

Local Capacity Requirements (LCR) for Year 2009 Study Results for the Humboldt and North Coast/North Bay Areas



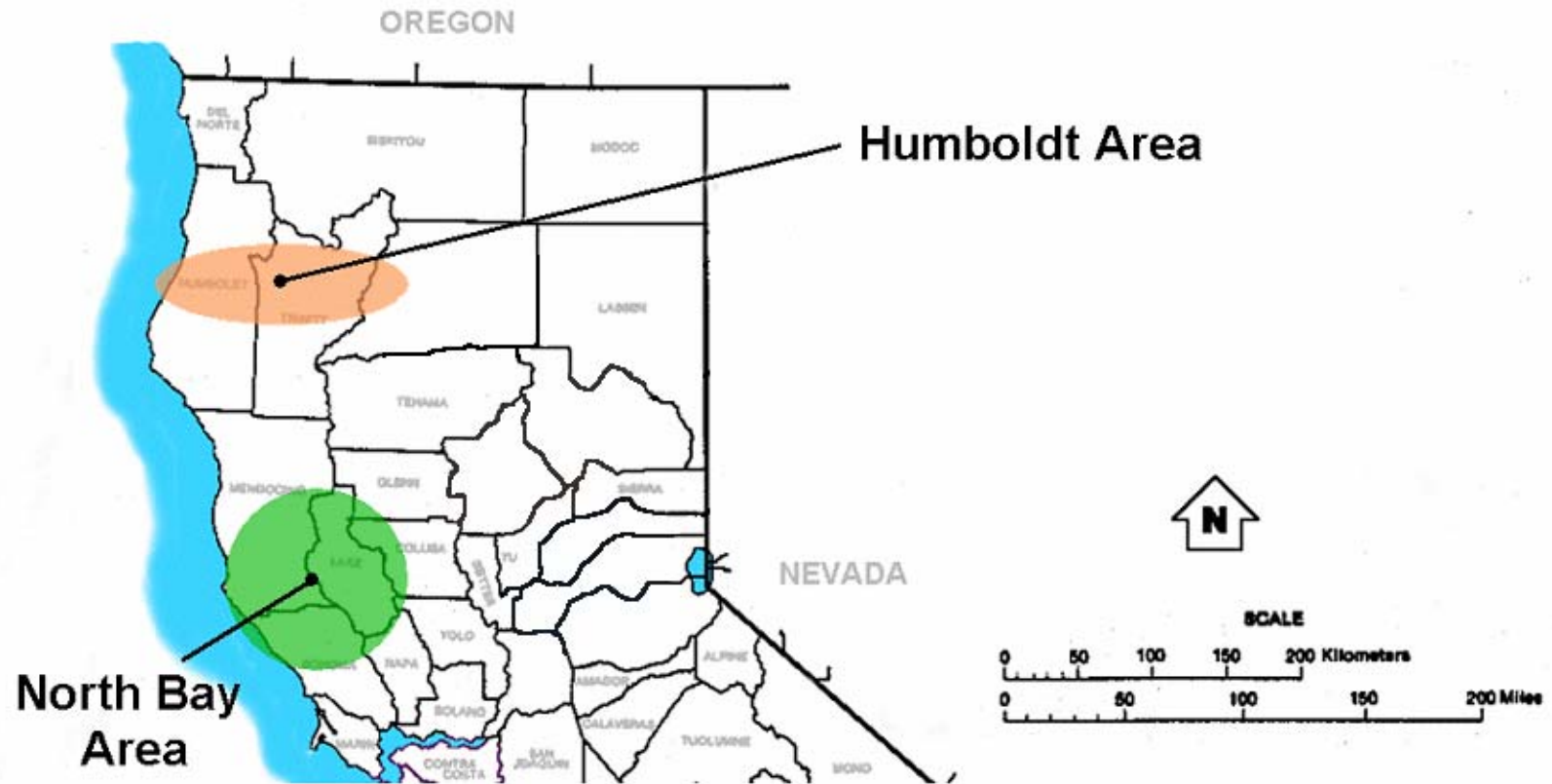
LCR Stakeholder Meeting, April 10th, 2008, Folsom CA



