



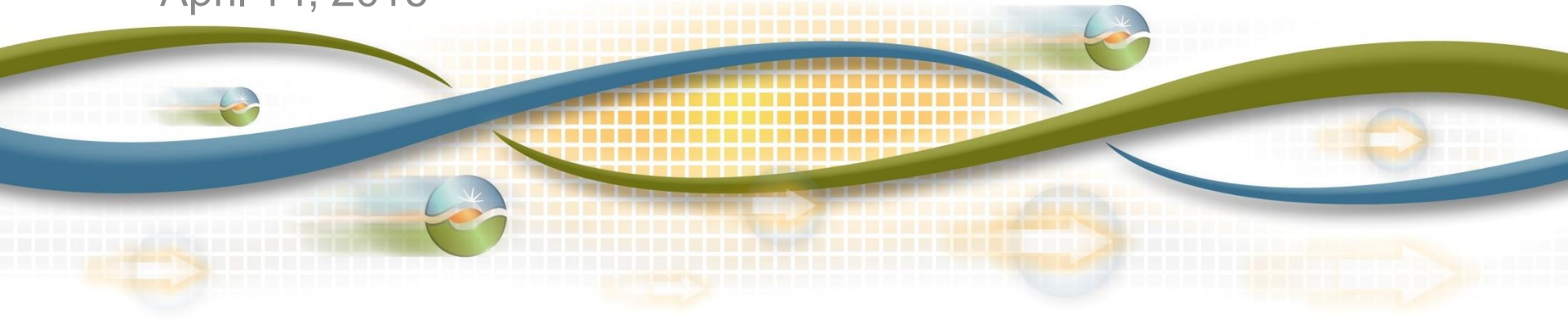
# 2017 Final LCR Study Results North Coast/ North Bay Area

