2026 & 2030 Final LCR Study Results Stockton Area

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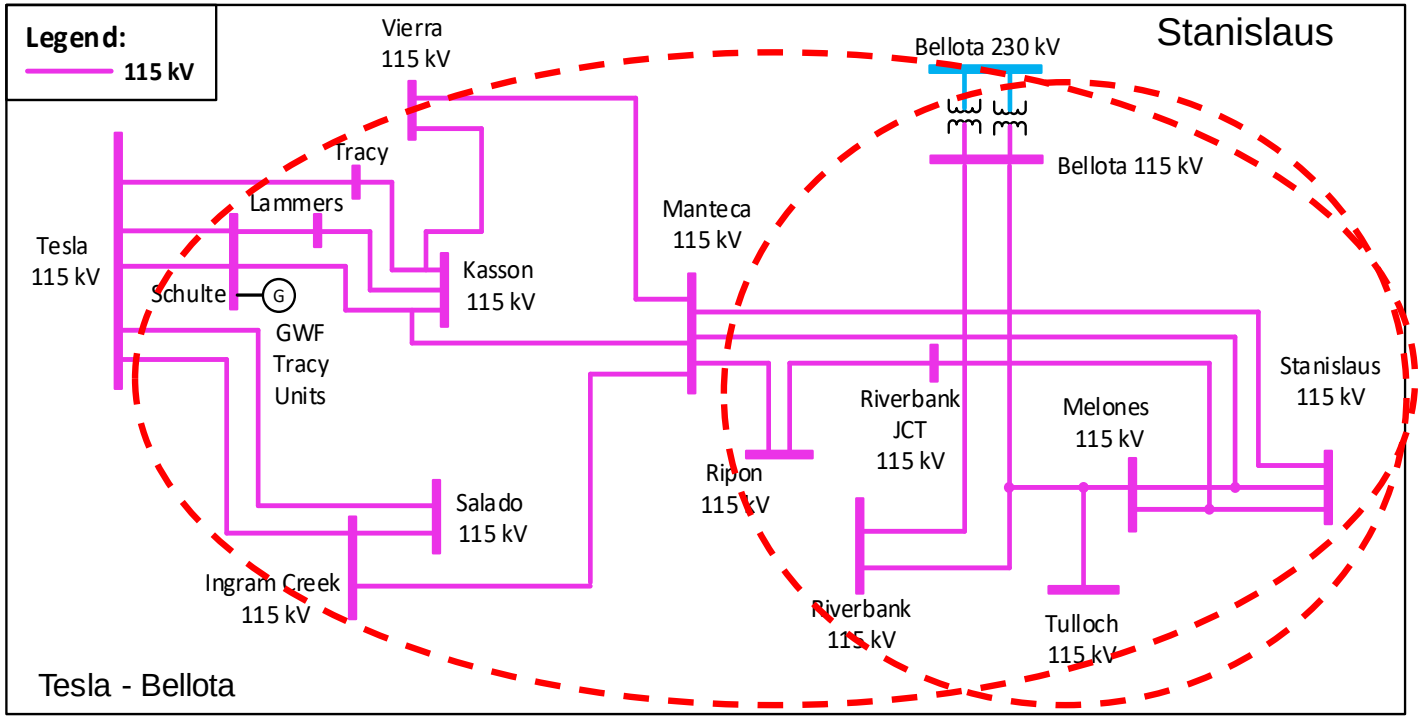
Stakeholder Call