California ISO
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Humboldt and North Coast/North Bay Areas



Changes since last Stakeholder meeting

Humboldt:

- Updated NQC data
- Humboldt Bay Repower - on-line changed from 1/2009 to 12/2009 – not modeled
- Humboldt Bay Reactive Support project - on-line changed from 1/2009 to 12/2009 – not modeled

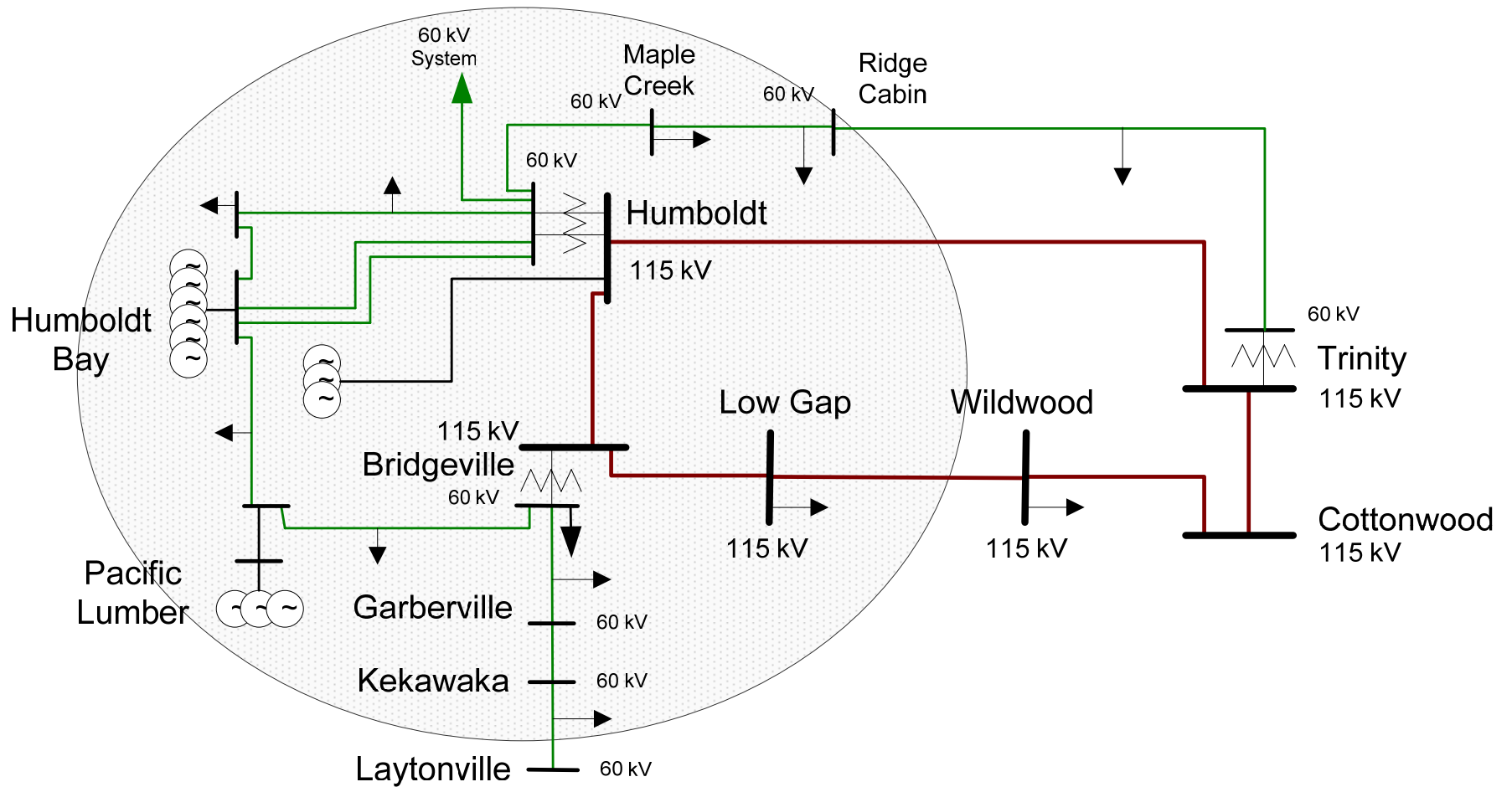
North Coast/North Bay:

