



# 2021 & 2025 LCR Study Draft Results North Coast & North Bay Area

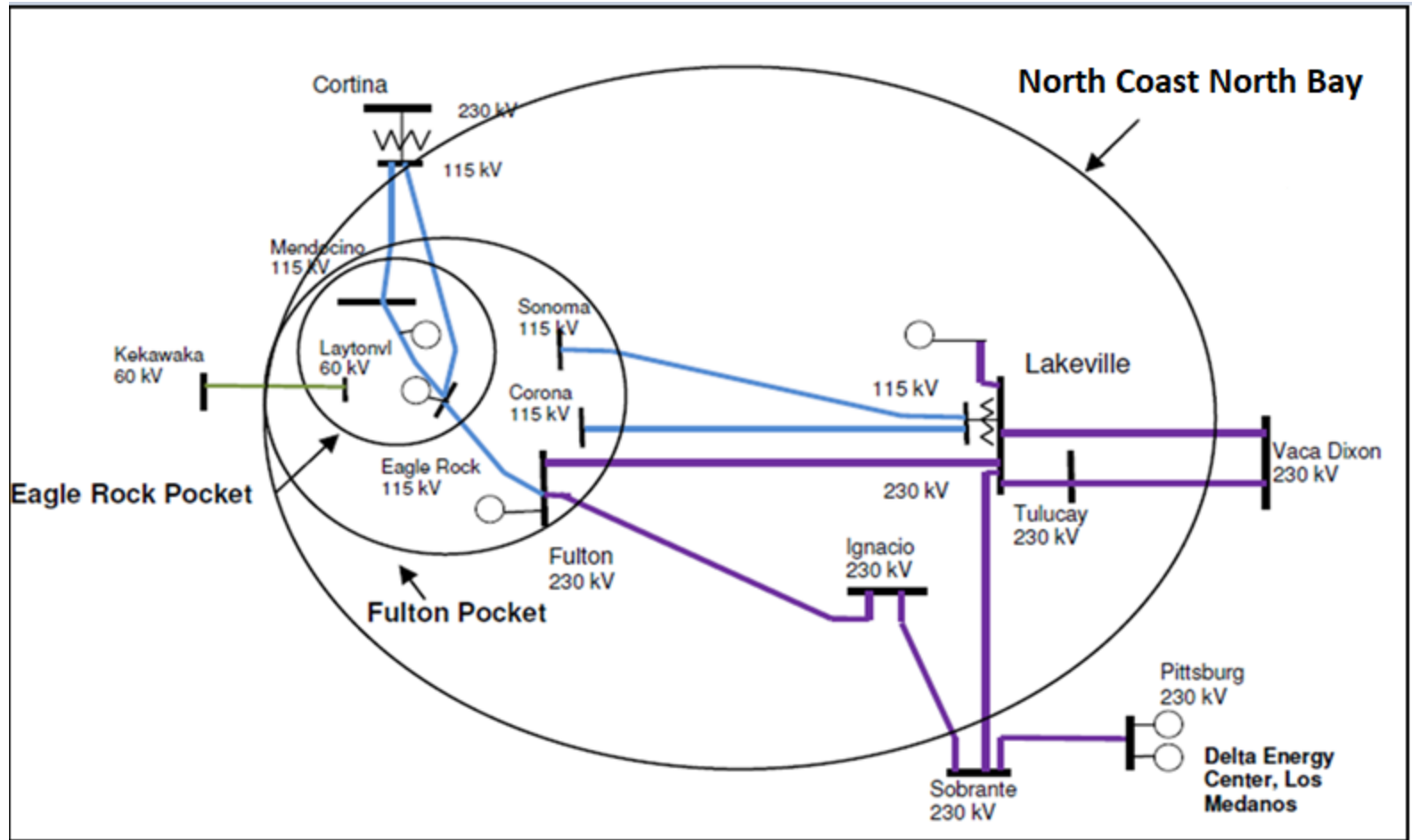
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Stakeholder Call

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# North Coast & Bay Area Transmission System



# Major transmission projects

Project Name	Expected ISD
Lakeville 60 kV Area Reinforcement	2021
Clear Lake 60 kV System Reinforcement	2022
Ignacio Area Upgrade	2023