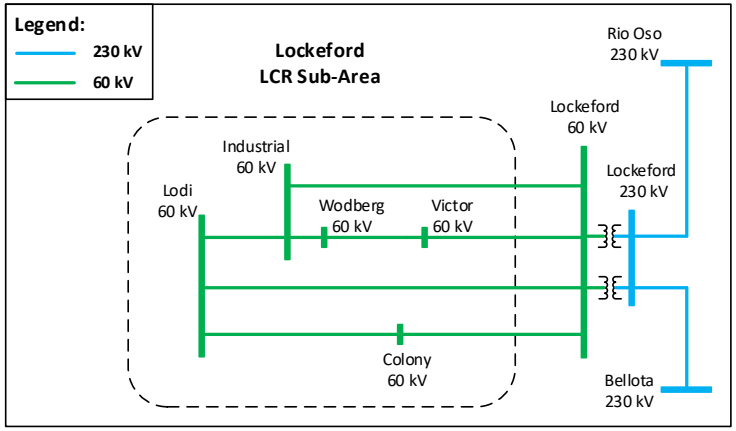
April 10, 2025

New major transmission projects

Projects	Expected ISD
Mosher Transmission Project	December 2027
Vierra 115 kV Looping Project	April 2027
Tesla 230 kV Bus Series Reactor	May 2024
Lockeford-Lodi Area 230 kV Development	December 2029
Manteca #1 60 kV Line Section Reconductoring Project	June 2025
Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Project	October 2029
Weber-Mormon Jct Line Section Reconductoring Project	December 2027
Tesla 115 kV Bus Reconfiguration	June 2028
Banta 60 kV Bus Voltage Conversion	March 2028

Stockton Area Transmission System & LCR Sub-areas





Stockton Area Overall: Load and Resources

Load (MW)	2026	Generation (MW)	Aug NQC	At Peak
Gross Load	1038	Market/Net Seller	450	450
AAEE	-12	Battery	157	157
Behind the meter DG	-17	MUNI/QF	130	130
Net Load	**1009**	Solar	15	0
Transmission Losses	18	Existing 20-minute Demand Response	6	6
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	**1027**	**Total**	**758**	**743**

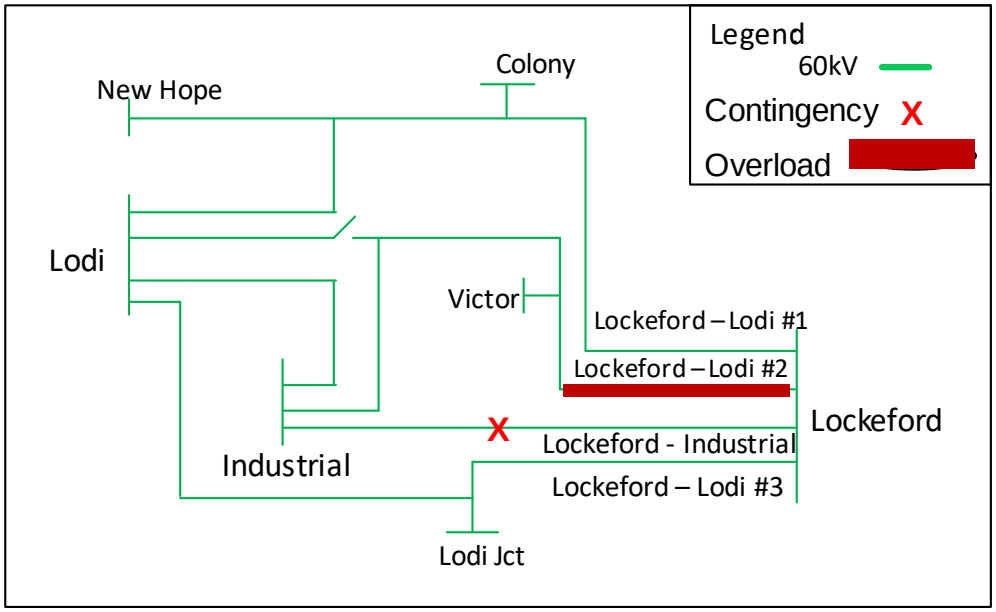
Stockton Area Overall: Load and Resources

Load (MW)	2030	Generation (MW)	NQC	At Peak
Gross Load	916	Market/Net Seller	496	496
AAEE	-18	Battery	157	157
Behind the meter DG	-20	MUNI/QF	107	107
Net Load	**878**	Solar	14	0
Transmission Losses	15	Existing 20-minute Demand Response	6	6
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	**893**	**Total**	**780**	**766**