- Updated NQC data
- A few units moving from QF status to Market status
- Received, validated and implemented a new operating procedure

Humboldt Area Load and Resources (MW)

		2009
Load	=	200
Transmission Losses	=	7
Total Load	=	207
Market Generation	=	135
Muni Generation	=	0
QF/Self-Gen Generation	=	48
Total Qualifying Capacity	=	183

Humboldt Area - Overview



Critical Contingency, Limitation and LCR

Critical Contingency

Contingency of Bridgeville-Cottonwood 115 kV line out with one of the Humboldt Bay units out of service

Limitation

Reactive margin within Humboldt

LCR

LCR of 177 MW (including 48 MW of QF/Self generation).

	Existing Generation Capacity Needed (MW)	Deficiency (MW)	Total MW LCR
Category B	177	0	177
Category C	177	0	177

Changes since the 2008 LCR study

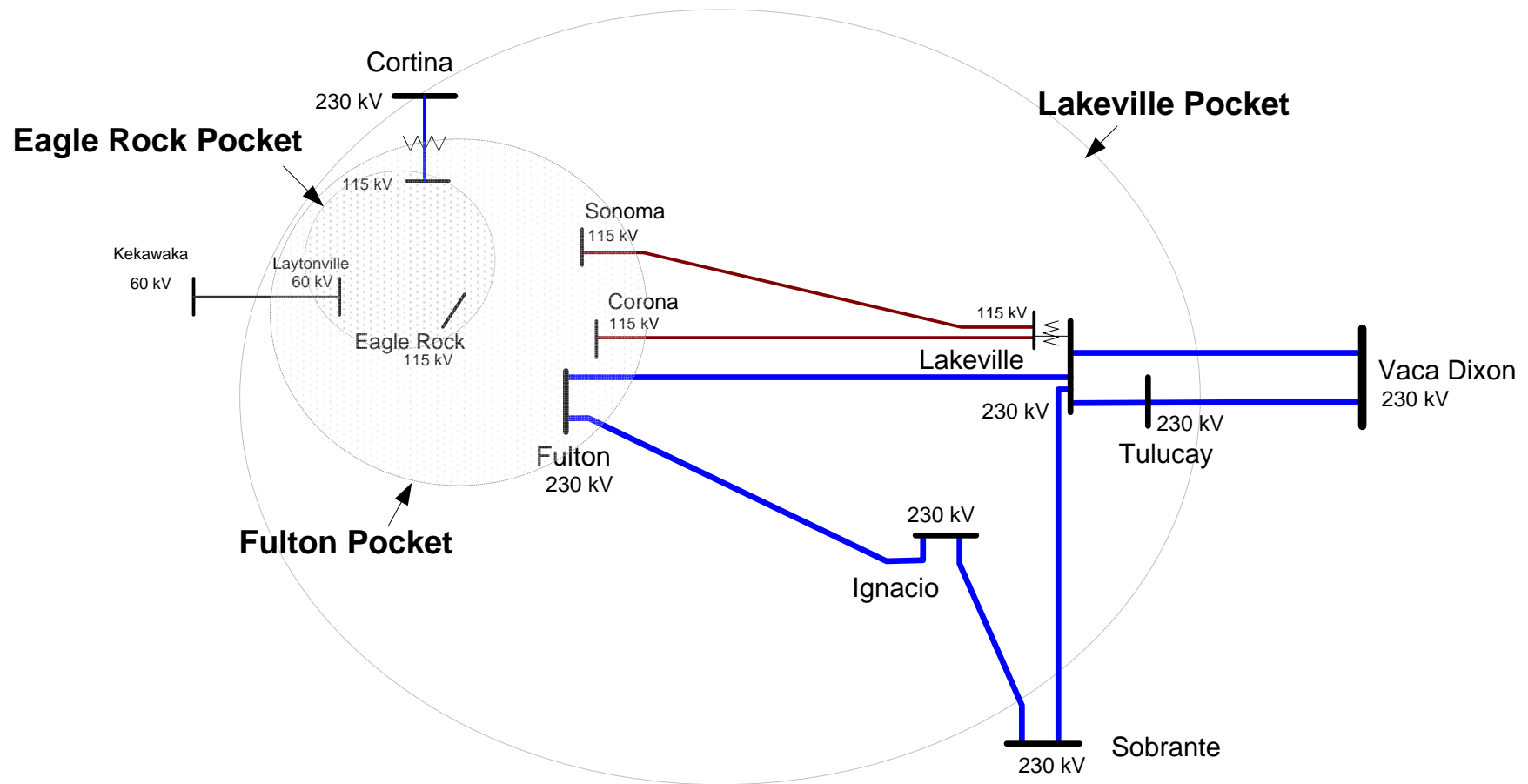
Total Humboldt LCR has slightly increased

