

# Local Capacity Requirements (LCR) for Year 2009 Study Results for the SDG&E Area



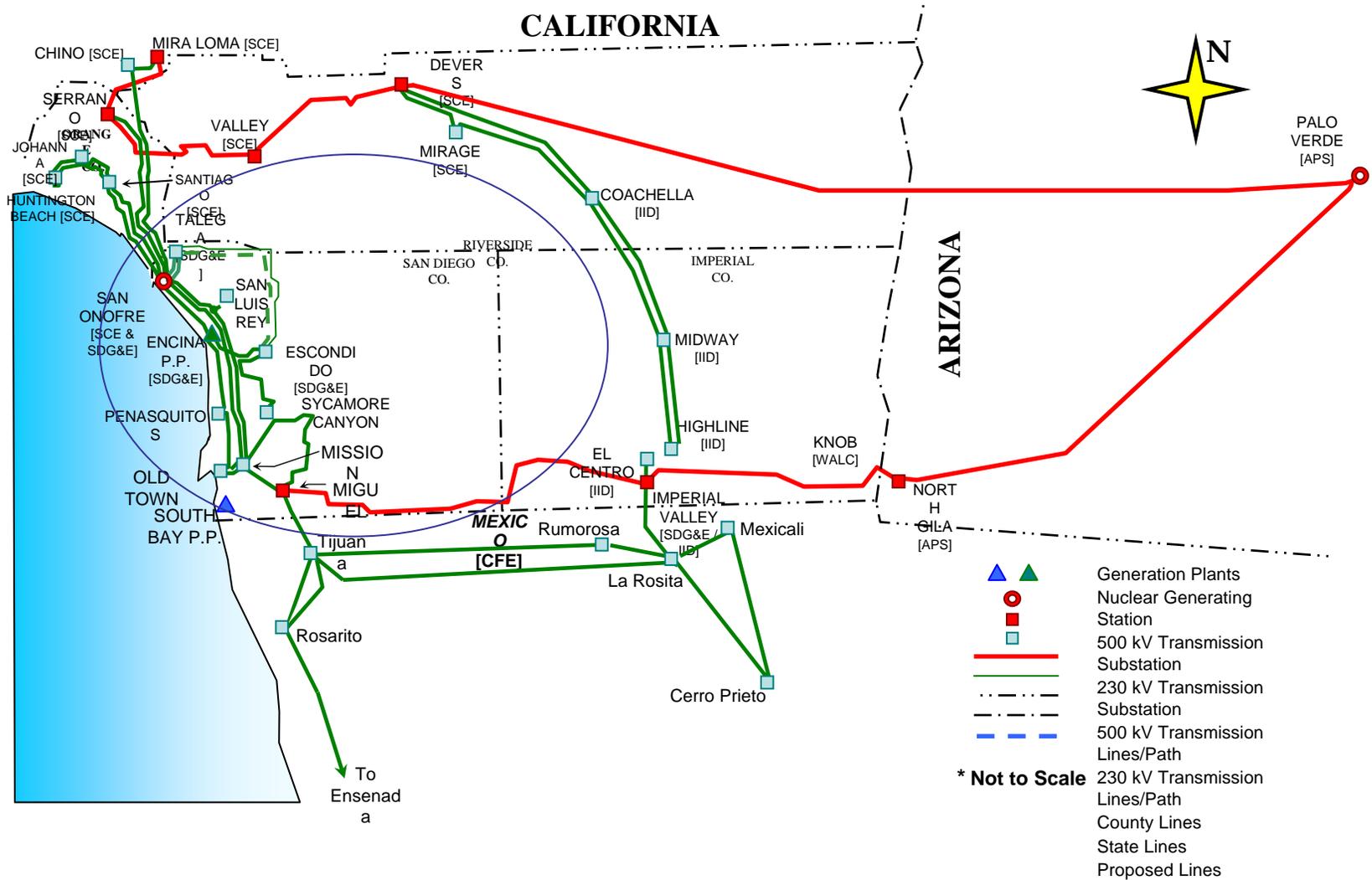
LCR Stakeholder Meeting, March 4<sup>th</sup>, 2008, Folsom CA



**California ISO**  
Your Link to Power

Ruhua You  
Regional Transmission Engineer  
Department of Planning and Infrastructure Development  
California Independent System Operator (CAISO)