Lockeford Sub-Area: Load and Resources

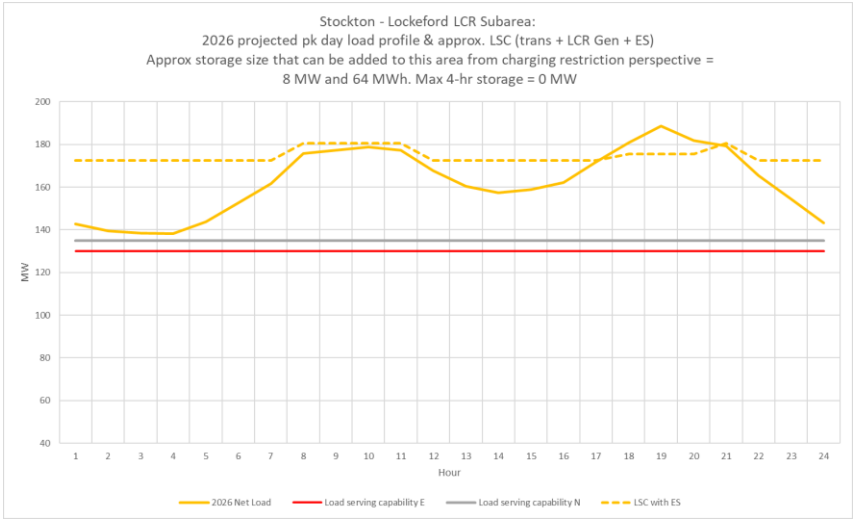
Load (MW)	2026	Generation (MW)	NQC	At Peak
Gross Load	189	Market/Net Seller	0	0
AAEE	-1	Battery	0	0
Behind the meter DG	-1	MUNI/QF	24	24
Net Load	**187**	Solar	0	0
Transmission Losses	1	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	**188**	**Total**	**24**	**24**

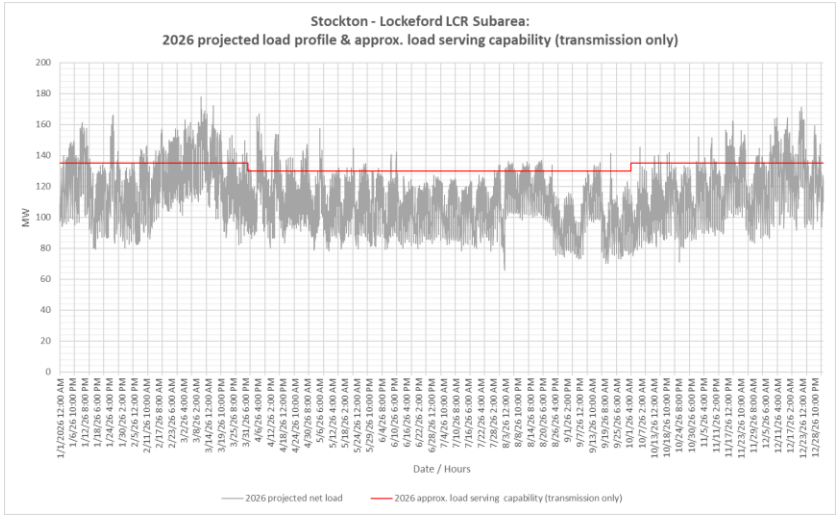
Lockeford Sub-Area : Requirements



Year	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2026	P3	Lockeford – Lodi #2 60 kV	Lockeford-Industrial 60 kV line and Lodi CT	47 (23)
2030	No LCR due to implementation of the Lockeford-Lodi Area 230 kV Development Project.			No requirements

