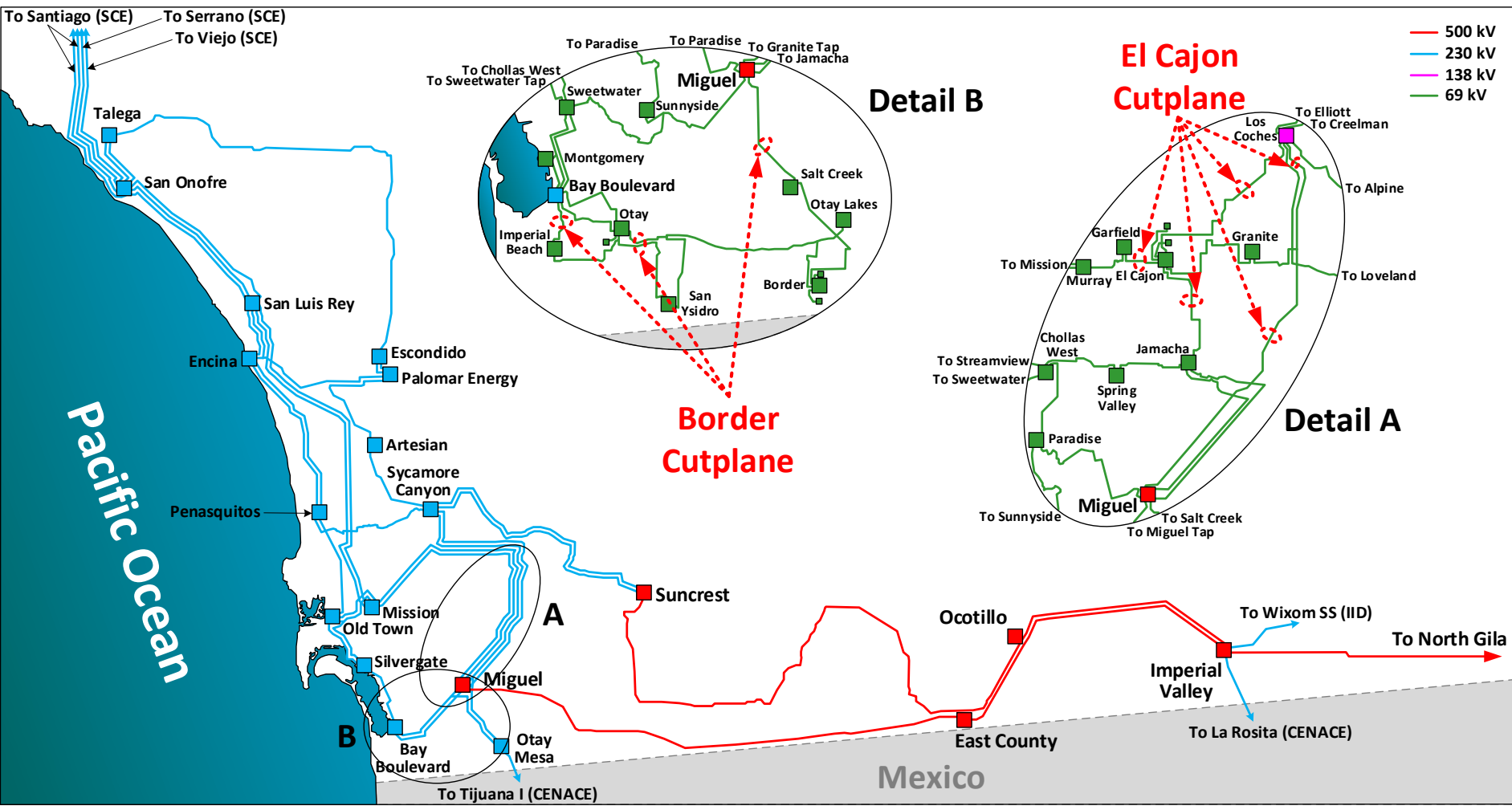
Rick Torres

Senior Engineer, Regional Transmission – South

Stakeholder Call

March 6, 2025

San Diego Area



Major Network Upgrades Modeled in 2026

Project Name	In-service Date
IID S-Line Upgrade	2024
SG and OT Redundant Bus Differential Relay	2024
TL649D Reconductor (San Ysidro - Otay Lake Tap)	Oct-24
Reconductor TL 605 Silvergate - Urban	Oct-24