- Load forecast is up by 8 MW
- New generator modeled at Pacific Lumber
- The load is driving the LCR up and the new unit with its VAR limits drives the LCR down
- Overall the total LCR has increased by 2 MW

North Coast/North Bay Load and Resources (MW)

		2009
Load	=	1530
Transmission Losses	=	66
Total Load	=	1596
Market Generation	=	621
Muni Generation	=	128
QF Generation	=	134
Total Qualifying Capacity	=	883

North Coast / North Bay - Overview



Critical Contingency, Limitation and LCR

Eagle Rock Sub-Area

Category B

Critical Contingency: The outage of Cortina #4 230/115 kV transformer.

Limitation: Thermal overload on Fulton-Hopland 60 kV line

LCR: 121 MW (includes 2 MW of QF generation)

Category C

Critical Contingency: The outage of Eagle Rock-Silverado-Fulton 115 kV line followed by Cortina #4 230/115 kV transformer.

Limitation: Thermal overload on Fulton-Hopland 60 kV line

LCR: 237 MW (includes 2 MW of QF generation)

¹ LCR need for Eagle Rock sub-area can be counted toward the LCR need of Fulton sub-area and Lakeville sub-area

Critical Contingency, Limitation and LCR

Fulton Sub-Area

Category B

No addition requirement (237 MW LCR in Eagle Rock is sufficient)

Category C

Critical Contingency: The outage of Lakeville-Ignacio 230 kV line #1 followed by Crockett-Sobrante 230 kV line #1

Limitation: Thermal overload on Fulton-Lakeville 230 kV line #1

LCR¹: 495 MW (includes 17 MW of QF and 62 MW of Muni generation).

¹ LCR for Eagle Rock sub-area can be counted toward the LCR of Fulton sub-area

Critical Contingency, Limitation and LCR

Lakeville Sub-Area (LCR for the overall North Coast/North Bay area¹)

Category B & C

Critical Contingency: The outages of Vaca Dixon-Lakeville 230 kV line with DEC unit out of service

Limitation: Thermal overload on Vaca Dixon-Tullucay 230 kV line.

LCR: 766 MW (includes 86 MW of QF and 129 MW of Muni generation).

¹ LCR for Eagle Rock/Fulton sub-areas can be counted toward the LCR of Lakeville sub-area

Changes since the 2008 LCR study

Total North Coast/North Bay LCR has increased

- Overall load forecast is up by 101 MW
- On a sub-area level all of the load growth have occurred in the Eagle Rock and Fulton sub-area with a small decrease in the Lakeville sub-area
- That is why the LCR has increased significantly in the Eagle Rock and Fulton sub-areas (as much as 120 MW)
- Overall the total LCR has increased by 90 MW

Stakeholder Comments



Your comments and questions are welcome

For written comments, please send to: RegionalTransmission@caiso.com