Lockeford Sub-area: Load Profiles





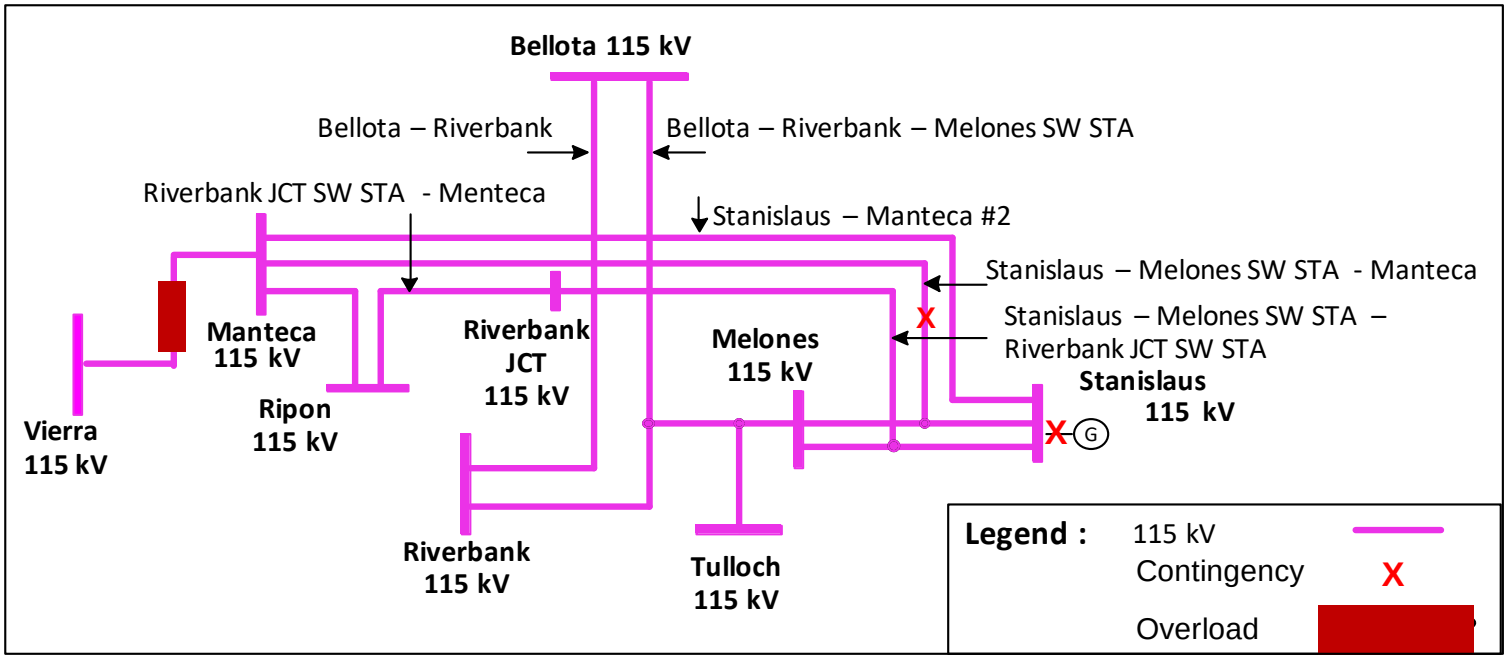
Stanislaus Sub-Area: Load and Resources

Load (MW)	2026: Generation (MW)	Aug NQC	At Peak
The Stanislaus Sub-area does not has a defined load pocket with the limits based upon power flow through the area.	Market/Net Seller	95	95
	Battery	0	0
	MUNI/QF	84	84
	Solar	0	0
	Existing 20-minute Demand Response	0	0
	Mothballed	0	0
	Total	**179**	**179**

Stanislaus Sub-Area: Load and Resources

Load (MW)	2030: Generation (MW)	Aug NQC	At Peak
The Stanislaus Sub-area does not has a defined load pocket with the limits based upon power flow through the area.	Market/Net Seller	95	95
	Battery	0	0
	MUNI/QF	84	84
	Solar	0	0
	Existing 20-minute Demand Response	0	0
	Mothballed	0	0
	Total	**179**	**179**

Stanislaus Sub-Area Requirements



Year	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2026	P3	VIERRA 115 kV – MANTECA 115 kV	Bellota-Riverbank-Melones 115 kV line and Stanislaus PH unit	244 (65)
2030	P3	VIERRA 115 kV – MANTECA 115 kV	Bellota-Riverbank-Melones 115 kV line and Stanislaus PH unit	244 (65)

