



2026 & 2030 Draft LCR Study Results Humboldt Area

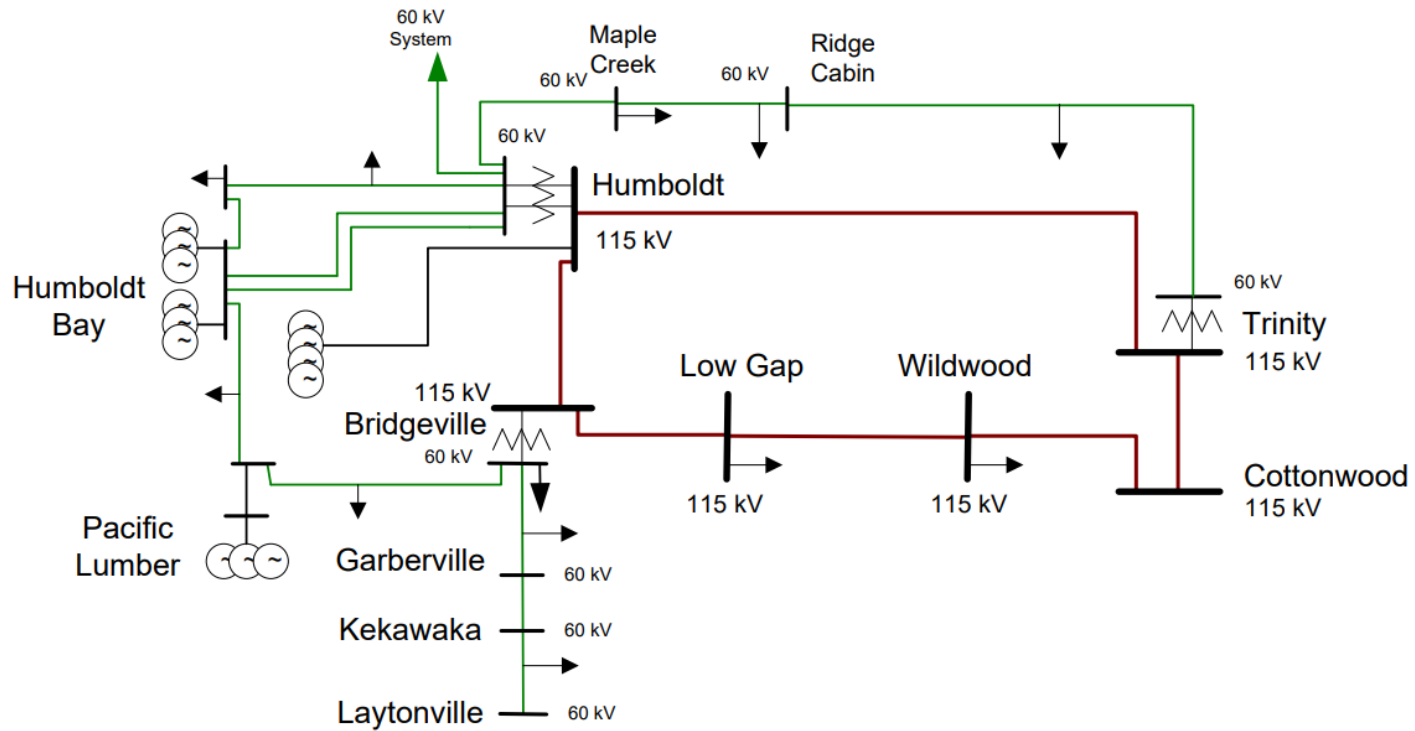
Rahul Iyer

Regional Transmission Engineer – North

Stakeholder Call

March 6, 2025

Humboldt Area Transmission System



Humboldt Load and Resources

Load (MW)	2026	2030	Generation (MW)	2026	2030
Gross Load	150	212	Market/Net Seller	174	174
AAEE	-1	-3	Battery	0	0
Behind the meter DG	0	-2	Muni/QF	0	0
Net Load	149	207	Solar	0	0
Transmission Losses	11	7	Existing 20-minute Demand Response	0	0
Pumps	0	0	Mothballed	0	0
Load + Losses + Pumps	160	214	Total Qualifying Capacity	174	174

Topology changes

Transmission Additions:

- Maple Creek Reactive Support (re-scoped to Willow Creek 60 kV Substation) (in-service 2027)
- Garberville Area Reinforcement (in-service 2029)

