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

LCR Stakeholder Meeting, March 4th, 2008, Folsom CA

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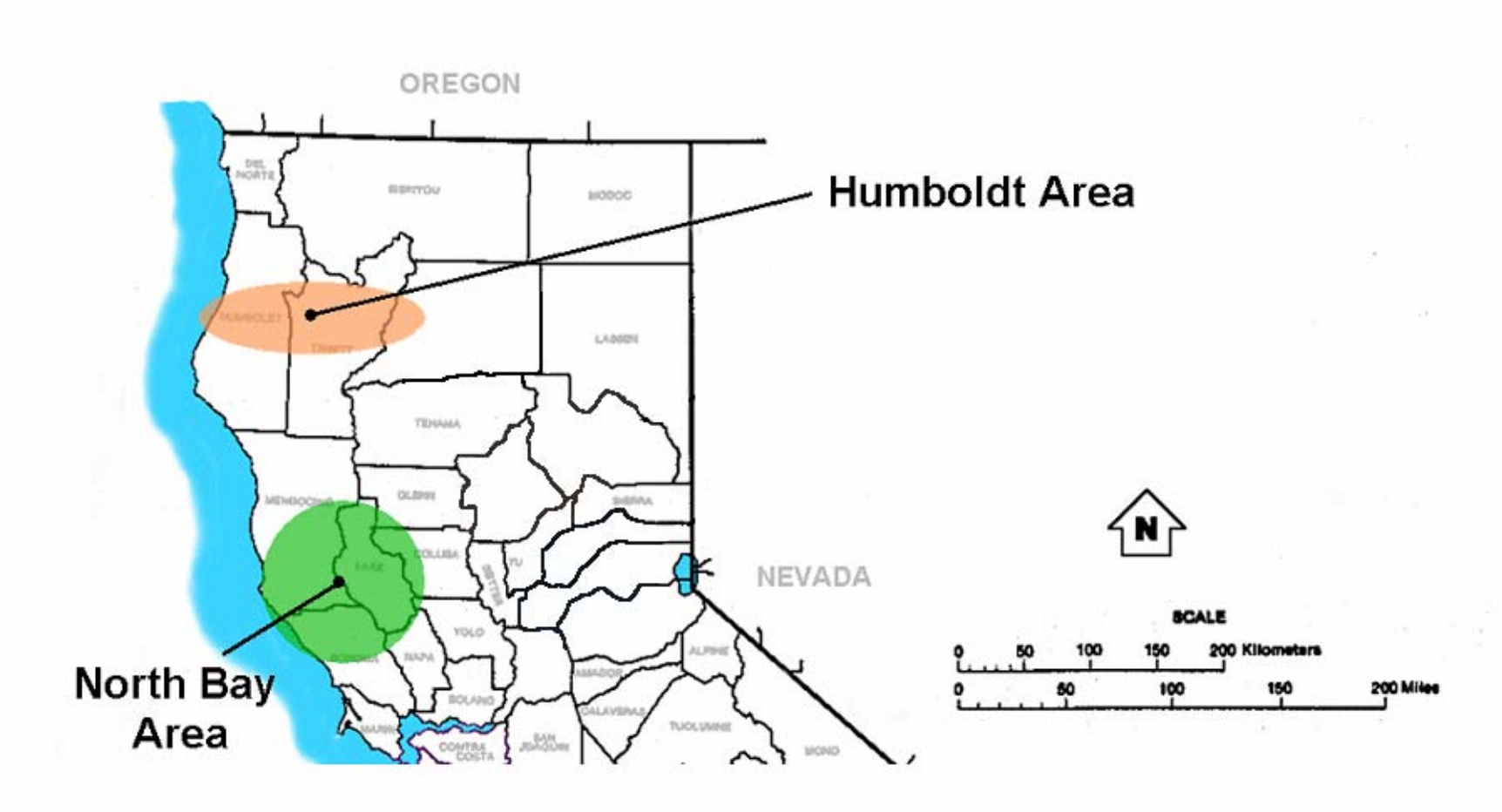
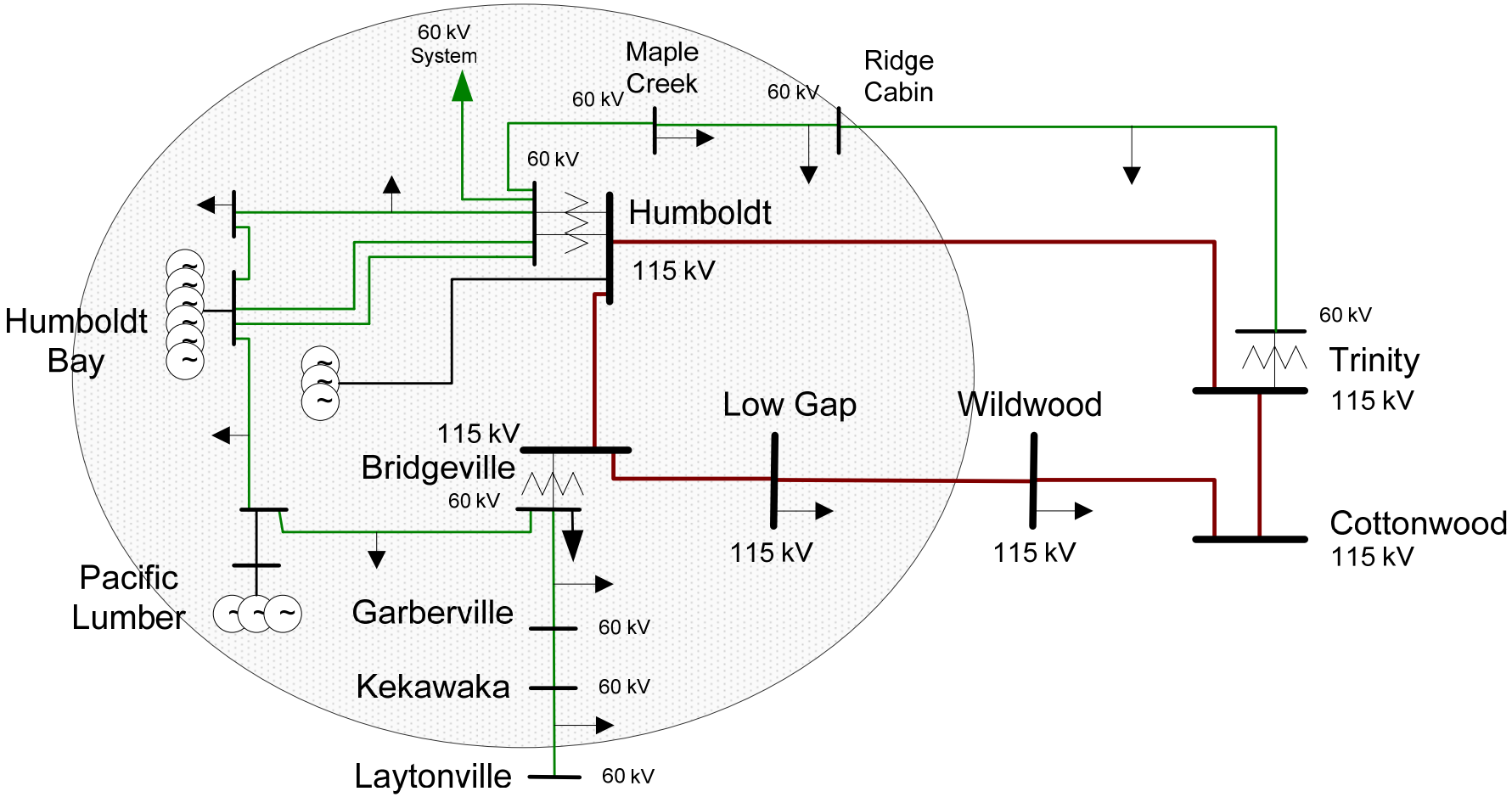
Humboldt and North Coast / North Bay Areas