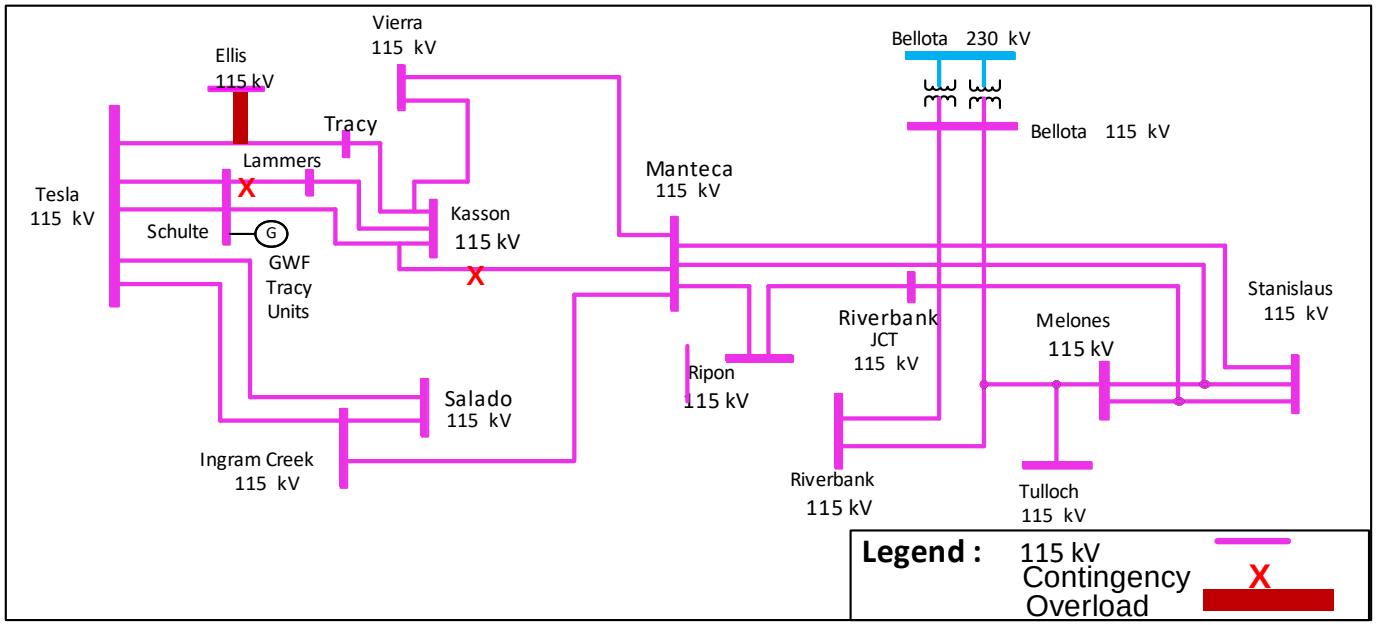
Tesla - Bellota Sub-Area : Load and Resources

Load (MW)	2026	Generation (MW)	NQC	At Peak
Gross Load	849	Market/Net Seller	450	450
AAEE	-11	Battery	157	157
Behind the meter DG	-16	MUNI/QF	107	107
Net Load	**822**	Solar	14	0
Transmission Losses	17	Existing 20-minute Demand Response	6	6
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	**839**	**Total**	**734**	**720**

