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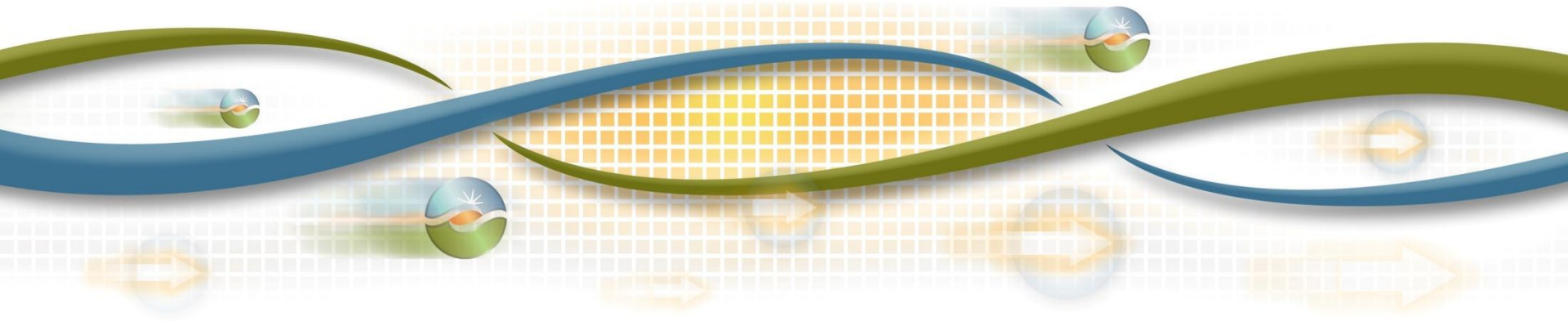
# 2013 Draft LCR Study Results Fresno and Kern Local Areas