Irina Green

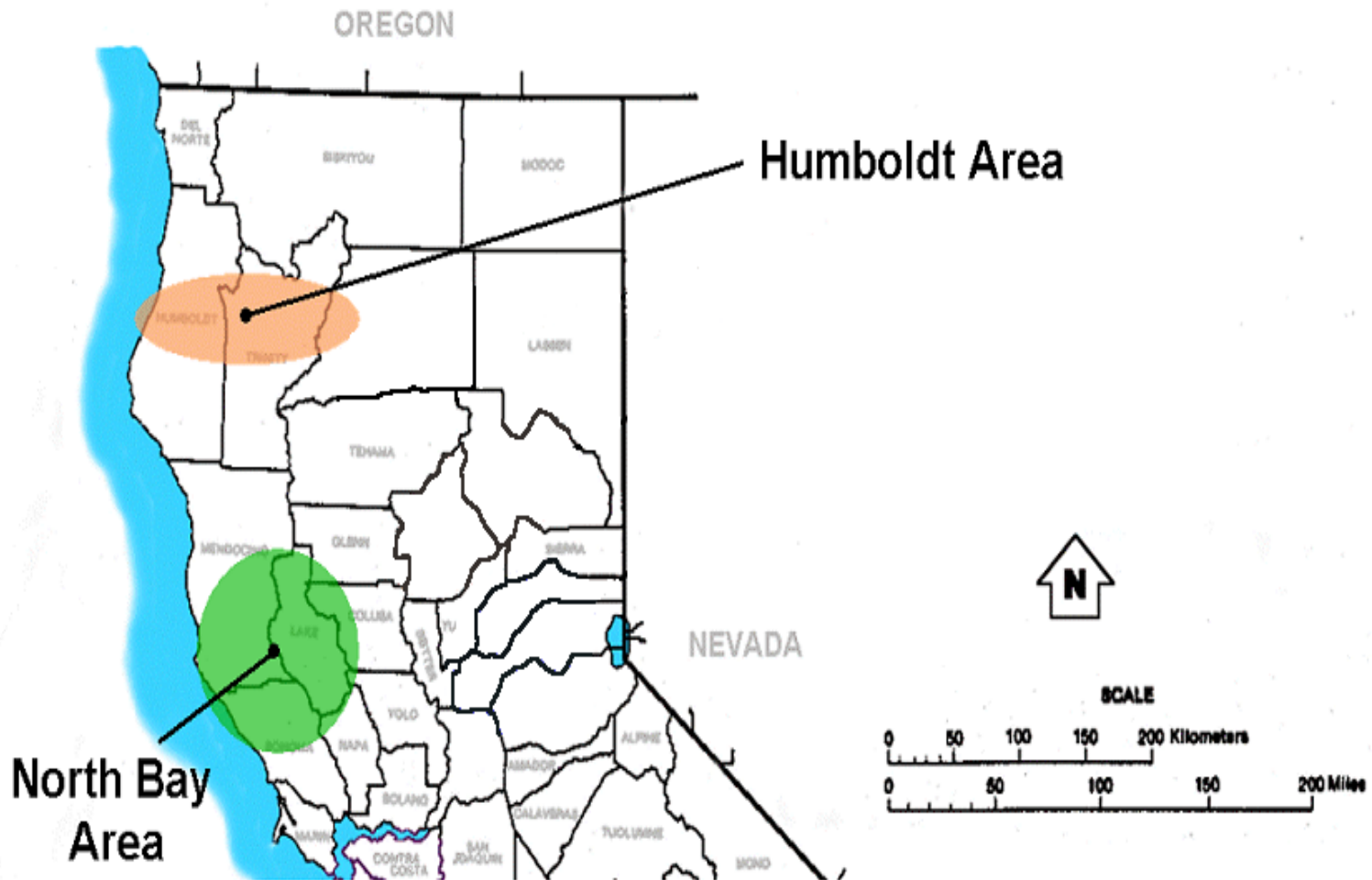
Regional Transmission Senior Advisor

Stakeholder Call

April 14, 2016



# Humboldt and North Coast/North Bay

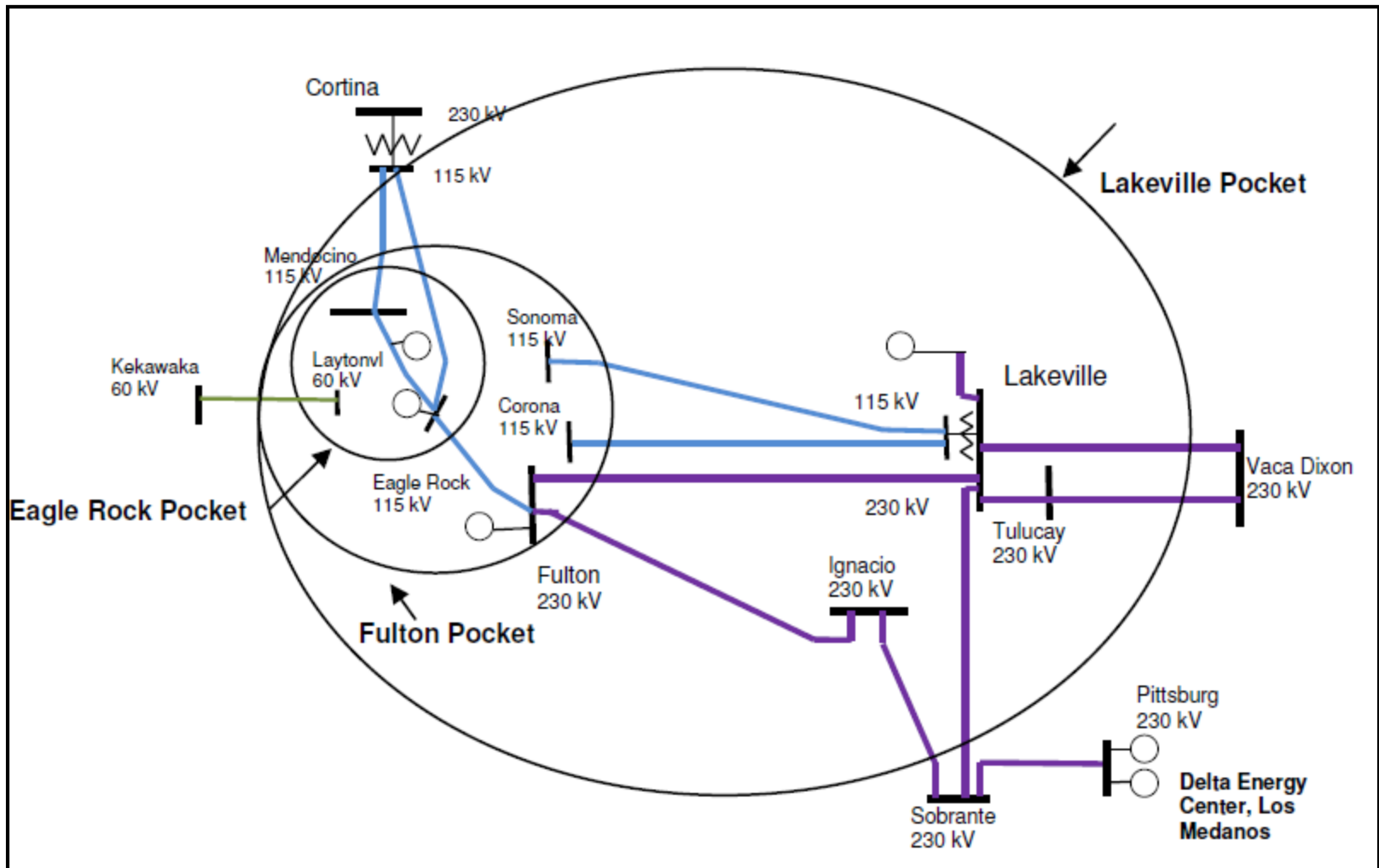


# North Coast/North Bay Load and Resources (MW)

**2017**

Load	=	1299
AAEE	=	-21
Transmission Losses	=	33
Total Load	=	<b>1311</b>
Market Generation	=	722
Wind Generation	=	0
Muni Generation	=	114
QF Generation	=	14
Total Qualifying Capacity	=	<b>850</b>