Tesla - Bellota Sub-Area : Load and Resources

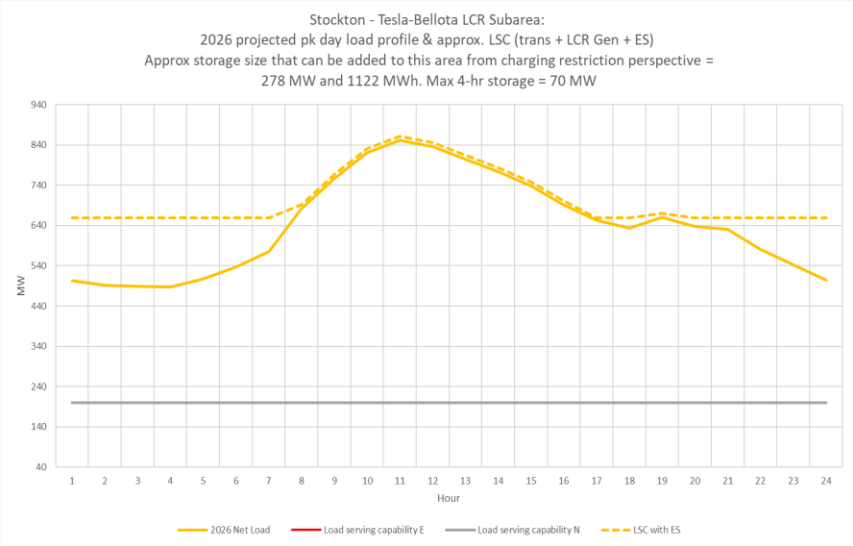
Load (MW)	2030	Generation (MW)	NQC	At Peak
Gross Load	916	Market/Net Seller	496	496
AAEE	-18	Battery	157	157
Behind the meter DG	-20	MUNI/QF	107	107
Net Load	**878**	Solar	14	0
Transmission Losses	15	Existing 20-minute Demand Response	6	6
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	**893**	**Total**	**780**	**766**