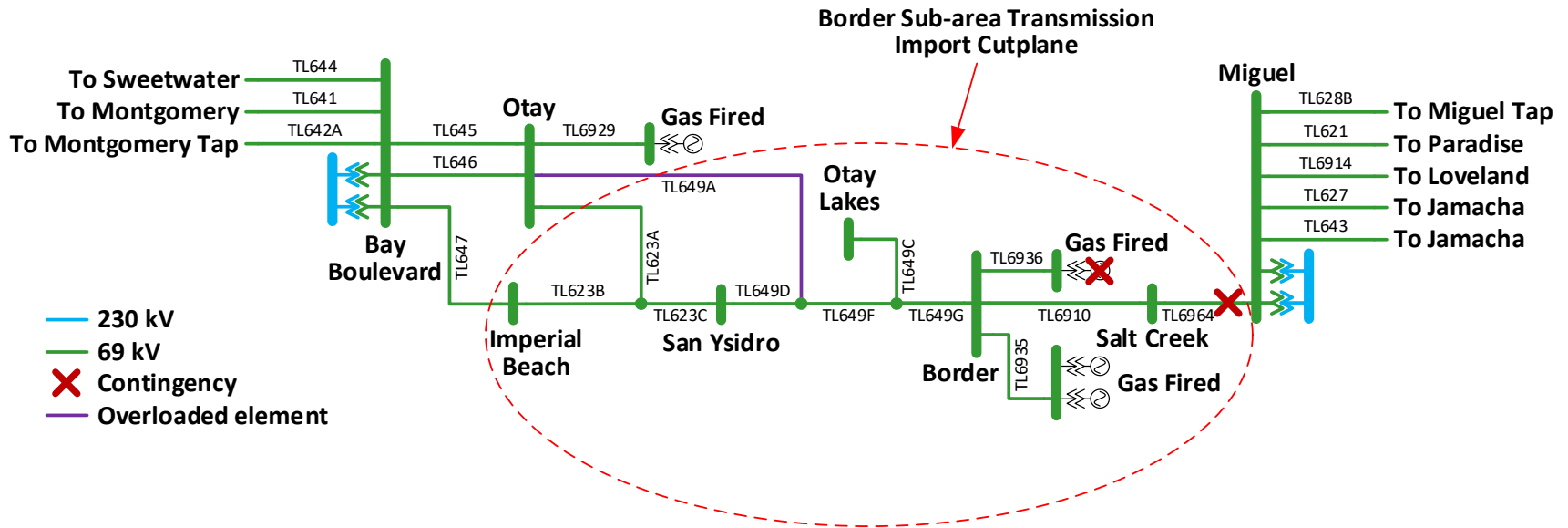
Major Network Upgrades Modeled in 2030

Project Name	In-service Date
TL695B Japanese Mesa - Talega Tap Reconductor	May-27
TL632 Granite Loop-In and TL6914 Reconfiguration	May-27
TL690E, Stuart Tap - Las Pulgas 69 kV Reconductor	May-28
Sweetwater Reliability Enhancement	Oct-27
Valley Center System Improvement	2028
TL623C Reconductor (San Ysidro - Otay Tap)	Jul-29

