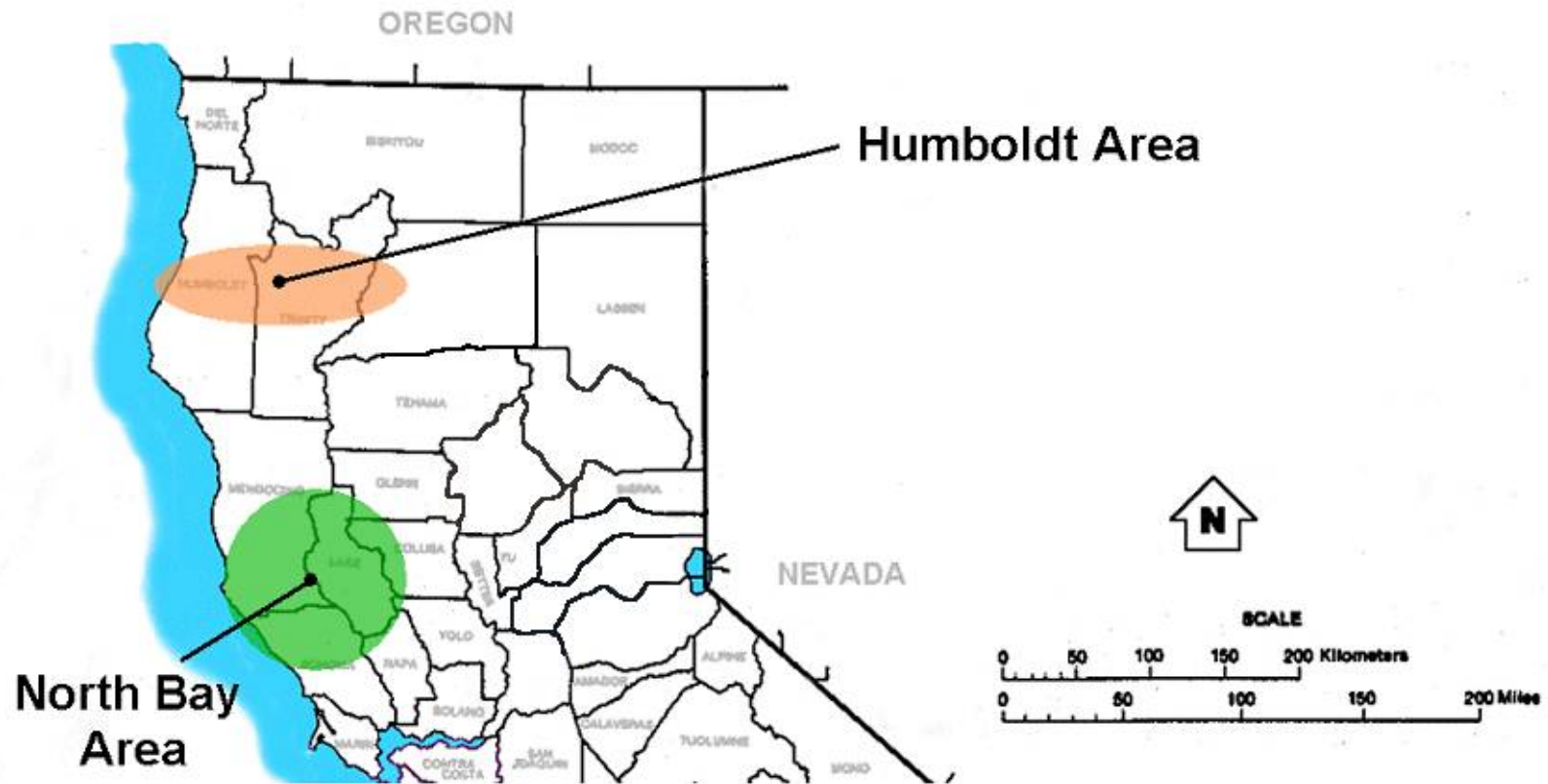


# Year 2008 LCR Study

## Humboldt, North Coast and North Bay in PG&E System

### Summary of Findings

*Prepared By*  
Paul Didsayabutra and Joseph Meier  
Regional Transmission North - California ISO  
March 21, 2007