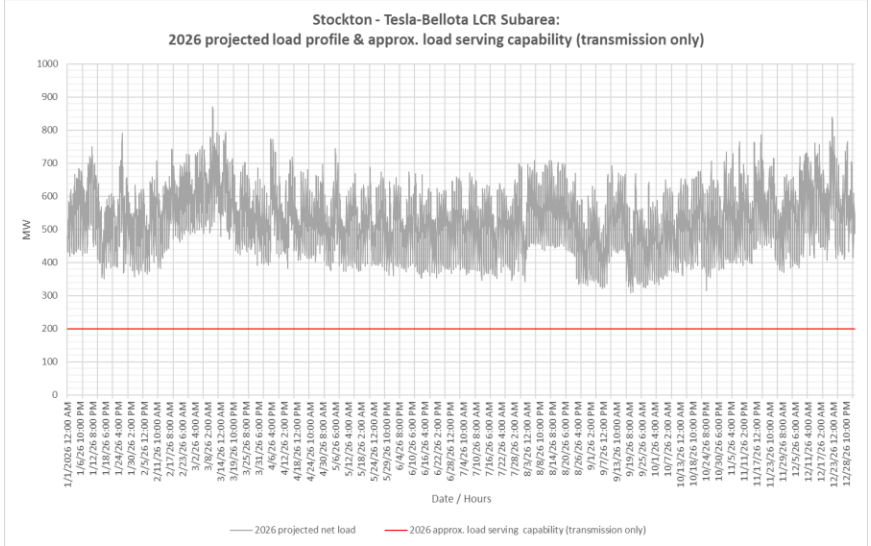
Tesla - Bellota Sub-Area Requirements



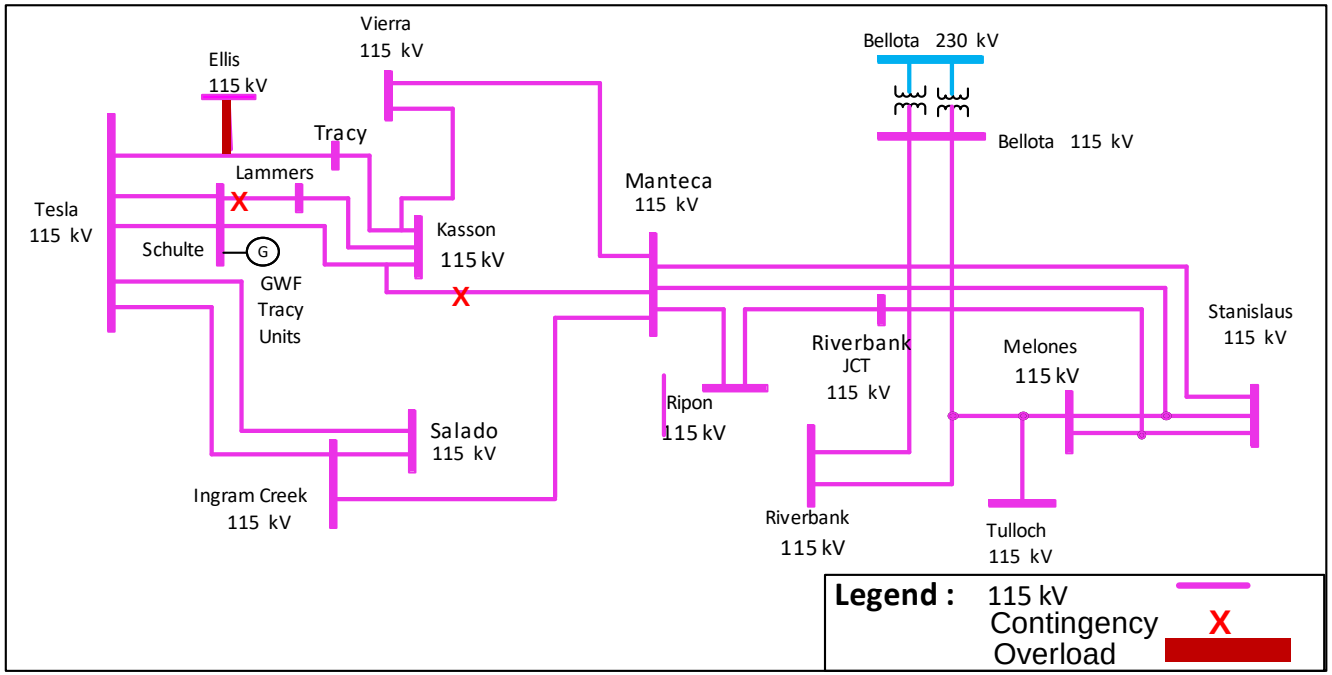
Year	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2026	P2-4	Melones–Riverbank-Bellota 115 kV	Tesla 115KV - Section 2D & 1D	600 (12 Peak)
2026	P6	Tesla – Tracy 115 kV	Schulte - Lammers 115 kV Line and Schulte - Kasson - Manteca 115 kV Line	885 (487 NQC, 501 Peak)
Total LCR Need in 2026				1,219 (487 NQC, 501 Peak)