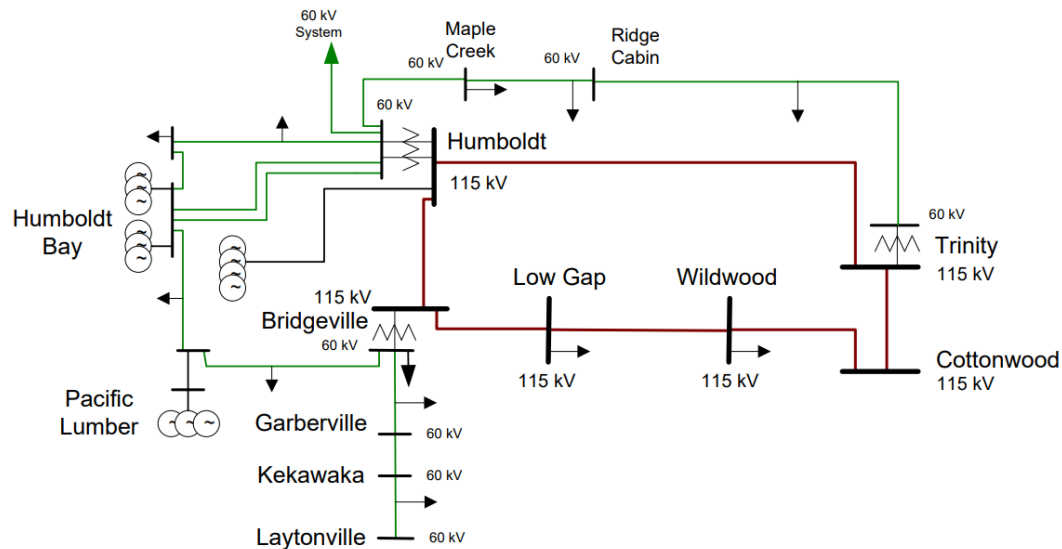
Resource Additions:

- No new resource additions

Resource Retirements:

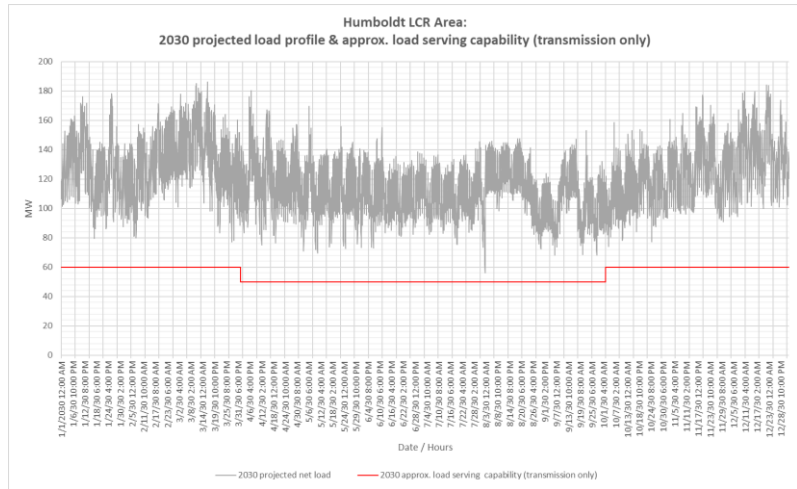
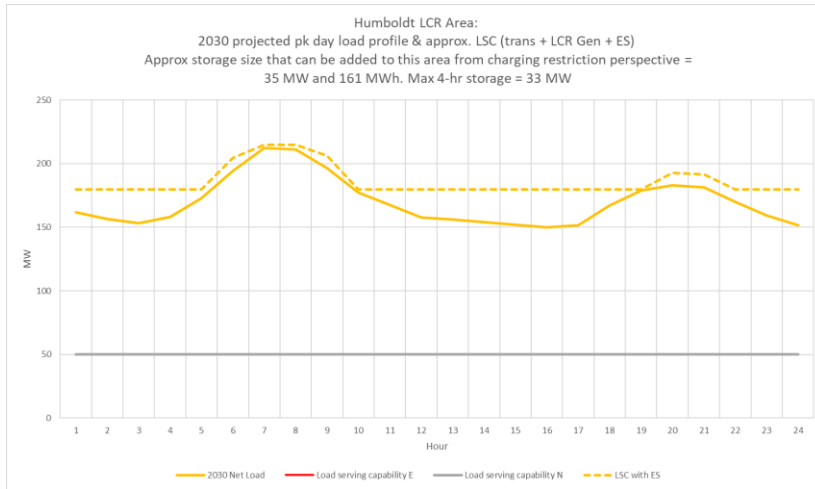
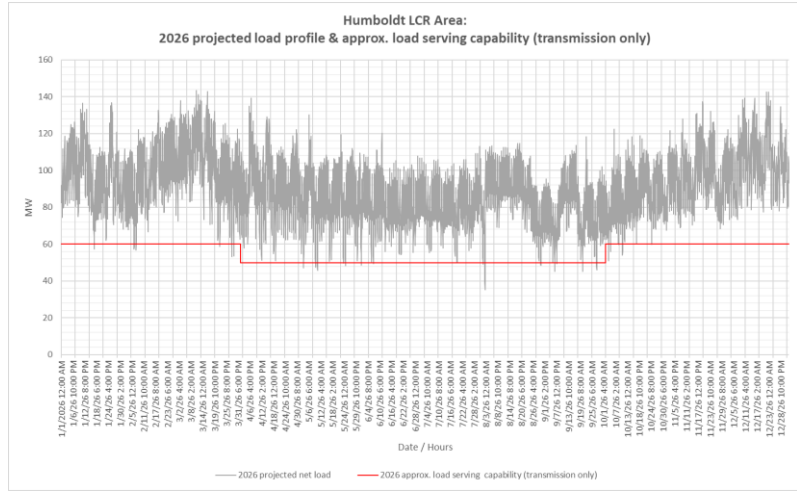
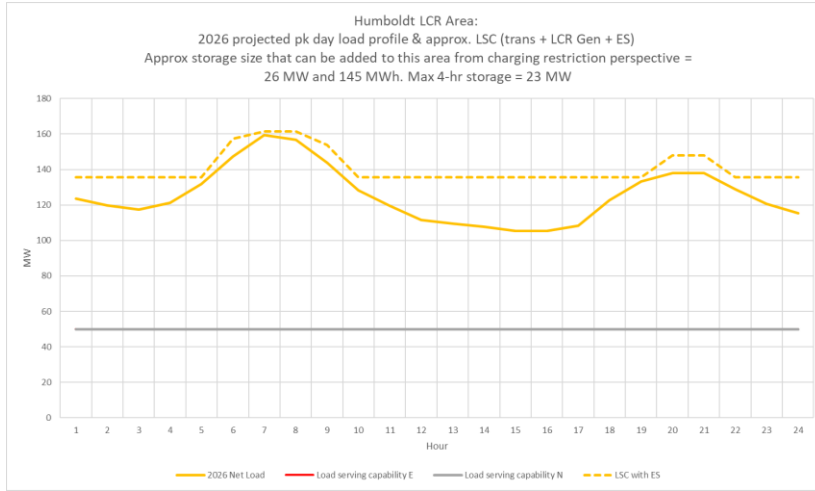
- No new retirements

Humboldt Area: Requirements



Year	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2026	P6	Thermal overload on Humboldt - Trinity 115 kV line	Cottonwood – Bridgeville 115 kV line + Humboldt – Humboldt Bay 115kV line	136
2030	P6	Thermal overload on Humboldt - Trinity 115 kV line	Cottonwood – Bridgeville 115 kV line + Humboldt – Humboldt Bay 115kV line	194 (20)

Humboldt Area: Load Profiles



Changes between years

Subarea	2025		2026	
	Load	LCR	Load	LCR
Humboldt	214	164	160	136

Subarea	2029		2030	
	Load	LCR	Load	LCR
Humboldt	222	173	214	194 (20)

- The decrease in 2026 LCR need is mostly due to load forecast decrease.
- The increase in 2030 LCR need is due to open line section from Garberville to Kekawaka 60kV line (part of Garberville Area Reinforcement project). This takes out one of the tie lines connecting Humboldt to outside areas.

Humboldt Area: Requirements

Year	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2026	P6	Thermal overload on Humboldt -Trinity 115 kV line	Cottonwood – Bridgeville 115 kV line + Humboldt – Humboldt Bay 115kV line	136
2030	P6	Thermal overload on Humboldt -Trinity 115 kV line	Cottonwood – Bridgeville 115 kV line + Humboldt – Humboldt Bay 115kV line	194 (20)

Study Year	Existing Generation Capacity Needed (MW)	NQC Deficiency (MW)	Total MW Need
2026	136	0	136
2030	174	20	194