# North Coast and North Bay



# Eagle Rock Sub-Area

## **Eagle Rock Sub-area – Category B**

Contingency: Cortina-Mendocino 115 kV line, with Geyser #11 unit out

2017 LCR need: 166 MW (includes 0 MW of QF/Muni generation)

Limiting component: Thermal overload on Eagle Rock-Cortina 115 kV line

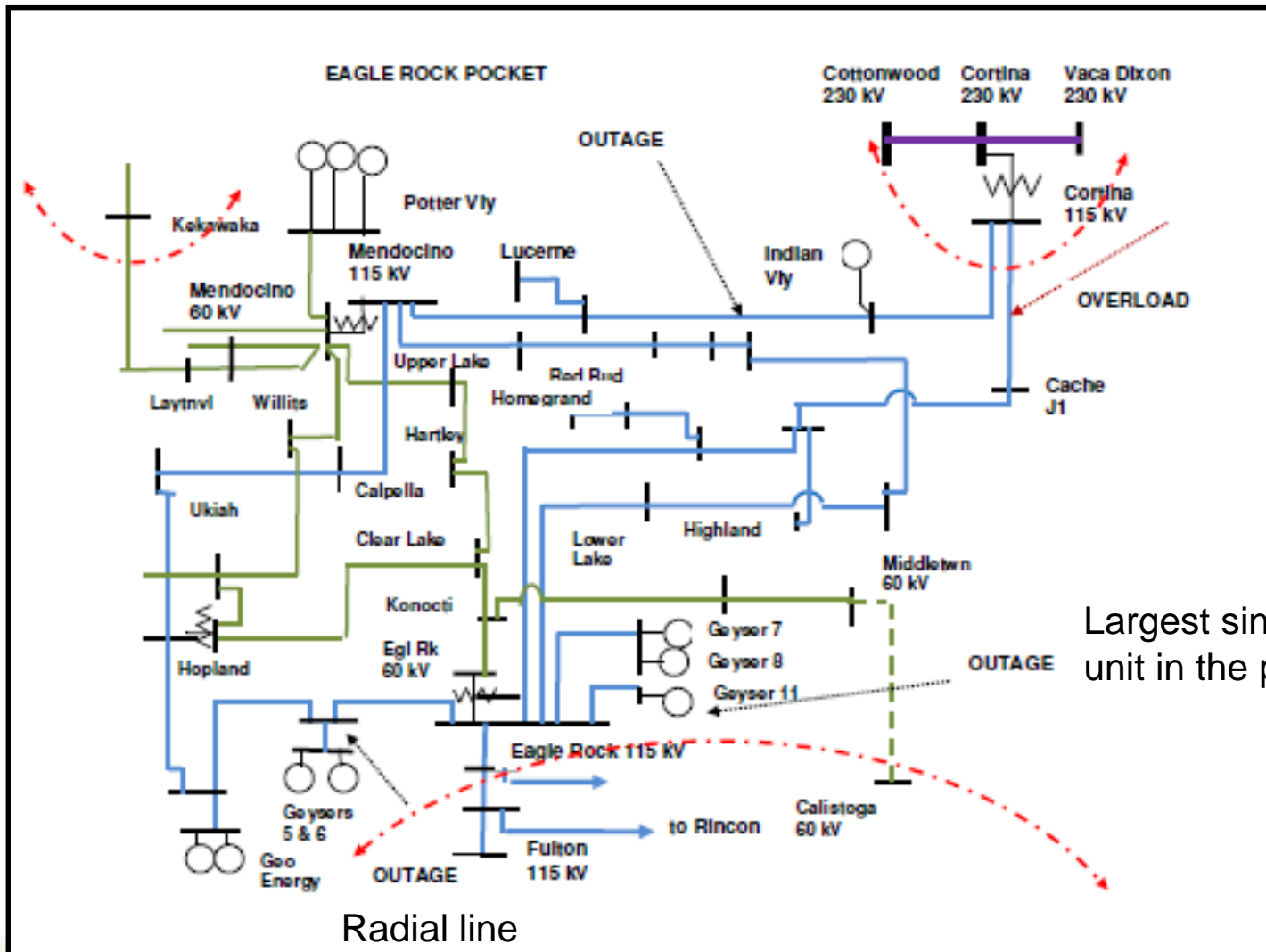
## **Eagle Rock Sub-area – Category C**

Contingency: Cortina-Mendocino and Geysers #3-Geysers #5 115 kV lines

2017 LCR need: 181 MW (includes 0 MW of QF/Muni generation)

Limiting component: Thermal overload on Eagle Rock-Cortina 115 kV line

# Eagle Rock Sub-Area



Largest single unit in the pocket

Radial line connecting two units

# Fulton Sub-area

## **Fulton Sub-area – Category B**

No requirement.