Border Sub-area: Load and Resources

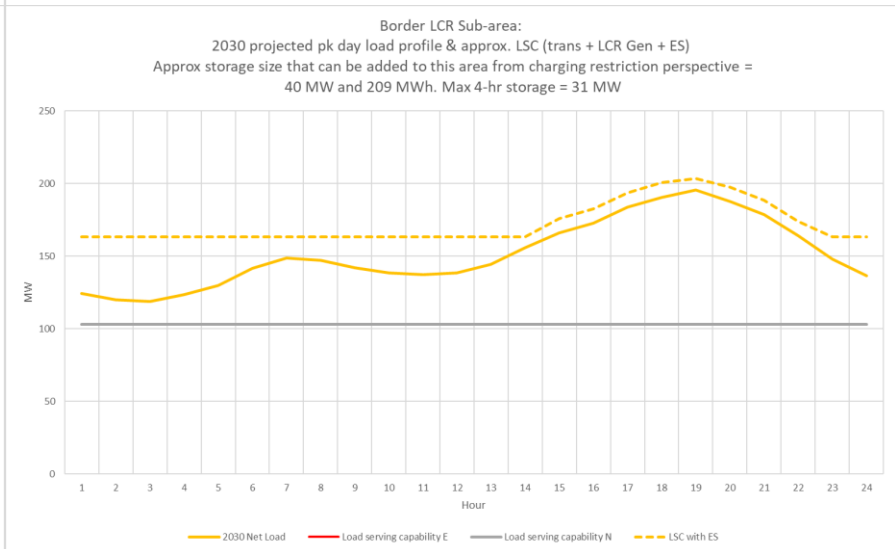
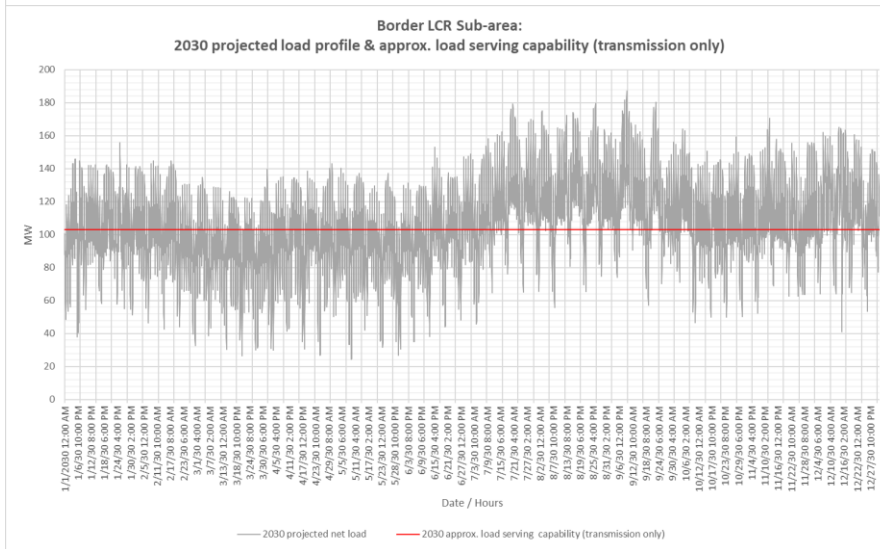
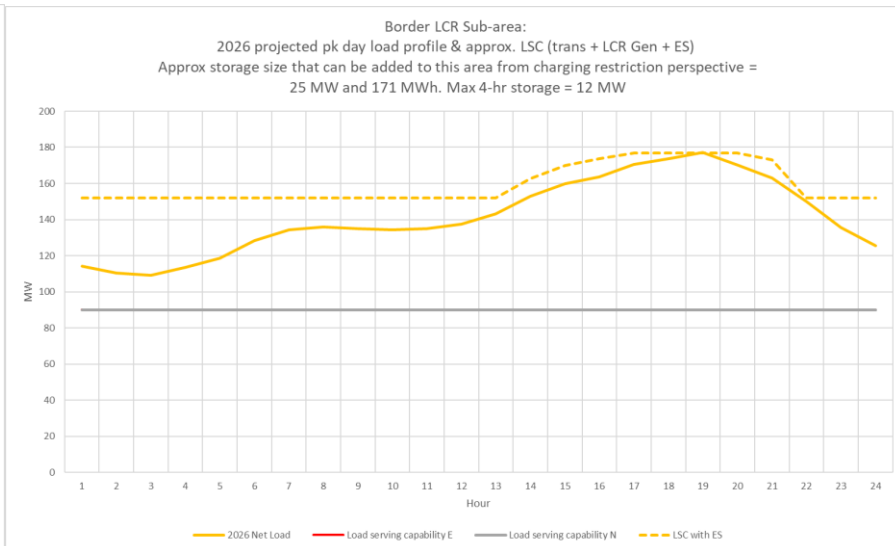
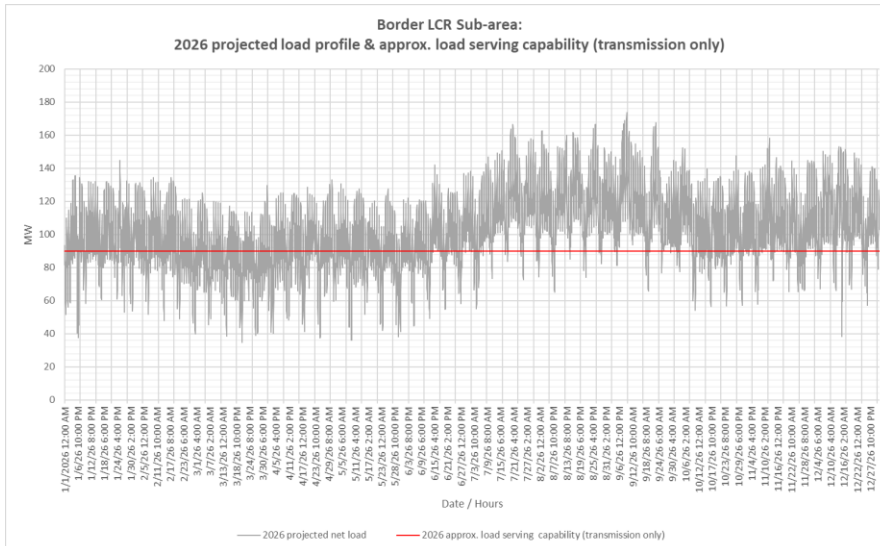
Load (MW)	2026	2030	Generation (MW)	NQC
Gross Load	196	222	Market/Net Seller	149
AAEE	-2	-4	Battery	0
Behind the meter DG	-18	-23	Wind	0
Net Load	176	195	Solar	0
Transmission Losses	1	1	Muni/QF	0
Pumps	0	0	Future preferred resource and energy storage	0
Load + Losses + Pumps	177	196	Total Qualifying Capacity	149

