

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



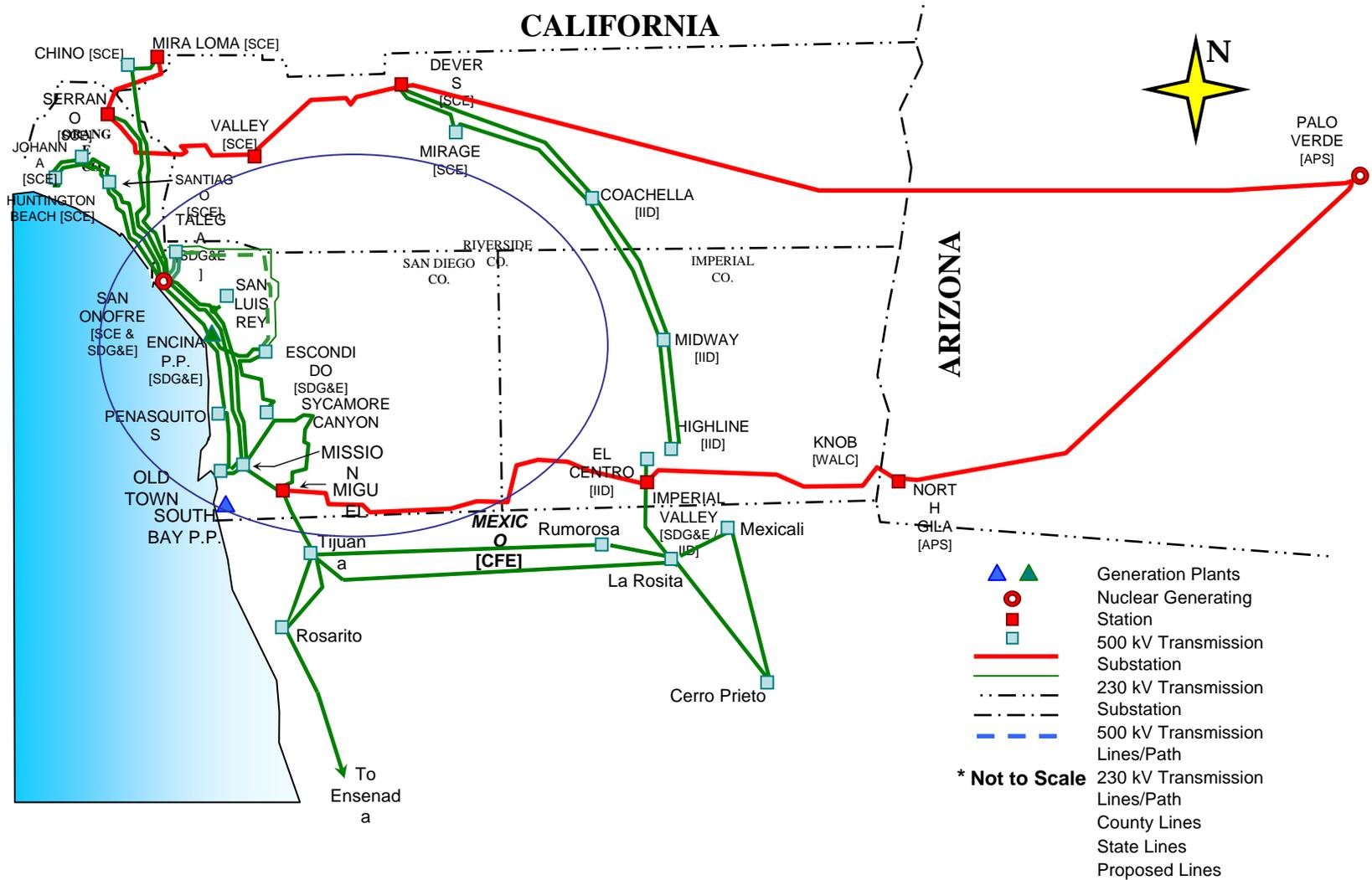
LCR Stakeholder Meeting, April 10th, 2008, Folsom CA



California ISO
Your Link to Power

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Department of Planning and Infrastructure Development
California Independent System Operator (CAISO)