## **Fulton Sub-area – Category C**

Contingency: Fulton-Lakeville and Fulton-Ignacio 230 kV lines

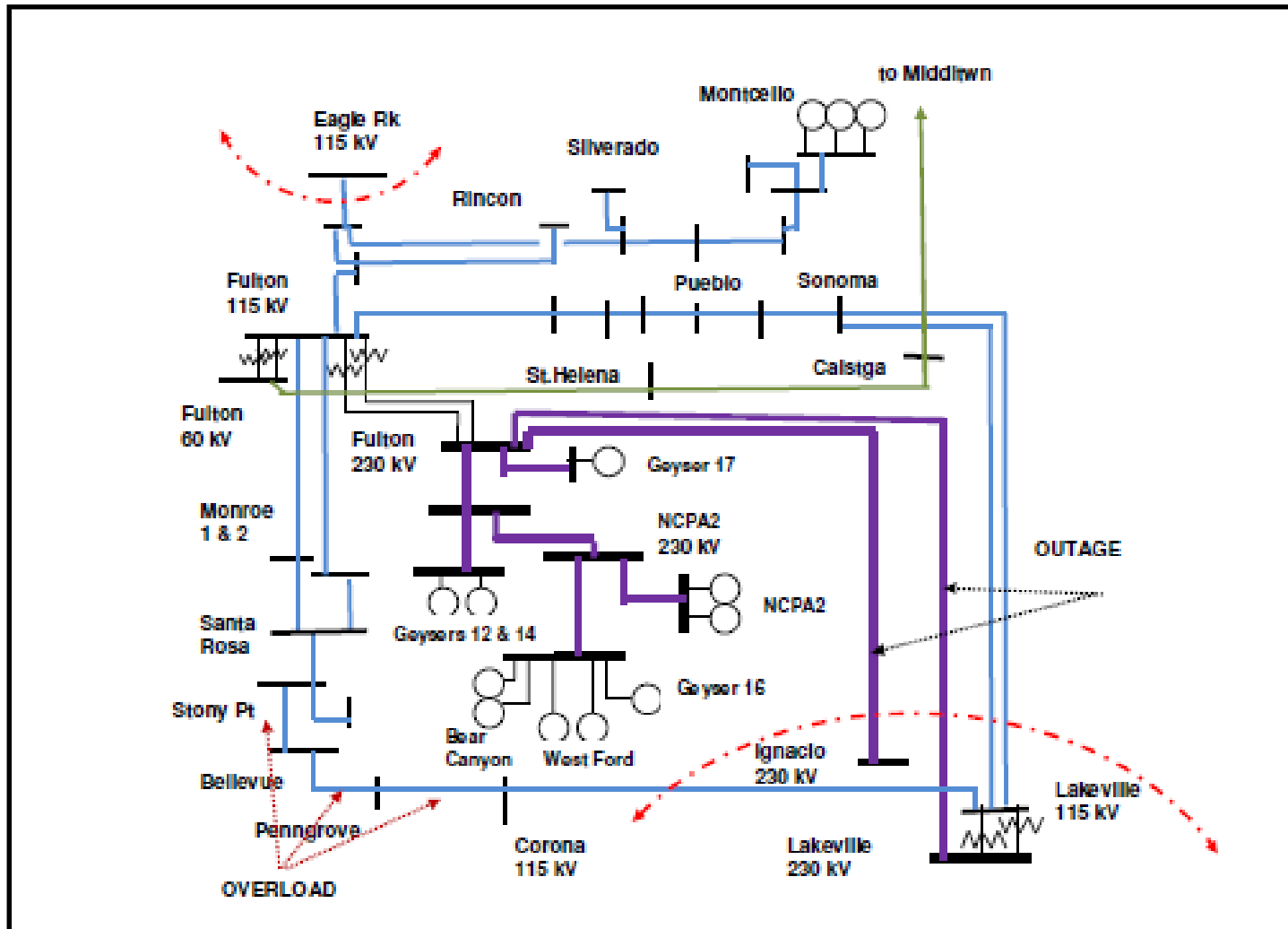
Limiting component: Thermal overload on Santa Rosa-Corona 115 kV line

2017 LCR need: 304 MW (includes 14 MW of QF and 55 MW Muni generation)

The LCR need is due to an outage in the Eagle Rock area: Cortina-Mendocino and Geysers #3-Geysers #5 115 kV lines

Generation in Fulton sub-area also supports the Eagle Rock sub-area

# Fulton Sub-area





# Lakeville Sub-area

## **Lakeville Sub-area (NC/NB Overall) – Category B**

Contingency: Vaca Dixon-Tulucay 230 kV line with Delta Energy Center power plant out of service