Border Sub-area: One-line diagram and LCR Requirement



Year	Cat	Limiting Facility	Contingency	LCR (MW)
2026	P3	Otoy - Otoy Lakes Tap 69 kV (TL649A)	Border unit out of service followed by the outage of Miguel - Salt Creek 69 kV (TL6964)	110
2030	P3	Otoy - Otoy Lakes Tap 69 kV (TL649A)	Border unit out of service followed by the outage of Miguel - Salt Creek 69 kV (TL6964)	120

Border Sub-area Load Profiles

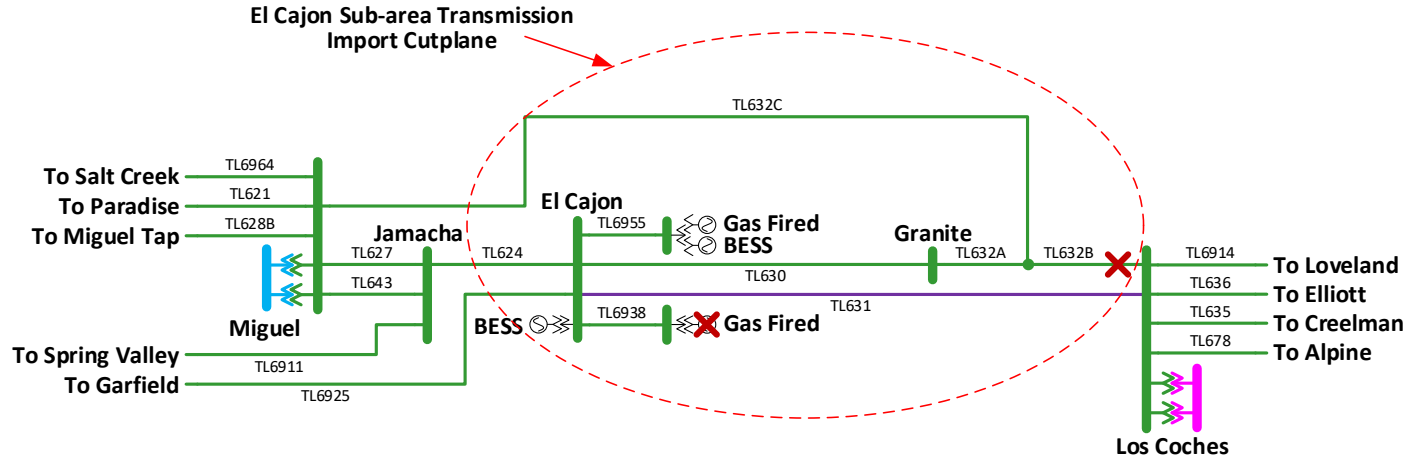


El Cajon Sub-area: Load and Resources

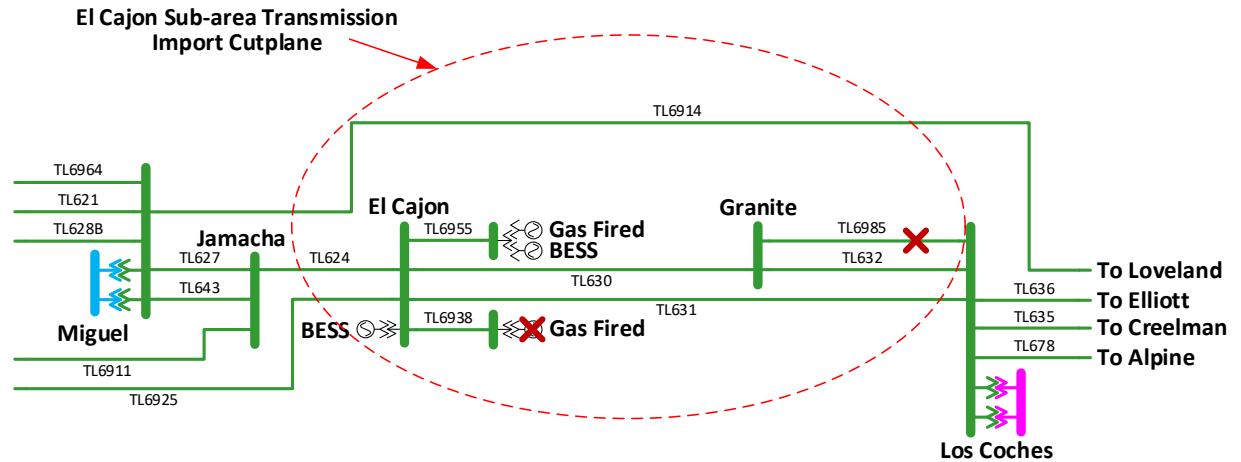
Load (MW)	2026	2030	Generation (MW)	NQC
Gross Load	193	214	Market/Net Seller	94
AAEE	-2	-3	Battery	107
Behind the meter DG	-16	-19	Wind	0
Net Load	175	192	Solar	0
Transmission Losses	1	0	Muni/QF	0
Pumps	0	0	Future preferred resource and energy storage	0
Load + Losses + Pumps	176	192	Total Qualifying Capacity	201