Humboldt Area Load and Resources (MW)

		2009
Load	=	200
Transmission Losses	=	7
Total Load	=	207
Market Generation	=	166
Muni Generation	=	0
QF/Self-Gen Generation	=	45
Total Qualifying Capacity	=	211

Humboldt Area - Overview



Critical Contingency, Limitation, and Capacity Requirements

Category B

Critical Contingency

Contingency of Humboldt 115/60 kV Transformer (#1 or #2)

Limitation

Thermal overload on the parallel transformer that still in-service

Local Capacity Requirement

LCR of 141 MW (including 45 MW of QF/Self generation). The requirement for the market units refers to units on the 60 kV side only.

Critical Contingency, Limitation, and Capacity Requirements

Category C

Critical Contingency

Contingency of Humboldt 115/60 kV Transformer (#1 or #2) and one unit of the new 60 kV Humboldt Bay Power Plant

Limitation

Thermal overload on the parallel transformer that still in-service

Local Capacity Requirement

LCR of 155 MW (including 45 MW of QF/Self generation as well as 3 MW of Deficiency). The requirement for the market units refers to units on the 60 kV side only.

Summary of the Requirements

	Existing Generation Capacity Needed (MW)	Deficiency (MW)	Total MW Requirement
Category B	141	0	141
Category C	152	3	155