2017 LCR need: 721 MW (includes 14 MW of QF and 114 MW of Muni generation)

Limiting component: Thermal overload on the Vaca Dixon-Lakeville 230 kV line

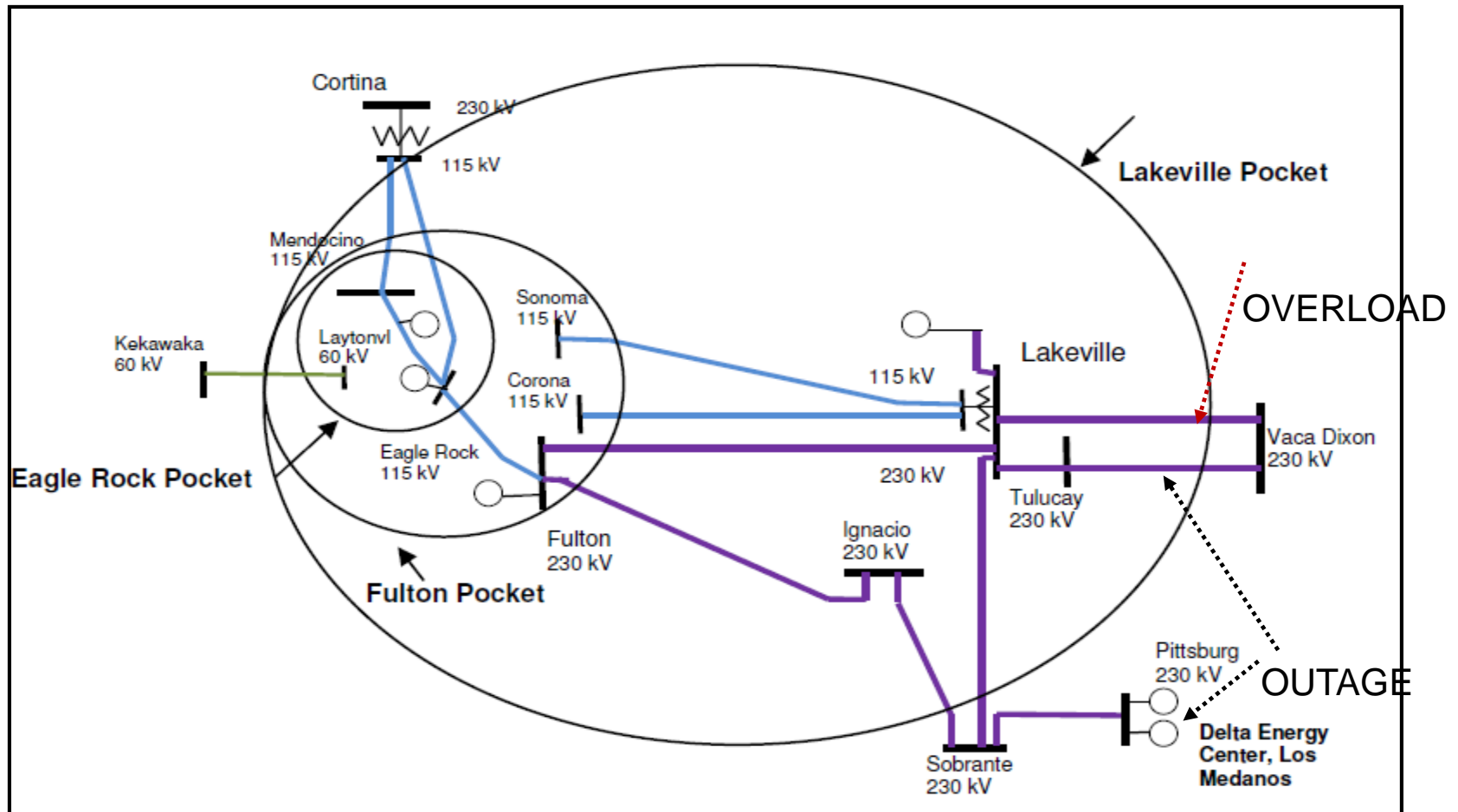
## **Lakeville Sub-area (NC/NB Overall) – Category C**

Contingency: Vaca Dixon-Tulucay and Vaca Dixon-Lakeville 230 kV lines

Limiting component: Thermal overload on the Eagle Rock-Cortina 115 kV line and possible overload on the Eagle Rock-Fulton 115 kV line or Moraga-Sobrante 115 kV line