Tesla - Bellota Sub-area: Load Profiles



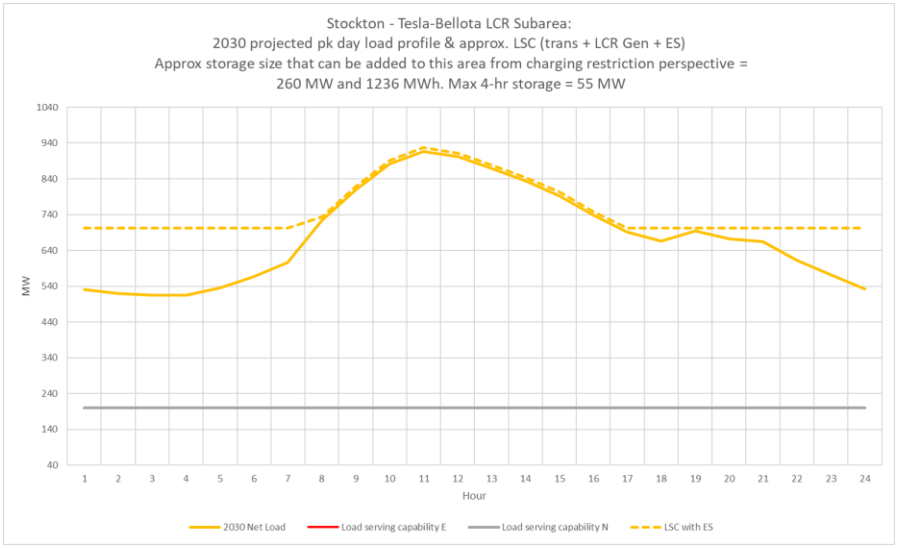


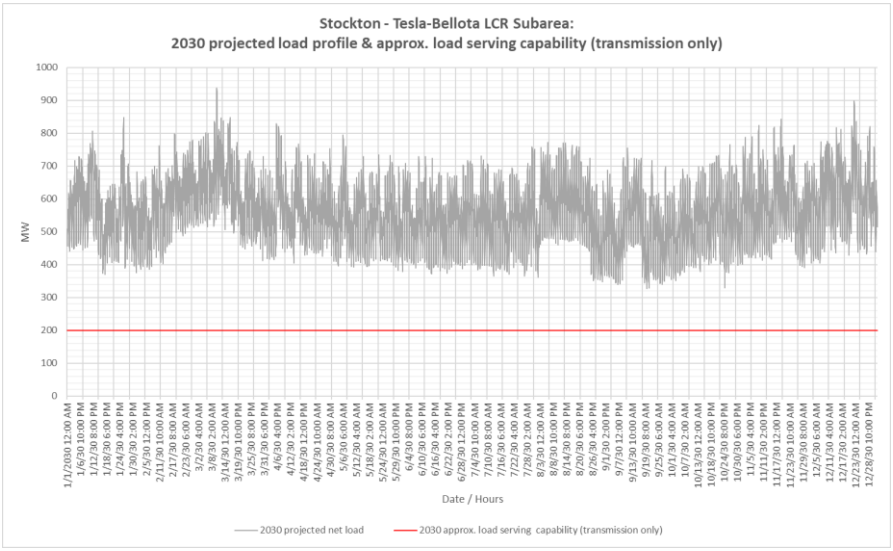
Tesla - Bellota Sub-Area Requirements



Year	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2030	P2-4	Melones–Riverbank-Bellota 115 kV	Tesla 115KV - Section 2D & 1D	670 (22 NQC, 36 Peak)
2030	P6	Tesla – Tracy 115 kV	Schulte - Lammers 115 kV Line and Schulte - Kasson - Manteca 115 kV Line	652 (208 NQC, 222 Peak)
Total LCR Need in 2030				988 (208 NQC, 222 Peak)

Tesla - Bellota Sub-area: Load Profiles





Changes from 2025 to 2026

Sub-area	2025		2026	
	Load	LCR	Load	LCR
Lockeford	187	43 (19)	188	47 (23)
Stanislaus	N/A	171	N/A	244 (65)
Tesla - Bellota	940	1296 (586)	839	1219 (487)
Total	1129	1339 (605)	1027	1266 (510)

The load forecast has decreased and the LCR need (including deficiencies) has decreased as well.
The Capacity Needed has increased slightly mainly due to the drop in "deficiency MWs" being replaced by actual new resources (including increased solar).

- N/A=Flow-through area. No defined load pocket or not an LCR sub-area anymore

Changes from 2029 to 2030

Sub-area	2029		2030	
	Load	LCR	Load	LCR
Lockeford	N/A	N/A	N/A	N/A
Stanislaus	N/A*	169	N/A*	244 (65)
Tesla - Bellota	923	911 (228)	893	988 (208)
Total	923	911 (228)	893	988 (208)

- After the implementation of the Lockeford – Lodi 230 kV Area 230 kV Project in 2029, there is no longer a requirement for LCR in the Lockeford sub-area.
- The Vierra Loop-in project and Tesla 115 kV Bus upgrade will alleviate some of the LCR requirements in the Tesla-Bellota Area.
- The LCR results have increased mainly due to the drop in "deficiency MWs" being replaced by actual new resources (including increased solar) with lower effectiveness factors.
- N/A*=Flow-through area. No defined load pocket or not an LCR sub-area anymore

Stockton Area Total LCR Need

Study Year	Existing Generation Capacity Needed (MW)	NQC Deficiency (MW)	Total MW Need
2026	756	510	1266
2030	780	208	988