El Cajon Sub-area: One-line diagram

Current



2030

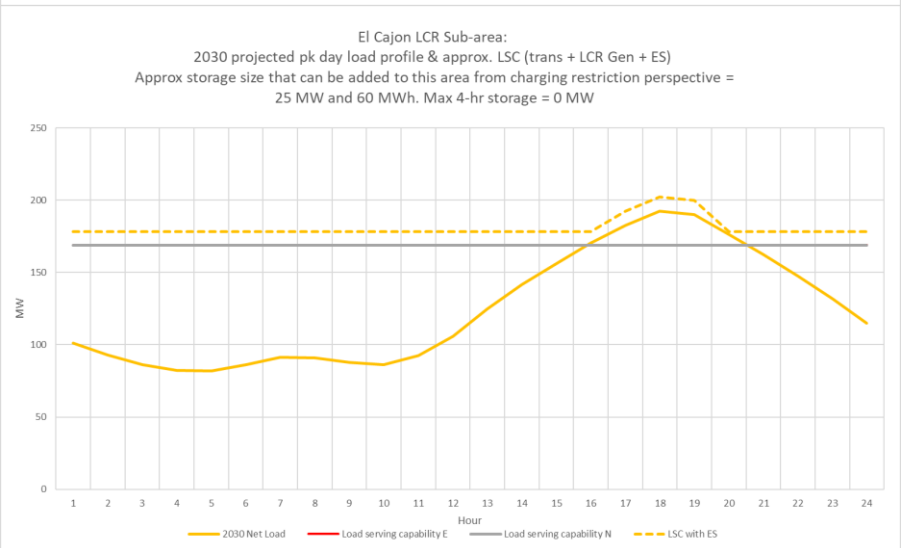
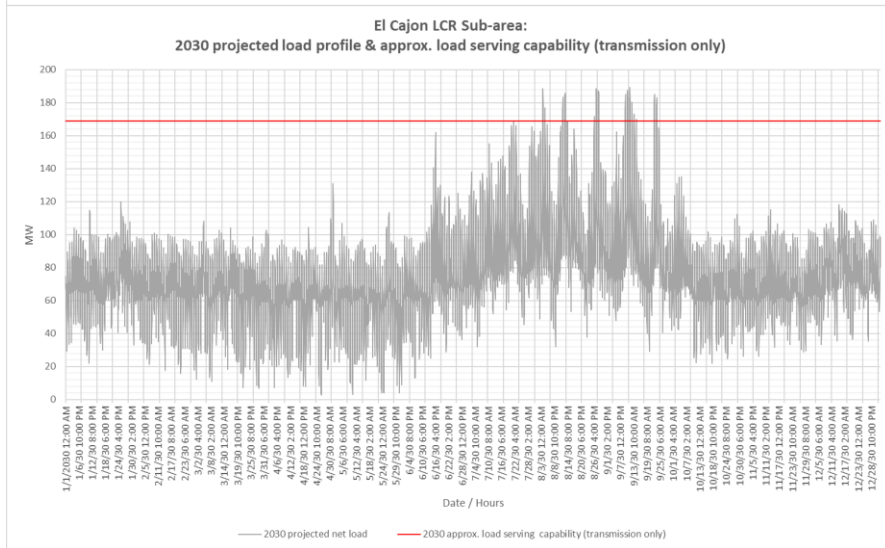
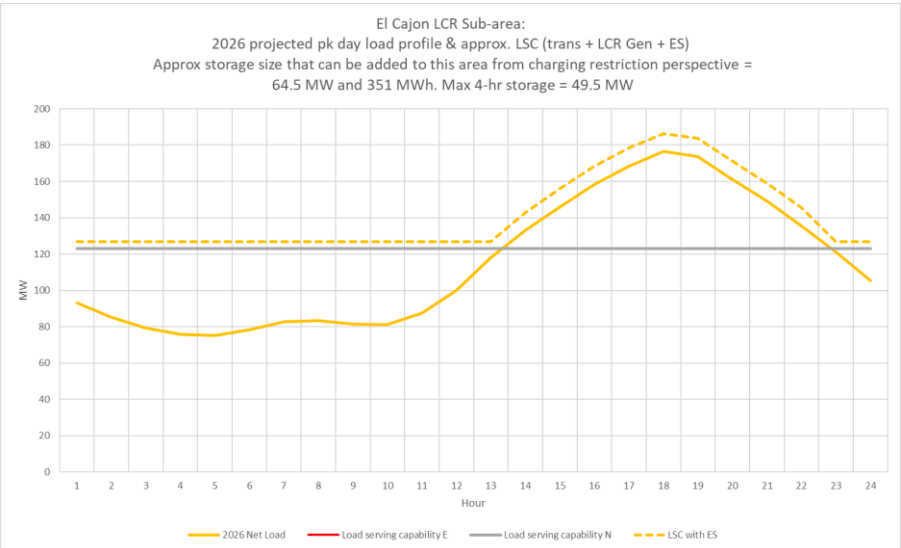
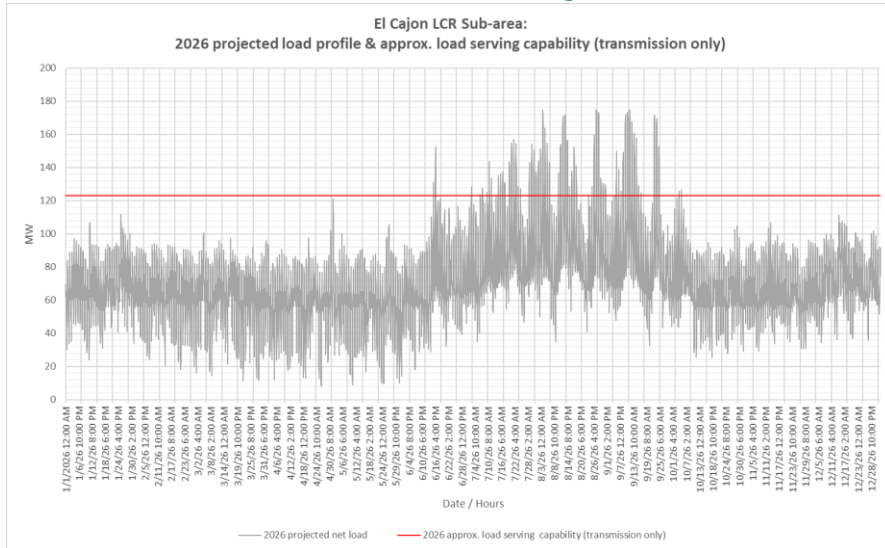


- 230 kV
- 138 kV
- 69 kV
- ✗ Contingency
- Overloaded element

El Cajon Sub-area: LCR Requirement

Year	Cat	Limiting Facility	Contingency	LCR (MW)
2026	P3	El Cajon – Los Coches 69 kV (TL631)	El Cajon unit out of service followed by the outage of Granite – Los Coches – Miguel 69 kV 3-terminal line (TL632)	114
2030	P3	El Cajon – Los Coches 69 kV (TL631)	El Cajon unit out of service followed by the outage of Granite – Los Coches 69 kV line ck 2 (TL6985)	70

El Cajon Sub-area Load Profiles



Changes Compared to Previous LCR Requirements

Sub-Area	MW								Major Reason for LCR Change
	2025		2026		2029		2030		
	Load	LCR	Load	LCR	Load	LCR	Load	LCR	
Border	157	99	177	110	166	97	196	120	Increase in load due to the incremental study year. Additionally, associated hours for managed peak load have changed according to the latest CEC hourly forecast resulting in different distribution of forecasted load across substations and a shift in the power factor.
El Cajon	166	96	176	114	170	0	192	70	