## Resource Additions:

- No new resource additions

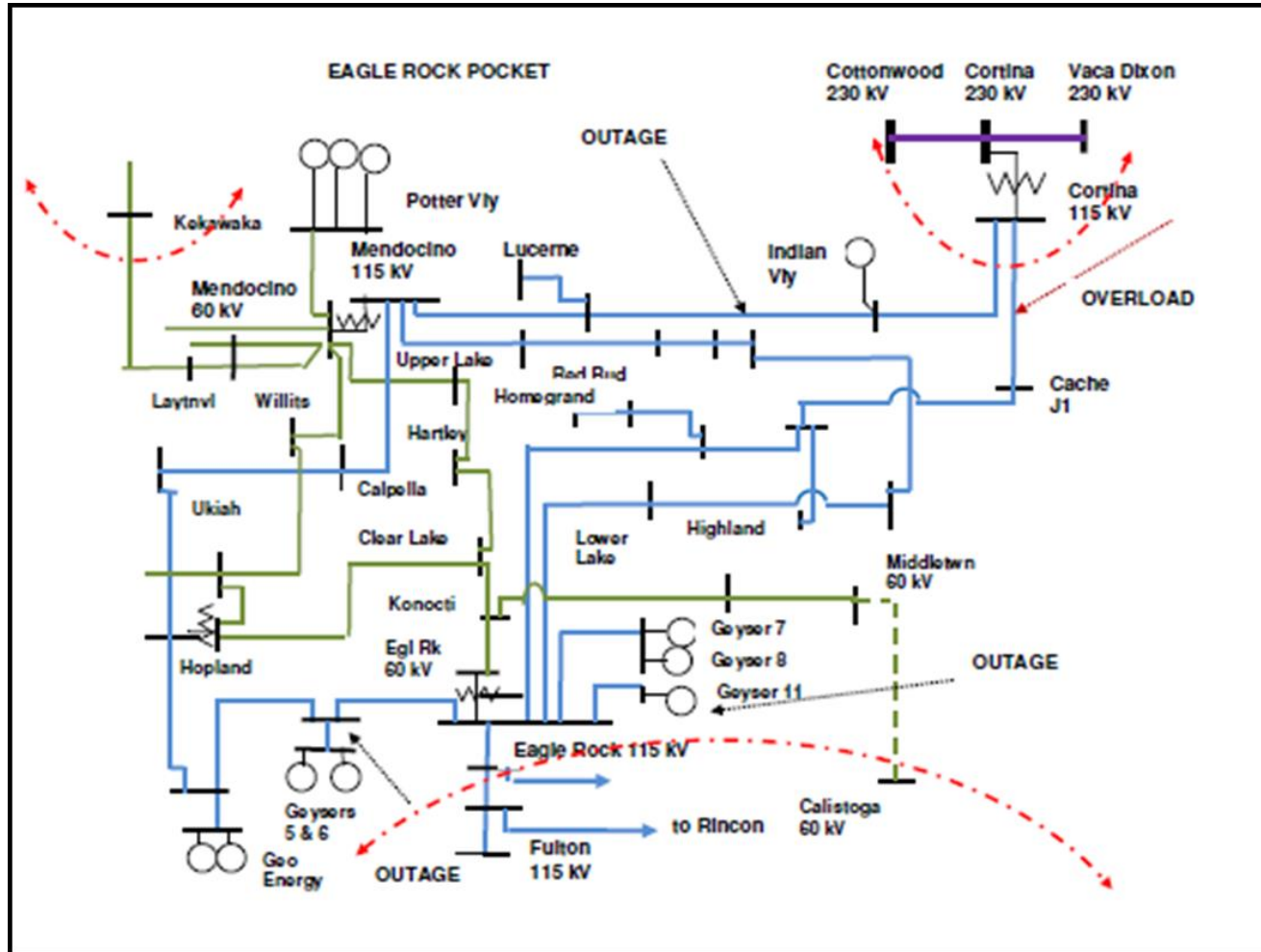
## Resource Retirements:

- No new retirements

## Eagle Rock Subarea: Load and Resources

Load (MW)	2021	2025	Generation (MW)	2021	2025
Gross Load	222	226	Market	248	248
AAEE	-1	-2	Solar	0	0
Behind the meter DG	0	0	Muni	2	2
<b>Net Load</b>	<b>221</b>	<b>224</b>	QF	0	0
Transmission Losses	11	11	Future preferred resource and energy storage	0	0
Pumps	0	0	<b>Total Qualifying Capacity</b>	<b>250</b>	<b>250</b>
<b>Load + Losses + Pumps</b>	<b>232</b>	<b>235</b>			

# Eagle Rock Sub Area : One-line diagram



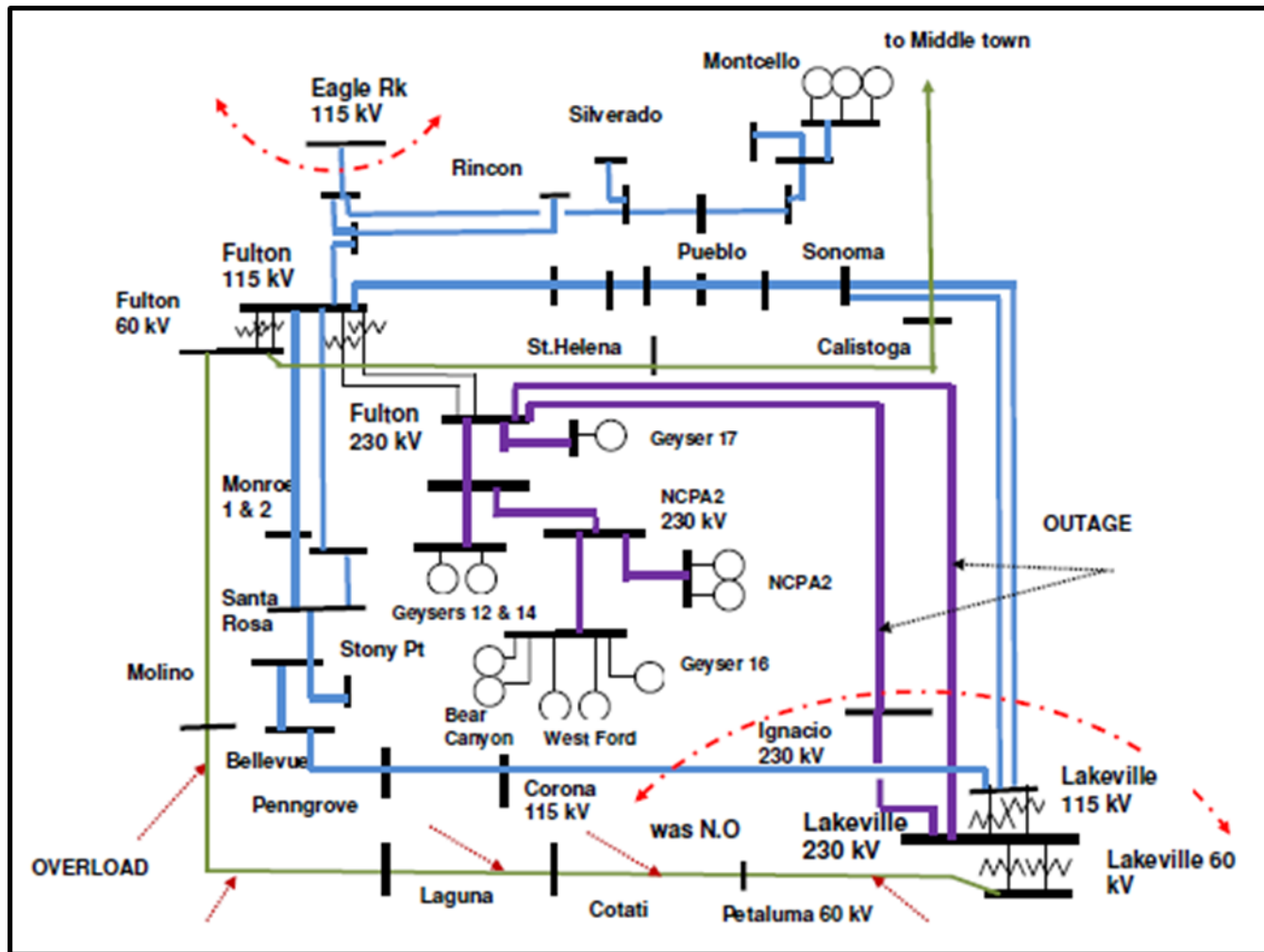
# Eagle Rock Sub Area : Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2021	First Limit	P3	Thermal overload on Eagle Rock-Cortina 115 kV line	Cortina-Mendocino 115 kV line with Geyser #11 unit out of service	184
2025	First Limit	P3	Thermal overload on Eagle Rock-Cortina 115 kV line	Cortina-Mendocino 115 kV line with Geyser #11 unit out of service	188