Changes since the 2008 LCR study

The Humboldt Bay Re-Powering Project is modeled in the study

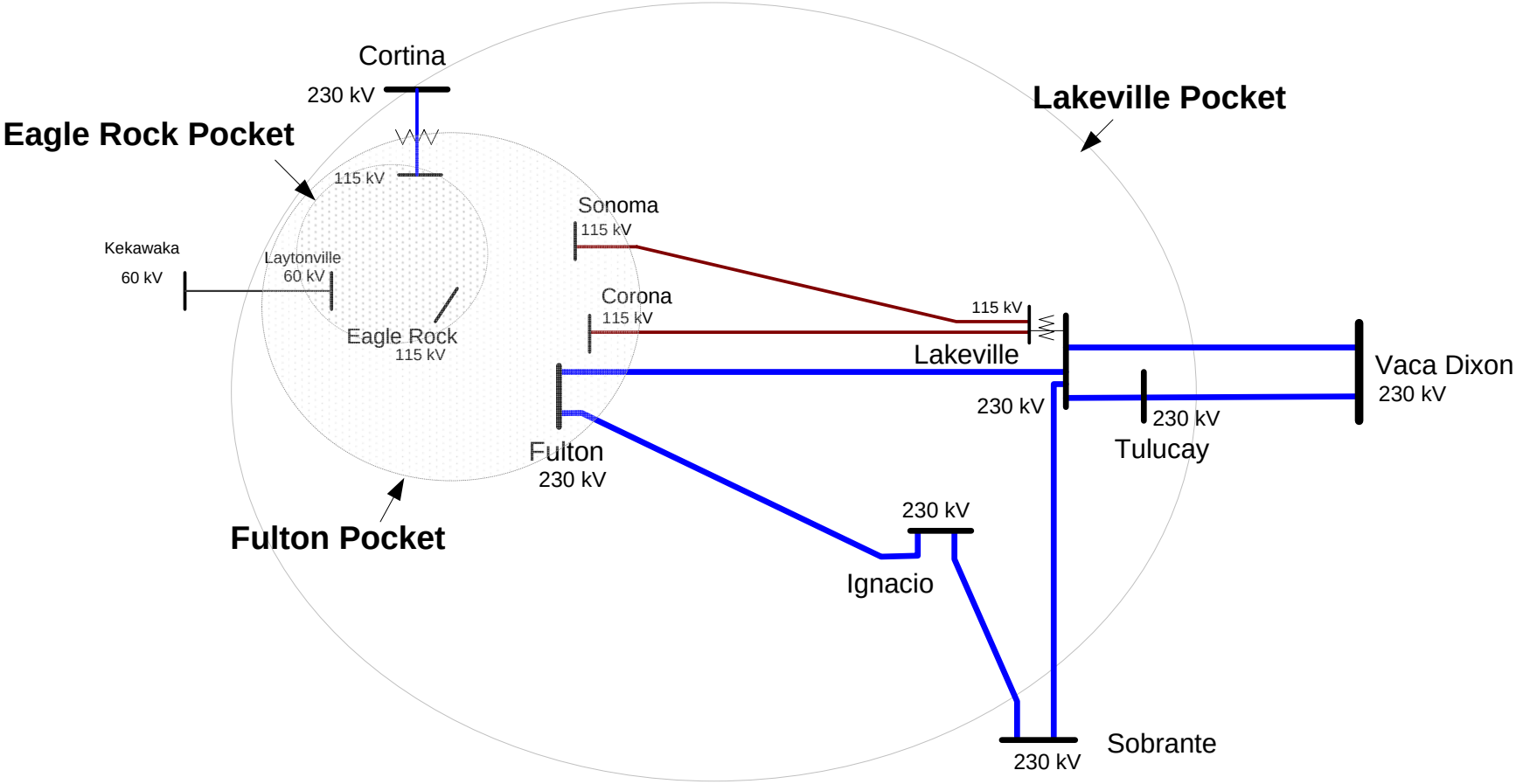
This project replaces the existing Humboldt Bay Power Plant with a new 166 MW Power Plant

*Only units connected to the 60 kV side will mitigate the problem

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 Capacity Requirements

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

Local Capacity Requirement: 121 MW (includes 19 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

Local Capacity Requirement: 237 MW (includes 19 MW of QF generation)

[1] LCR requirement for Eagle Rock pocket can be counted toward the requirement of Fulton pocket

Critical Contingency, Limitation, and Capacity Requirements

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

Local Capacity Requirement[1]: 495 MW (includes 71 MW of QF and 62 MW of Muni generation).

[1] LCR requirement for Eagle Rock pocket can be counted toward the requirement of Fulton pocket

Critical Contingency, Limitation, and Capacity Requirements

Lakeville Sub-Area (LCR requirement for the overall North Coast/North Bay area[1])

Category B

Critical Contingency: The outages of Vaca Dixon-Tullucay 230 kV

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

Local Capacity Requirement: 570 MW (includes 135 MW of QF and 129 MW of Muni generation).

Category C

Critical Contingency: The outages of Vaca Dixon-Tullucay 230 kV line followed by Crockett-Sobrante 230 kV or vice versa.

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

Local Capacity Requirement: 839 MW (includes 135 MW of QF and 129 MW of Muni generation).

[1] LCR requirement for Eagle Rock/Fulton pocket can be counted toward the requirement of Lakeville pocket

Changes since the 2008 LCR study

Revised Load Forecast

The revised load forecast projects higher future demand in North Coast and North Bay area. This results in a slight increase of LCR in this area compare to the previous projection

Stakeholder Comments

Your comments and questions are welcome

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