# San Diego LCR Area



# San Diego Area Boundary Transmission Lines

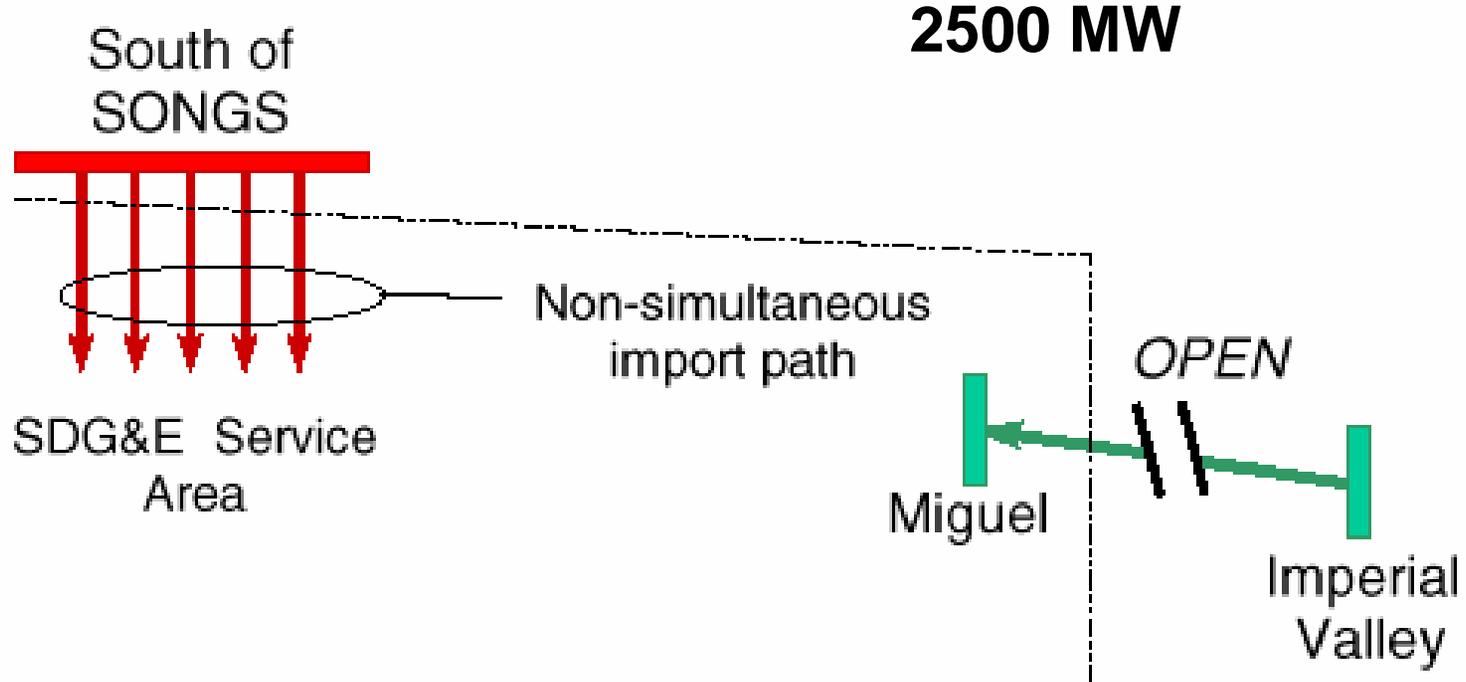
- 1) Imperial Valley – Miguel 500 kV Line
- 2) Otay Mesa – Tijuana 230 kV Line
- 3) San Onofre - San Luis Rey #1 230 kV Line
- 4) San Onofre - San Luis Rey #2 230 kV Line
- 5) San Onofre - San Luis Rey #3 230 kV Line
- 6) San Onofre – Talega #1 230 kV Line
- 7) San Onofre – Talega #2 230 kV Line

## San Diego Area Load and Resources (MW)

<b>Total 1 in 10 Load</b>	<b>5052</b>
<b>Generation</b>	
Market Generation	3411
Muni Generation	0
QF Generation	201
<b>Total Qualifying Capacity</b>	<b>3612</b>
SDG&E Non-simultaneous Import capability with a segment of SWPL Out	2500

# SDG&E Non-simultaneous Import Capability

## Non-Simultaneous



# Critical SDG&E Area Contingencies

## **El Cajon Sub-area**

- Contingency: the loss of El Cajon-Jamacha 69 kV line followed by the loss of Miguel-Granite-Los Coches 69 kV line
- LCR requirement: 100 MW (includes 0 MW of QF and 45 MW of deficiency)
- Limiting component: Thermal overload on the El Cajon-Los Coches 69 kV line

## **Rose Canyon Sub-area**

- Contingency: the loss of Old Town-Pacific Beach 69 kV line followed by the loss of Rose Canyon-Penasquitos 69 kV line
- LCR requirement: 55 MW (includes 0 MW of QF)
- Limiting component: thermal overload on the Eastgate – Rose Canyon 69 kV line

# Critical SDG&E Area Contingencies

## **Bernardo Sub-area**

- Contingency: the loss of Artesian - Sycamore 69 kV line followed by the loss of Poway-Rancho Carmel 69 kV line
- LCR requirement: 72 MW (includes 0 MW of QF and 34 MW of deficiency)
- Limiting component: Thermal overload on the Felicita Tap – Bernardo 69 kV line

## **Border-Otay Sub-area**

- Contingency: the loss of Border – Miguel followed by the loss of Imperial Beach-Otay-Syo 69 kV line
- LCR requirement: 27 MW
- Limiting component: thermal overload on Otay – Otay Lake Tap

# Critical SDG&E Area Contingencies

## South Bay Sub-area

- Contingency: the loss of South Bay-Grant Hill 138 kV line
- LCR requirement: 445 MW (include 0 MW of QF and 261 MW of deficiency)
- Limiting component: South Bay 138/69 kV Bank

## San Diego Overall

- Contingency: the loss of Southwest Power Link with the Otay Mesa Combined Cycle power plant out of service
- LCR requirement: 3113 MW
- Limiting component: South of San Onofre (Path 44) non-simultaneous import capability 2500 MW

## San Diego Area LCR Need

	<b>QF (MW)</b>	<b>Wind (MW)</b>	<b>Market (MW)</b>	<b>Max. Qualifying Capacity (MW)</b>
<b>Available generation</b>	193	8	3411	3612

	<b>Existing Generation Capacity Needed (MW)</b>	<b>Deficiency (MW)</b>	<b>Total MW Requirement</b>
<b>Category B (Single)</b>	3113	261	3374
<b>Category C (Multiple)</b>	3113	340	3453

Each unit is only counted once, regardless in how many sub-areas it is needed.

The change from 2008 to 2009 LCR is due to the load growth and Otay Mesa Generation coming online.

# Stakeholder Comments



**Your comments and questions are welcome**

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