## Fulton Subarea: Load and Resources

Load (MW)	2021	2025	Generation (MW)	2021	2025
Gross Load	848	859	Market	469	469
AAEE	-4	-9	Wind	0	0
Behind the meter DG	0	0	Muni	54	54
<b>Net Load</b>	<b>844</b>	<b>850</b>	QF	5	5
Transmission Losses	22	22	Future preferred resource and energy storage	0	0
Pumps	0	0	<b>Total Qualifying Capacity</b>	<b>528</b>	<b>528</b>
<b>Load + Losses + Pumps</b>	<b>866</b>	<b>872</b>			

# Fulton Sub Area : One-line diagram





# Fulton Sub Area : Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2021	First Limit	P6	Thermal overload on Sonoma-Pueblo 115kV Line	Fulton-Lakeville and Fulton-Ignacio 230 kV lines	340
2025	First Limit	P6	Thermal overload on Pengrove-Corona 115kV Line	Fulton-Lakeville and Fulton-Ignacio 230 kV lines	272

Lakeville 60kV Area Reinforcement – Open 60kV line between Cotati and Petaluma - In service date 2021.

## North Coast & North Bay Area Overall: Load and Resources

Load (MW)	2021	2025	Generation (MW)	2021	2025
Gross Load	1525	1458	Market	723	723
AAEE	-7	-16	Wind	0	0
Behind the meter DG	0	0	Muni	114	114
<b>Net Load</b>	<b>1418</b>	<b>1442</b>	QF	5	5
Transmission Losses	38	39	Future preferred resource and energy storage	0	0
Pumps	0	0	<b>Total Qualifying Capacity</b>	<b>842</b>	<b>842</b>
<b>Load + Losses + Pumps</b>	<b>1456</b>	<b>1481</b>			

# NCNB Area : Requirement

Year	#	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2021	First Limit	P2-4	Thermal overload on Tulucay – Vaca Dixon 230 kV Line	Lakeville 230 kV – Section 2E & 1E	843
2025	First Limit	P2-4	Thermal overload on Tulucay – Vaca Dixon 230 kV Line	Lakeville 230 kV – Section 2E & 1E	837
2021	Second Limit	P3	Vaca Dixon-Lakeville 230 kV line	Vaca Dixon-Tulucay 230 kV line with Delta Energy Center power plant out of service	766
2025	Second Limit	P3	Vaca Dixon-Lakeville 230 kV line	Vaca Dixon-Tulucay 230 kV line with Delta Energy Center power plant out of service	739

# North Coast & North Bay Area Total Generation & LCR Need

Generation	Market (MW)	(MW)	Muni (MW)	QF (MW)	Total MW
2021	723	0	114	5	842
2024	723	0	114	5	842

Year	LCR Need	Existing Generation Capacity Needed (MW)	Deficiency (MW)	Total MW Need
2021	P2-4	842	1	843
2025	P2-4	837	0	837

# Changes Compared to Previous LCR Requirements

Subarea	2020		2024		2021		2025	
	Load	LCR	Load	LCR	Load	LCR	Load	LCR
<b>Eagle Rock</b>	259	227	263	240	232	184	235	188
<b>Fulton</b>	875	456	898	316	866	340	872	272
<b>Overall</b>	1492	742	1537	706	1456	843	1481	837

LCR increase vs. last year results are due to changes to the LCR criteria.