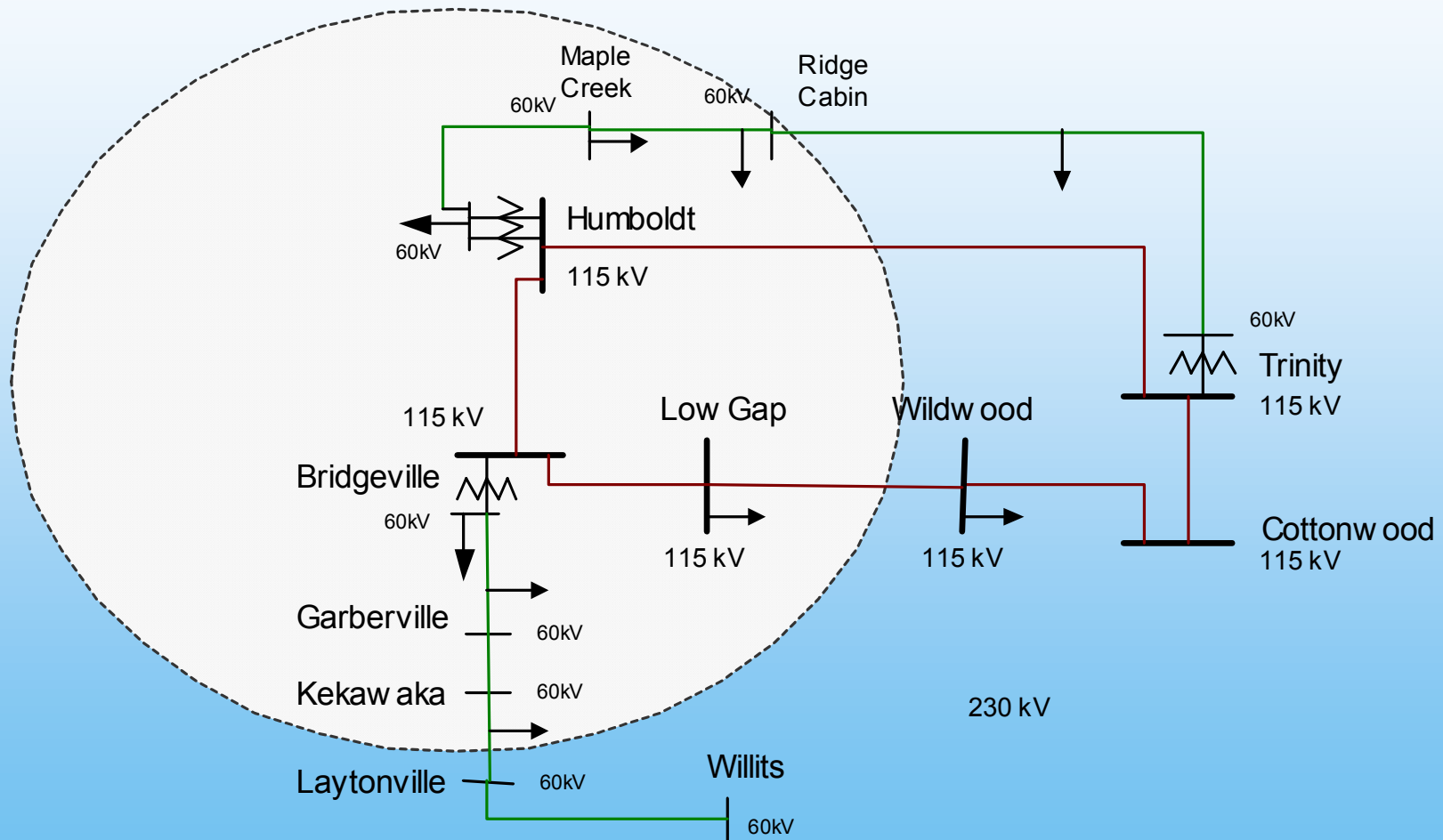


# Humboldt Area Load and Resources

(MW)

		<b>2008</b>
Load	=	194
Transmission Losses	=	5
Total Load	=	<b>199</b>
Market Generation	=	135
Muni Generation	=	0
QF/Self-Gen Generation	=	45
Total Qualifying Capacity	=	<b>180</b>

# Humboldt



# Humboldt Area

## **Critical Contingency**

Contingency of Cottonwood-Bridgeville 115 kV line and one of Humboldt Bay Power Plant.

## **Limitation**

Limited by low voltage and reactive margin in the area

## **Local Capacity Requirement**

LCR of 175 MW (QF/Self Gen generation 45 MW)

## Critical Humboldt Contingencies

	QF (MW)	Muni (MW)	Market (MW)	Max. Qualifying Capacity (MW)
Available generation	45	0	135	180

	Existing Generation Capacity Needed (MW)	Deficiency (MW)	Total MW Requirement
Category B (Single)	175	0	175