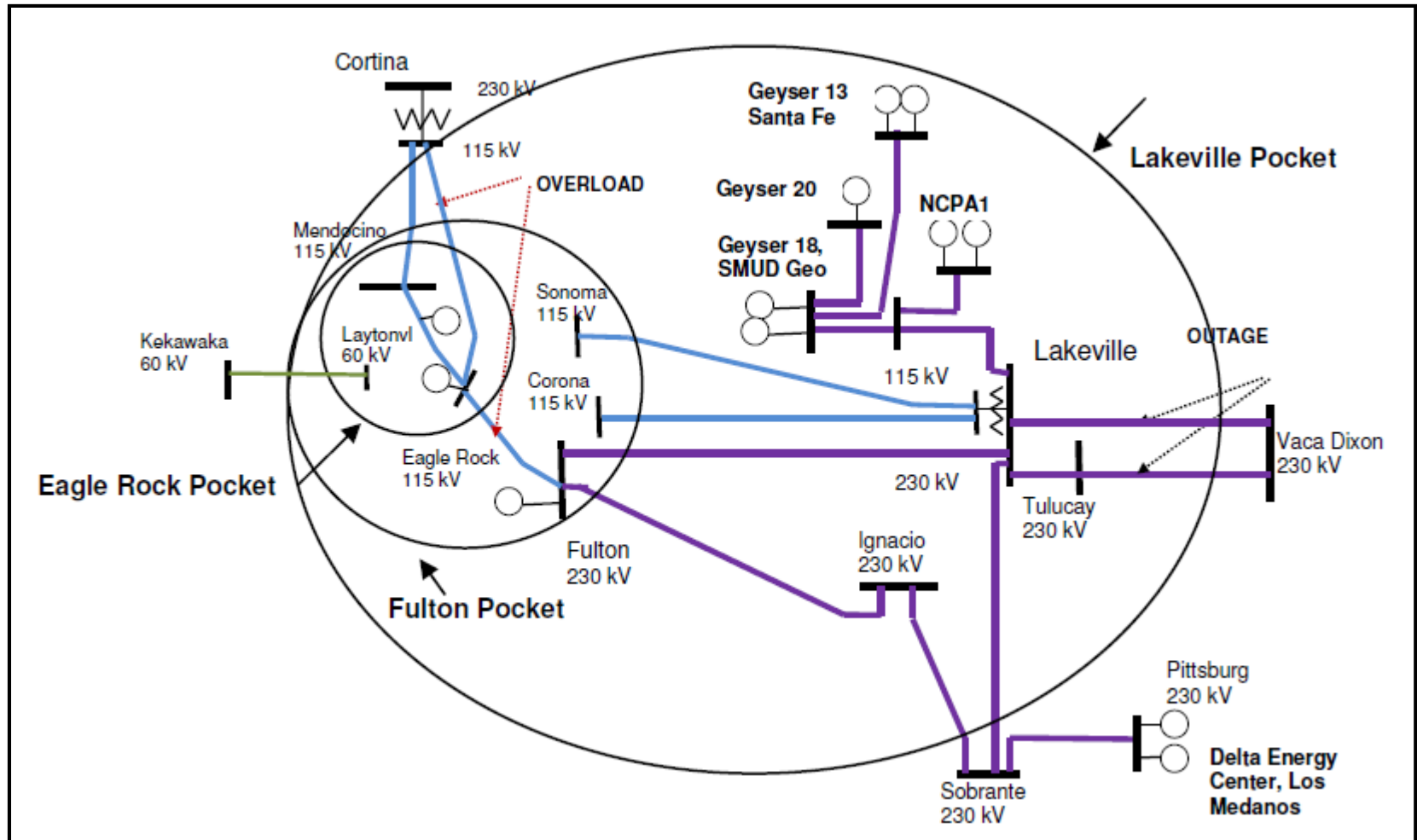
Was not limiting in 2017

# Lakeville sub-area one line and generator



LCR need depends on the generation in the Pittsburg area.

# Lakeville Sub-area double line outage



LCR need depends on the generation in the Pittsburg area.

# Changes

## Since last year:

1. 2017 load forecast has decreased by 122 MW vs. 2016
2. LCR need has increased by 110 MW mainly due to reduced LCR need (by about 600 MW) in the Pittsburg sub-area.

## Since last stakeholder meeting:

1. Updated NQC.

**Your comments and questions are welcomed**

For written comments, please send to: [RegionalTransmission@caiso.com](mailto:RegionalTransmission@caiso.com)