Abhishek Singh

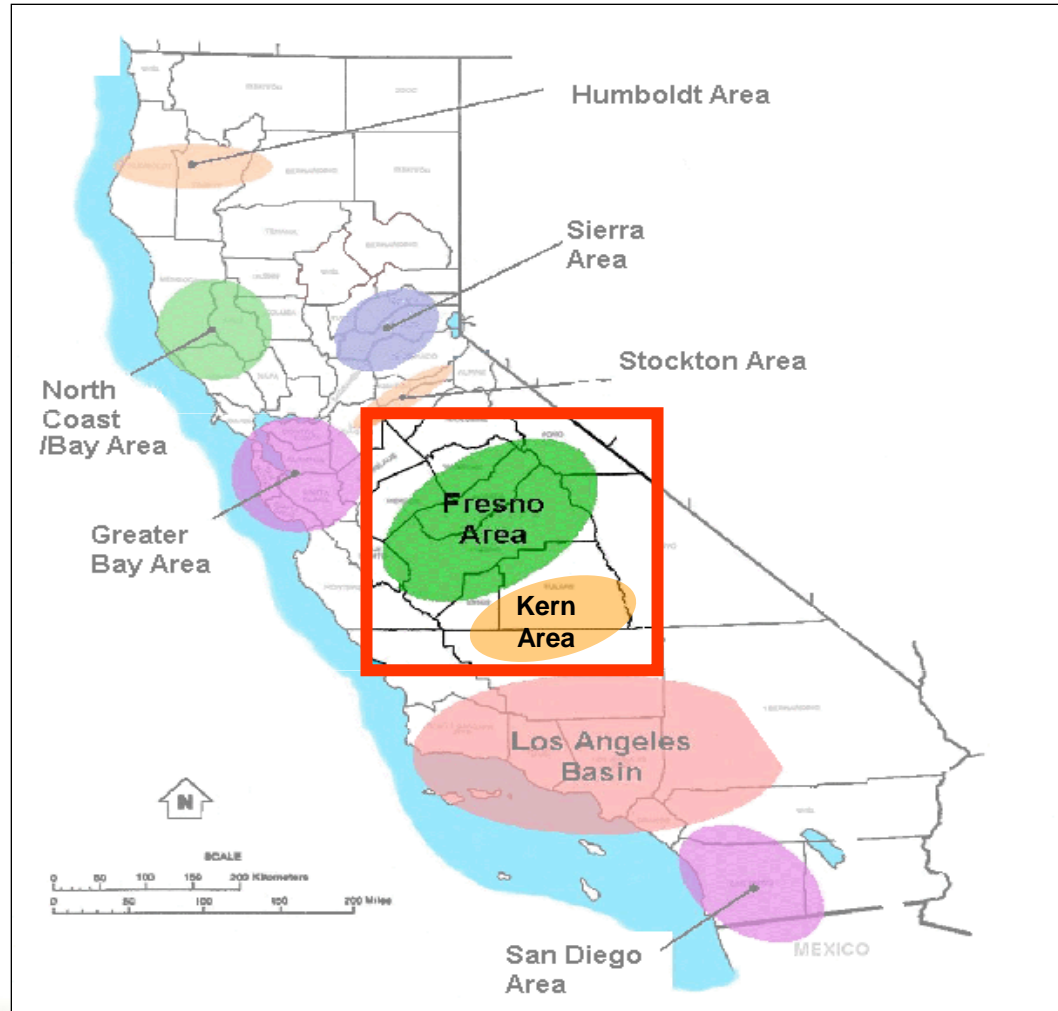
Senior Regional Transmission Engineer

Stakeholder Meeting

March 8, 2012



# Fresno and Kern LCR Areas



# Kern Area Overview

## Area Generation, Load and Transmission

### Kern LCR Area

#### Total Generation and Load:

- Generation (NQC plus new unit): 631
- Load (1-in-10 Summer-Peak): **1310 MW**

#### Transmission Upgrades:

- Navy 35 load and self-gen transferred to Midway-Elk Hills 230 kV line.

#### New resources:

- One new generator ( Q340)

# Kern Area LCR

## Kern PP Sub-Area

### Limiting Contingencies:

#### Category B:

- T-1: Kern PP 230/115 kV bank #5

#### Category C:

- T-1: Kern PP 230/115 kV bank #5
- L-1: Kern PP – Double C Jct. 115 kV line

### Constrained Elements:

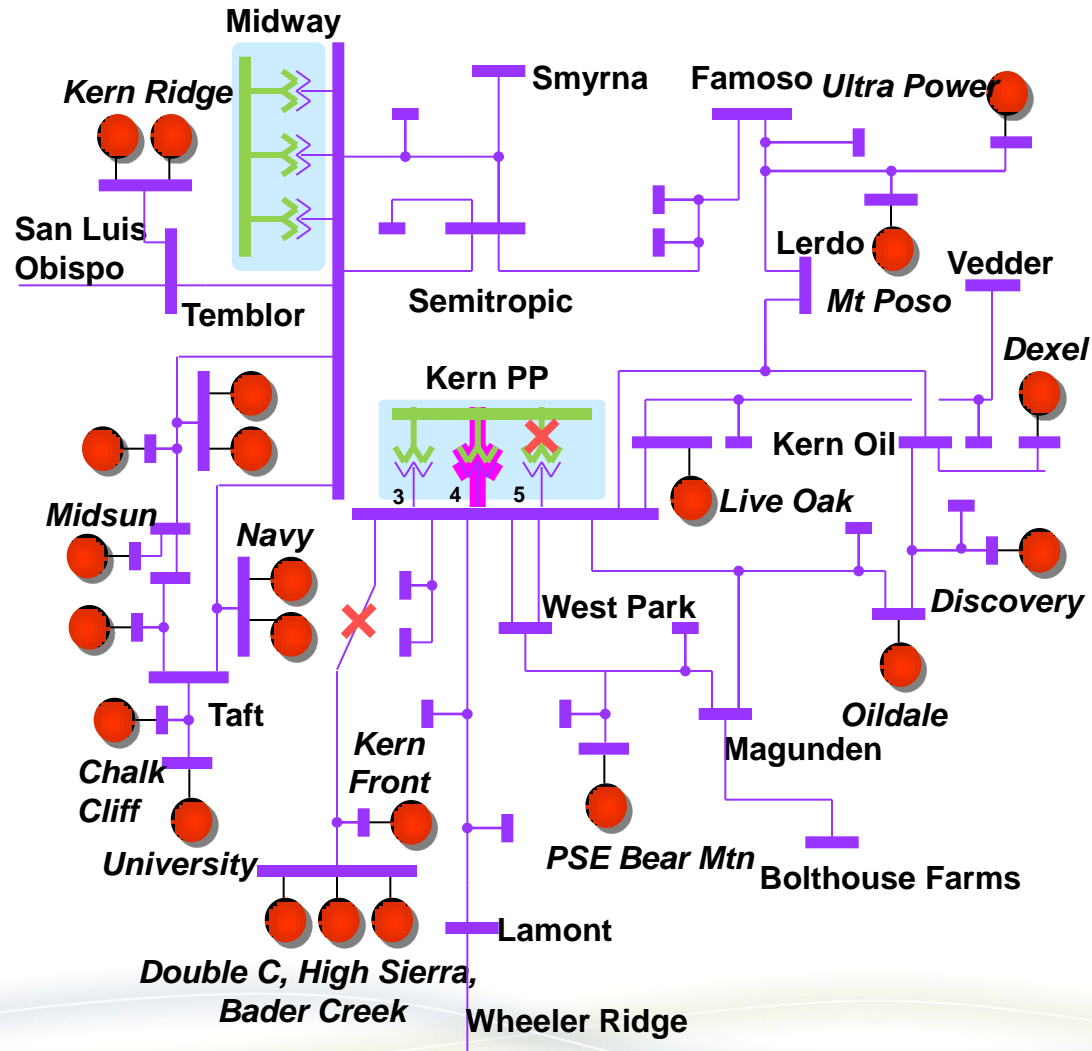
- Kern PP 230/115 kV bank #4

### LCR Results (MW):

Contingency	Cat. B	Cat. C
LCR	295	483

Including:

QF	596	596
Muni	0	0
Deficiency		0



# Kern Area LCR

## West Park Sub-Area

### Limiting Contingencies:

#### Category B:

- None

#### Category C5

- L-1: Kern West Park # 1
- L-1: Kern West Park # 2

### Constrained Elements:

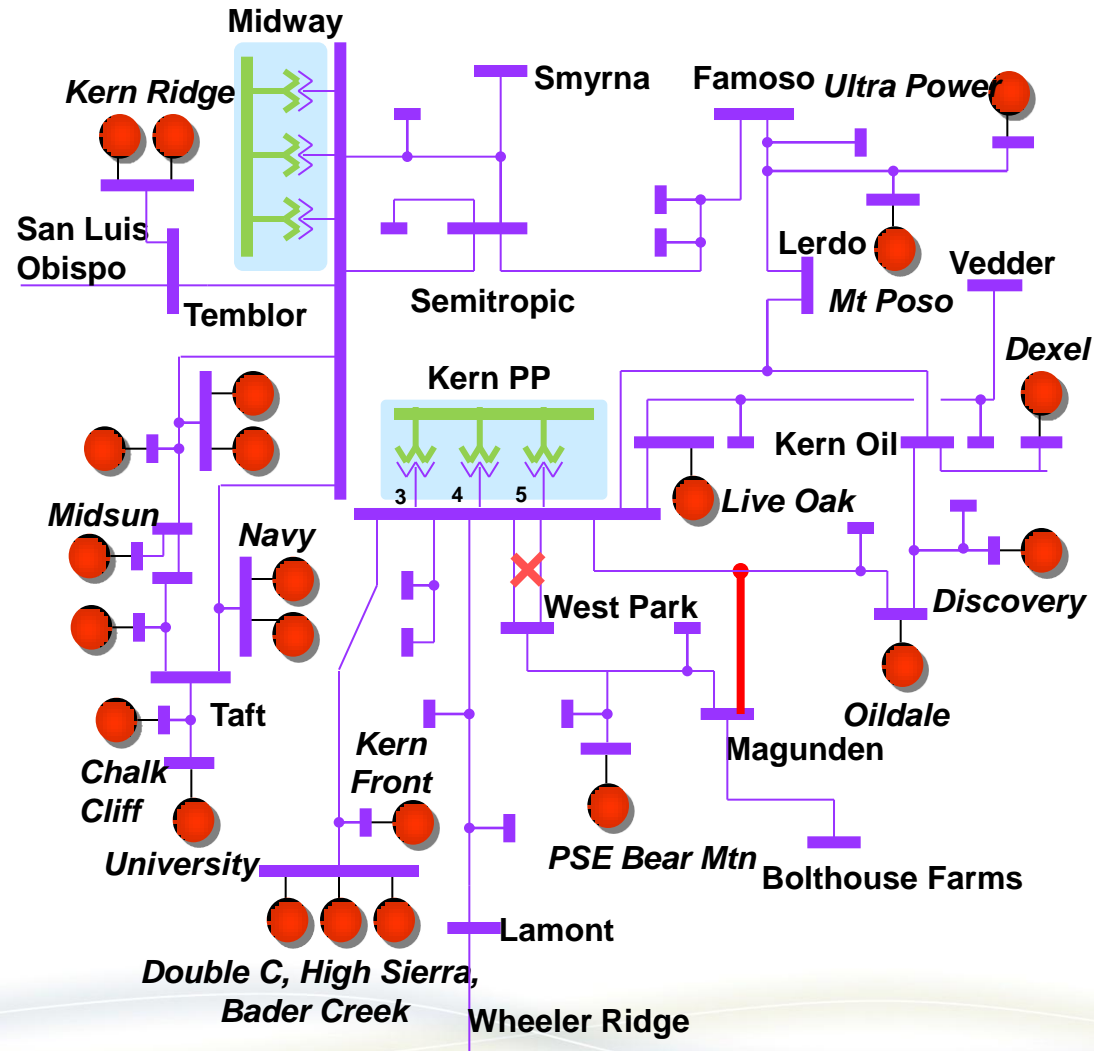
- **KERN-MAGUNDEN-WITCO - From 6/42 to Magunden Sub**