San Diego LCR Area



San Diego Area Boundary Transmission Lines

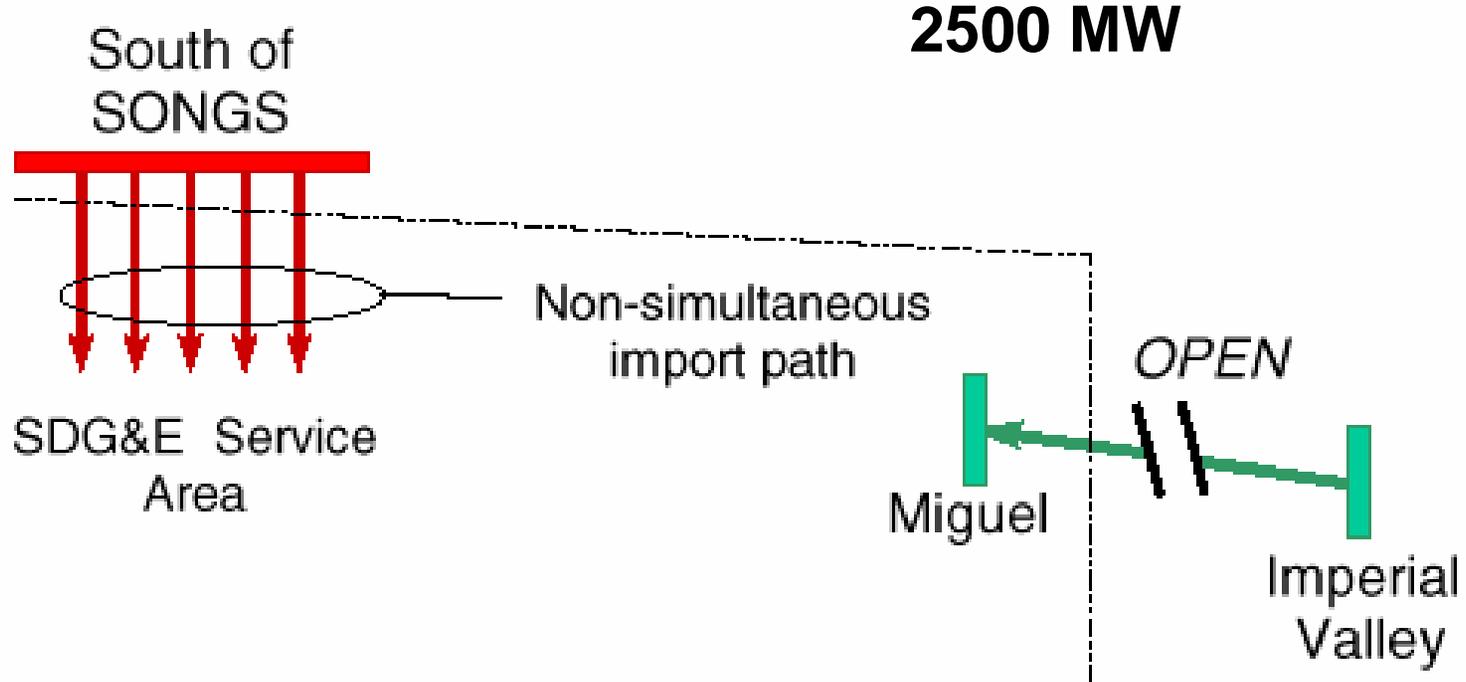
- 1) Imperial Valley – Miguel 500 kV Line
- 2) Otay Mesa – Tijuana 230 kV Line
- 3) San Onofre - San Luis Rey #1 230 kV Line
- 4) San Onofre - San Luis Rey #2 230 kV Line
- 5) San Onofre - San Luis Rey #3 230 kV Line
- 6) San Onofre – Talega #1 230 kV Line
- 7) San Onofre – Talega #2 230 kV Line

San Diego Area Load and Resources (MW)

Total 1 in 10 Load	5052
Generation	
Market Generation	3462
Muni Generation	0
QF Generation	201
Total Qualifying Capacity	3663
SDG&E Non-simultaneous Import capability with a segment of SWPL Out	2500

SDG&E Non-simultaneous Import Capability

Non-Simultaneous



Changes since last Stakeholder meeting

San Diego:

- Updated NQC data
- Used Higher 30-minute rating for the South Bay 138/69 kV Transformer Bank

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: 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: 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: 72 MW (includes 0 MW of QF and 32 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: 27 MW (includes 0 MW of QF)
- 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: 146 MW (include 6 MW of QF)
- 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: 3113 MW (include 201 MW of QF/Wind)
- Limiting component: South of San Onofre (Path 44) non-simultaneous import capability 2500 MW

San Diego Area LCR

	QF (MW)	Wind (MW)	Market (MW)	Max. Qualifying Capacity (MW)
Available generation	192	9	3462	3663

	Existing Generation Capacity Needed (MW)	Deficiency (MW)	Total MW LCR
Category B (Single)	3113	0	3113
Category C (Multiple)	3113	77	3190

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

Changes since the 2008 LCR study

Total San Diego LCR has slightly increased

- Load forecast is up by 60 MW
- New sub-area analysis presented
- Three new peakers and two small resources modeled in the area
- Otay Mesa Power Plant
- Otay Mesa replaces Palomar as the biggest single generator outage and increase the LCR by 20 MW
- Overall the LCR has increased by 80 MW

Stakeholder Comments



Your comments and questions are welcome

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