## Changes since the 2007 LCR study

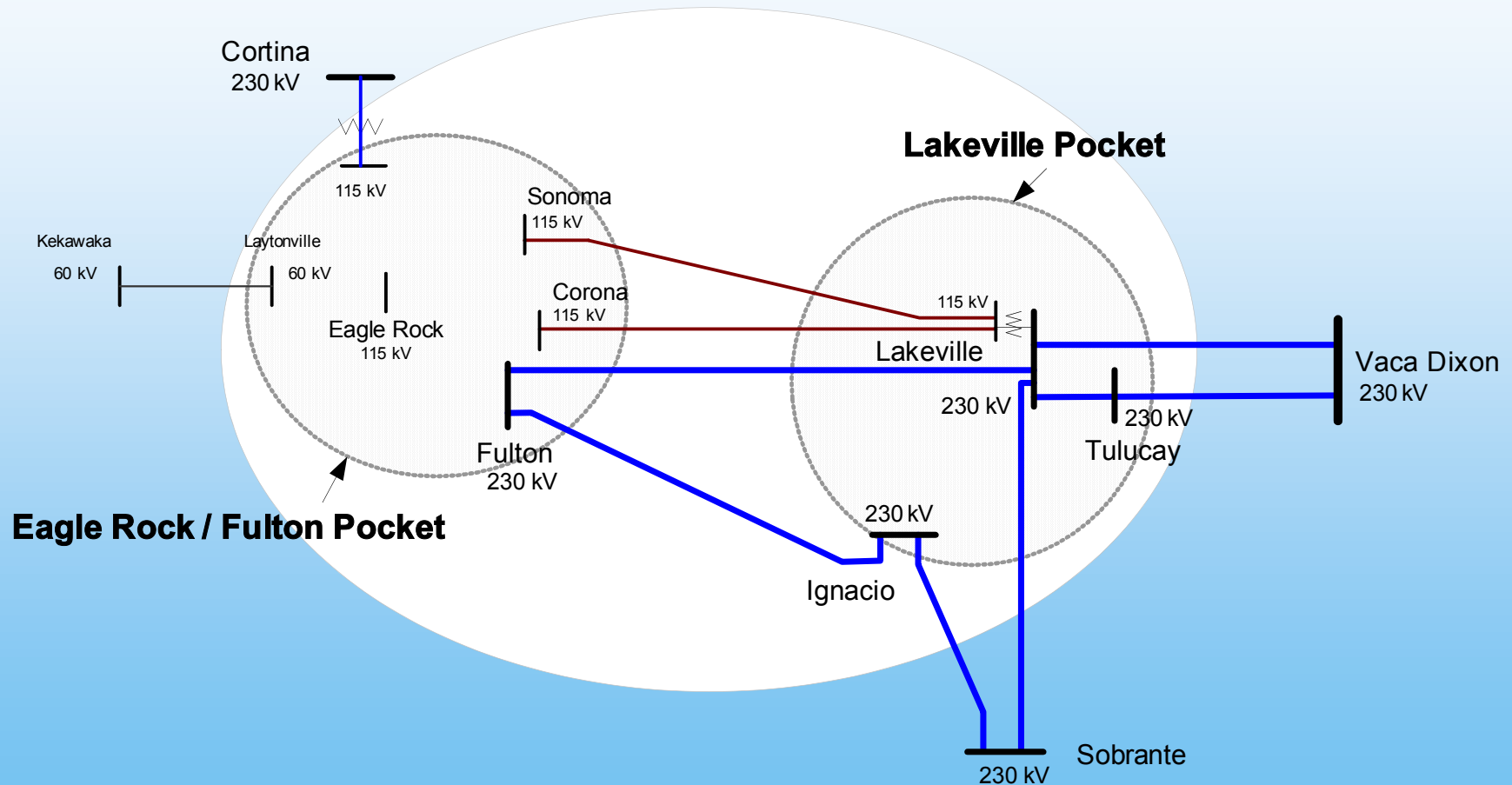
### **Total Net Qualifying Capacity has decreased**

Mainly because of updates to the historical output levels of QF generation in the area.

## North Coast/North Bay Area Load and Resources (MW)

		<b>2008</b>
Load	=	1437
Transmission Losses	=	58
Total Load	=	1495
Market Generation	=	621
Muni Generation	=	128
QF Generation	=	134
Total Qualifying Capacity	=	883

# North Coast / North Bay





# Critical North Coast/Bay Area Contingencies

## **Eagle Rock Sub-area**

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: 215 MW (includes 16 MW of QF generation).

## **Fulton Rock Sub-area**

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

Limitation: Thermal overload on Sonoma-Pueblo 115 kV line #1

Local Capacity Requirement: 366 MW (includes 68 MW of QF and 61 MW of Muni generation).

# Critical North Coast/Bay Area Contingencies

**Lakeville Sub-area** (LCR requirement for the overall North Coast/North Bay area<sup>1</sup>)

Critical Contingency: The outage of Vaca Dixon-Lakeville 230 kV line and Delta Energy Center out of service.

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

Local Capacity Requirement: 676 MW ( includes 134 MW of QF and 132 MW of Muni generation.

<sup>1</sup> LCR requirement for Eagle Rock/Fulton pocket can be counted toward the requirement of Lakeville pocket

# Changes since the 2007 LCR study

## **Total Net Qualifying Capacity has decreased**

Mainly because of updates to the historical output levels of QF generation in the area.