#### LCR Results (MW):

Contingency	Cat. B	Cat. C
LCR	0	115

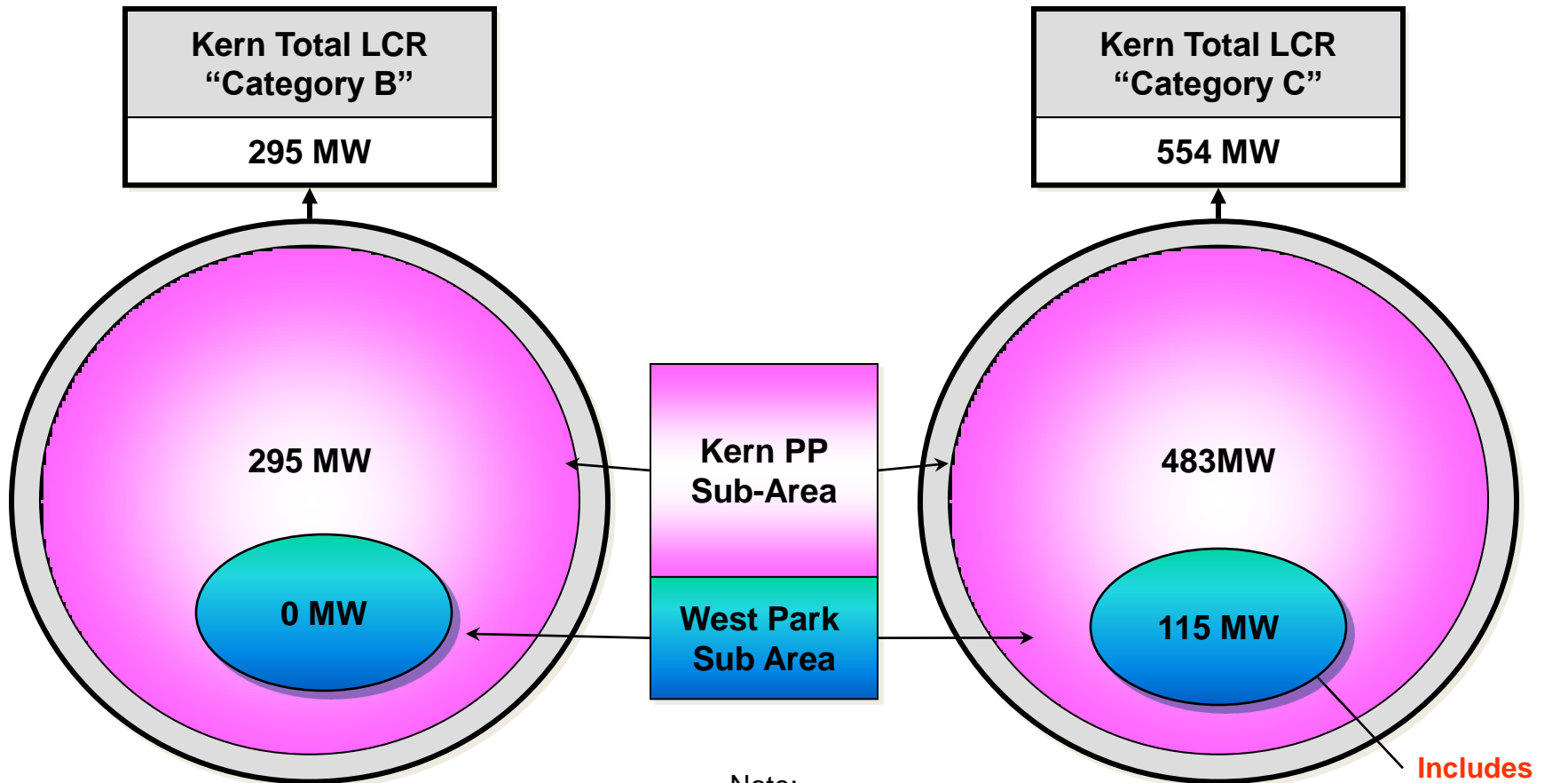
Including:

QF	46	44
Muni	0	0
Deficiency	0	71



# Kern Area LCR

## Summary of 2013 LCR



Note:

In the Kern area, due to overlapping of LCR sub-areas, the "Kern Total LCR" is *not* a simple sum, but rather an aggregated sum of LCR in individual sub-areas.

**Includes  
71 MW  
deficiency**

# Changes

## Since last year:

- 1) Load forecast is higher by 201 MW
- 2) Overall the LCR needs have increased by 229 MW

**Your comments and questions are welcome.**

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

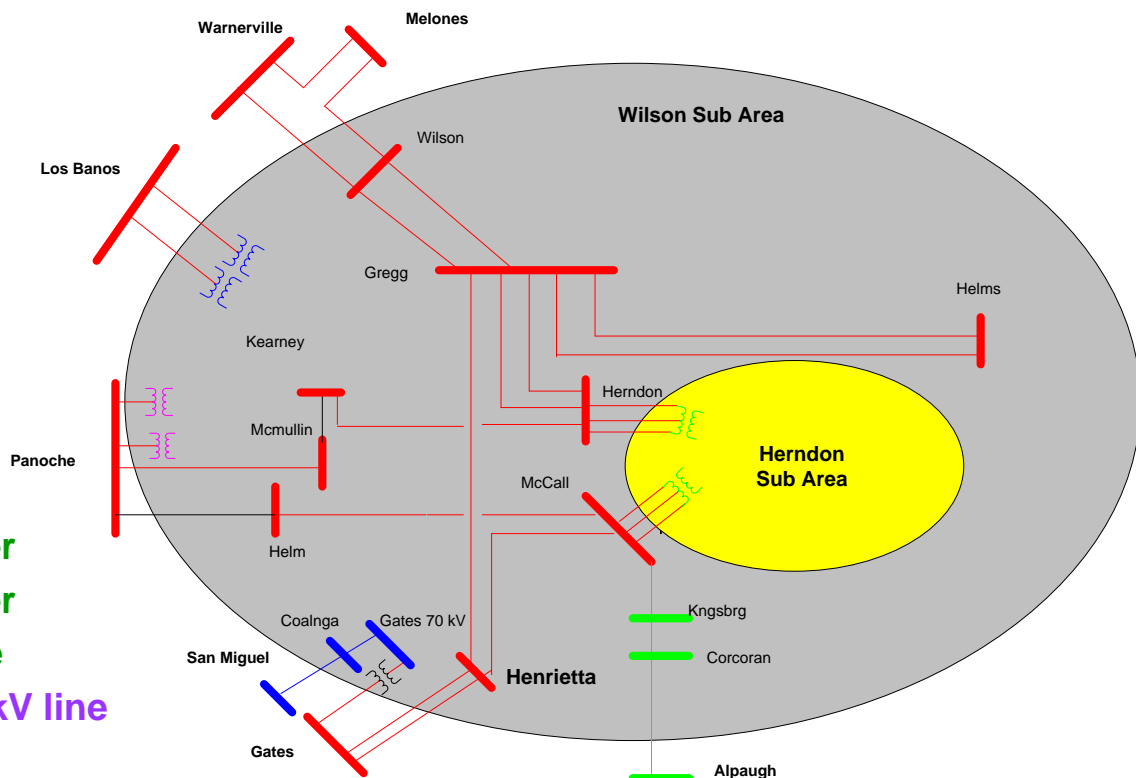
# Greater Fresno Area

## Electrical Boundaries and LCR Sub-Areas

### Electrical Boundaries:

- Gates – McCall 230 kV line
- Gates – Gregg 230 kV line
- Gates 230/70 kV transformer #1
- Panoche 230/115 kV transformer #1
- Panoche 230/115 kV transformer #2
- Panoche – Kearney 230 kV line
- Panoche – Helm 230 kV line
- Warnerville – Wilson 230 kV line
- Melones – Wilson 230 kV line
- Los Banos #3 230/70 kV transformer
- Los Banos #4 230/70 kV transformer
- San Miguel – Coalinga #1 70 kV line
- Smyrna – Alpaugh – Corcoran 115 kV line

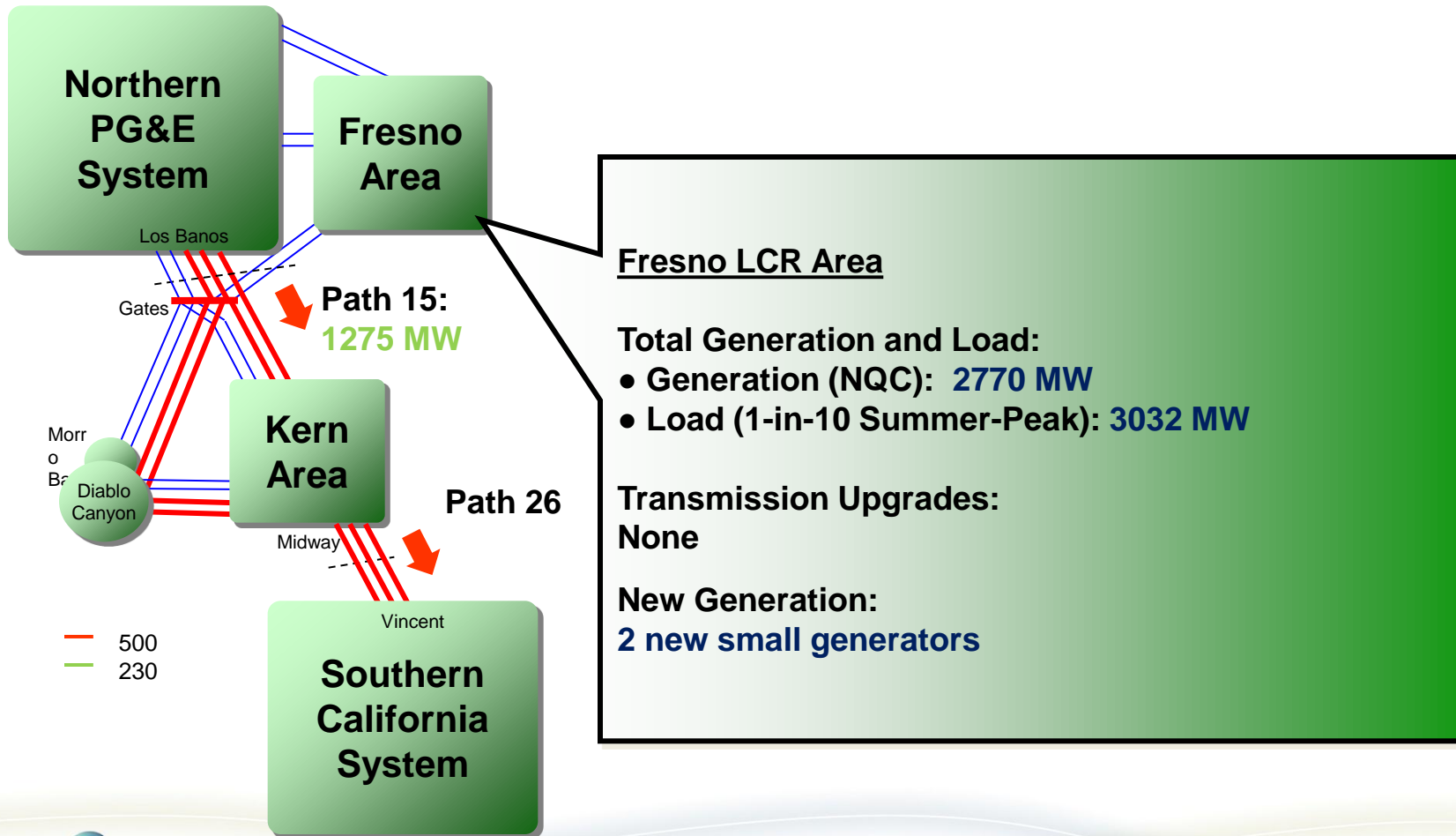
### LCR Sub-Areas:





# Fresno Area Overview

## Area Generation, Load, Transmission and Path Flows



# Fresno Area LCR

## Wilson Sub-Area

### Limiting Contingencies:

#### Category C:

- L-1: Melones – Wilson 230 kV line
- G-1: Helms unit #3

#### Category B:

- G-1: Helms unit #3
- L-1: Melones – Wilson 230 kV line

### Constrained Elements:

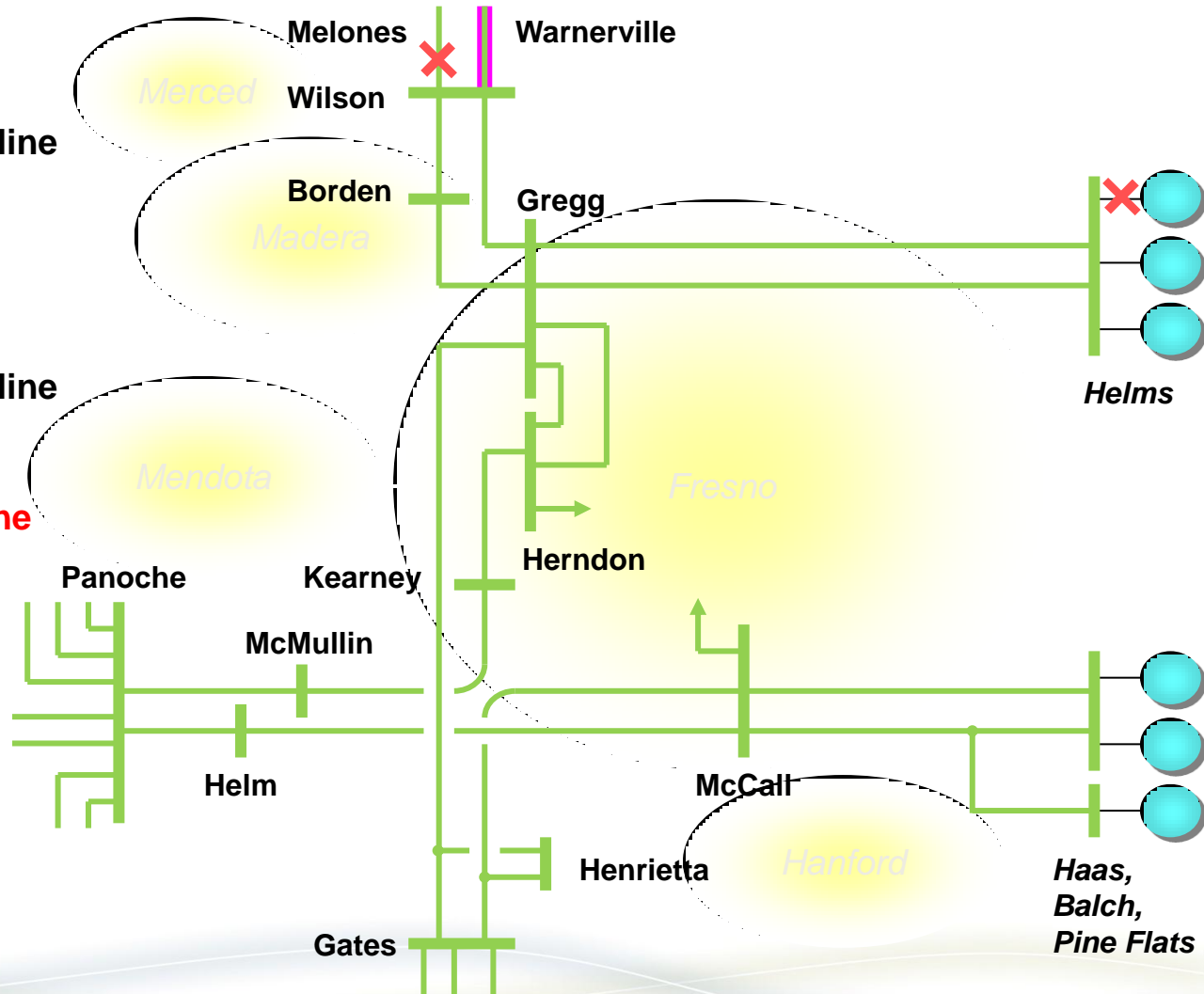
- Warnerville – Wilson 230 kV line

#### LCR Results (MW):

Contingency	Cat. B	Cat. C
LCR	1786	1786

Including:

QF	189	189
Muni	167	167
Deficiency	0	0



# Fresno Area LCR

## Herndon Sub-Area

### Limiting Contingency:

#### Category B:

- None

#### Category C:

- L-1: Helm-Mccall 230 kV Line
- L-1: Gates-Mccall 230 kV line

### Constrained Element:

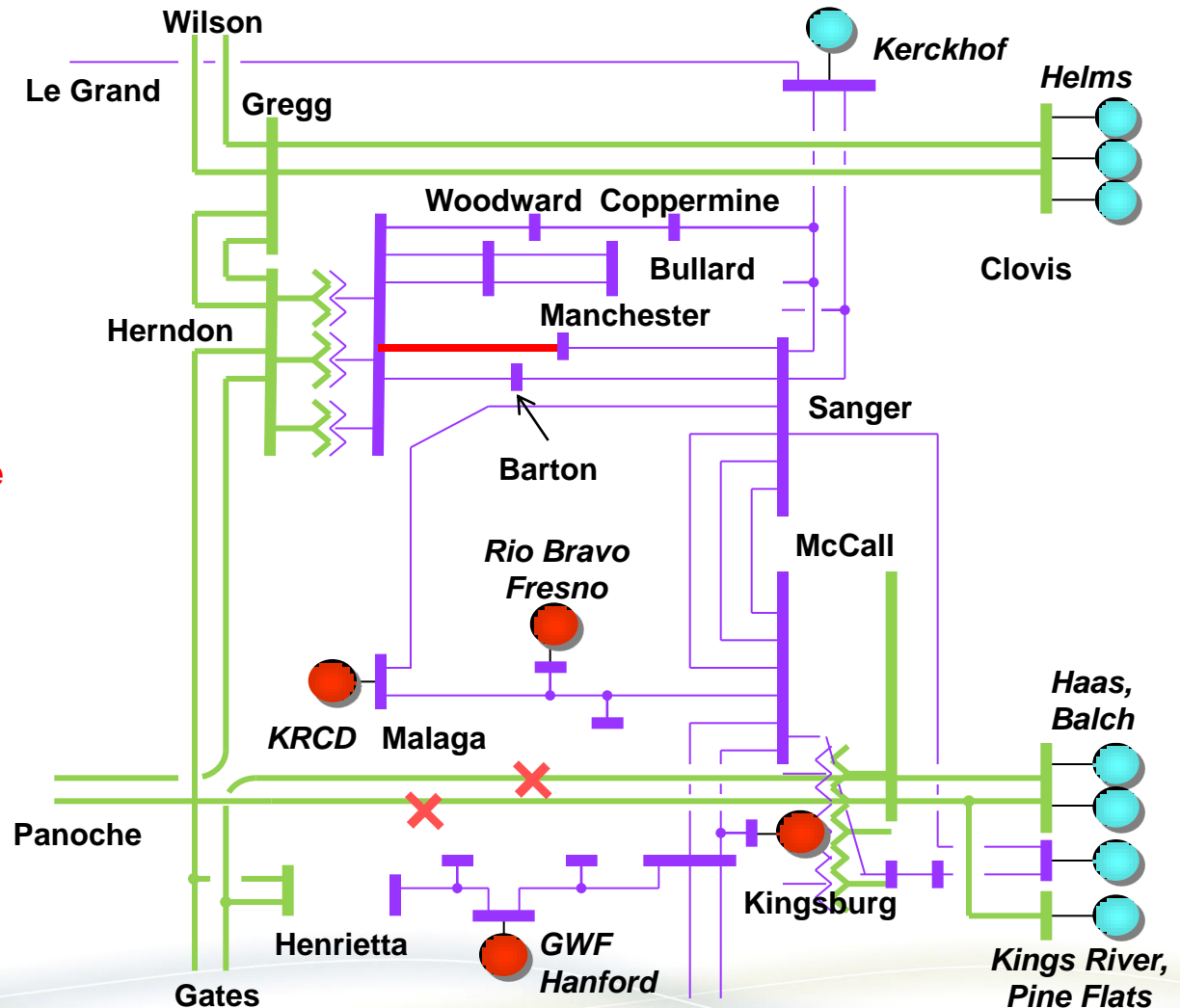
- Herndon-Manchester 115 kV line

### LCR Results (MW):

Contingency	Cat. B	Cat. C
LCR	0	372

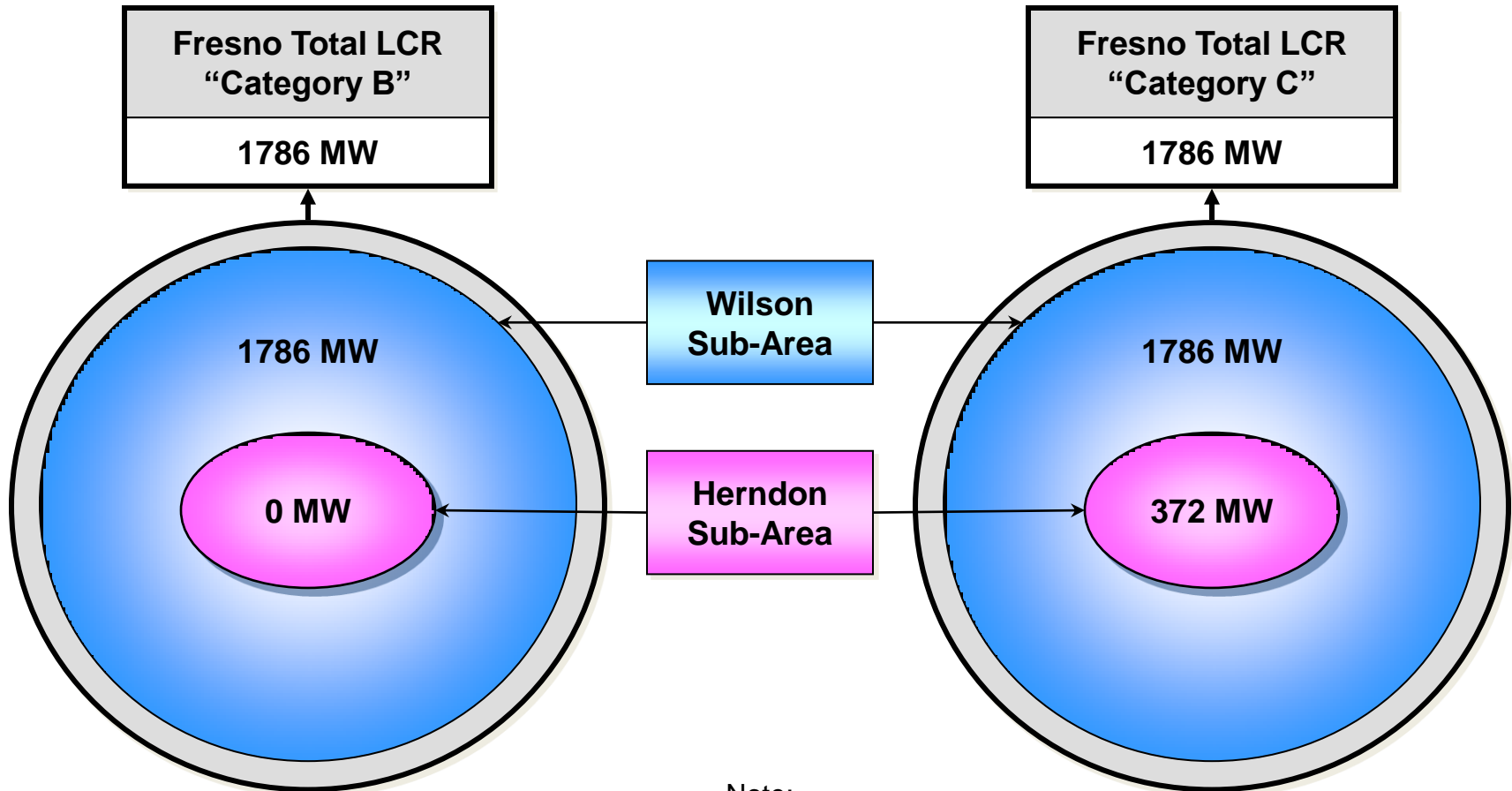
Including:

QF	41	41
Muni	99	99
Deficiency	0	0



# Fresno Area LCR

## Summary of 2013 LCR



Note:

In the Fresno area, due to overlapping of LCR sub-areas, the "Fresno Total LCR" is *not* a simple sum, but rather an aggregated sum of LCR in individual sub-areas.

# Changes

## Since last year:

- 1) Load has decreased by 86 MW
- 2) Overall LCR reduced by 121 MW.

**Your comments and questions are welcome.**

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