

SCE's Ability to Power I-710 Electrical Goods Movement Systems

TSWG Meeting
October 5, 2009
Russell.Neal@sce.com

Issues

- Power Generation
- Transmission
- Distribution
- Process

Power Needs of Green Line



Supplied at 14 points. Total of all peak loads is 7 MW

Average total load is much lower

Power Needs of Blue Line



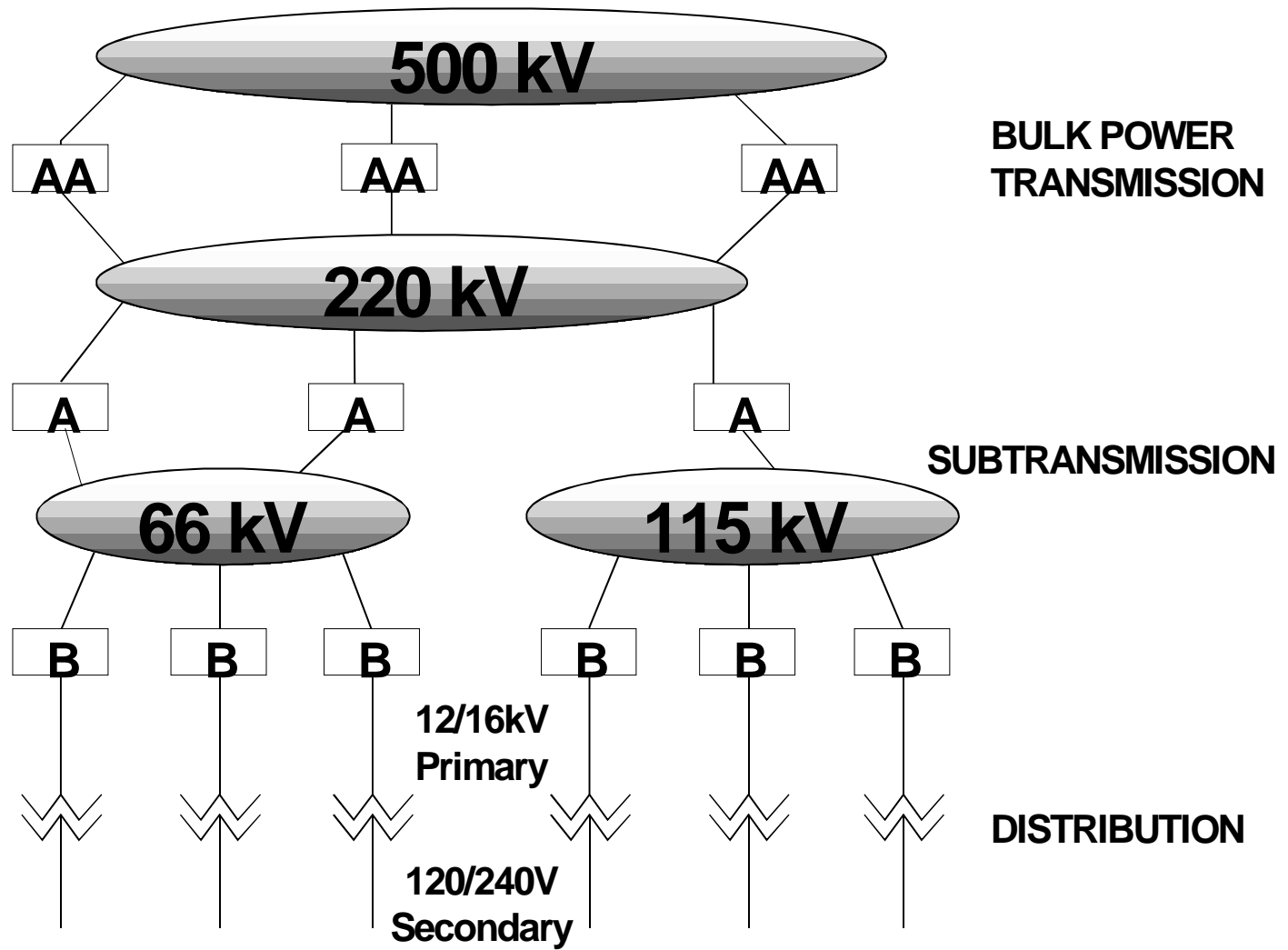
Supplied at 15 points. Total of all peak loads is 12 MW

Average total load is much lower

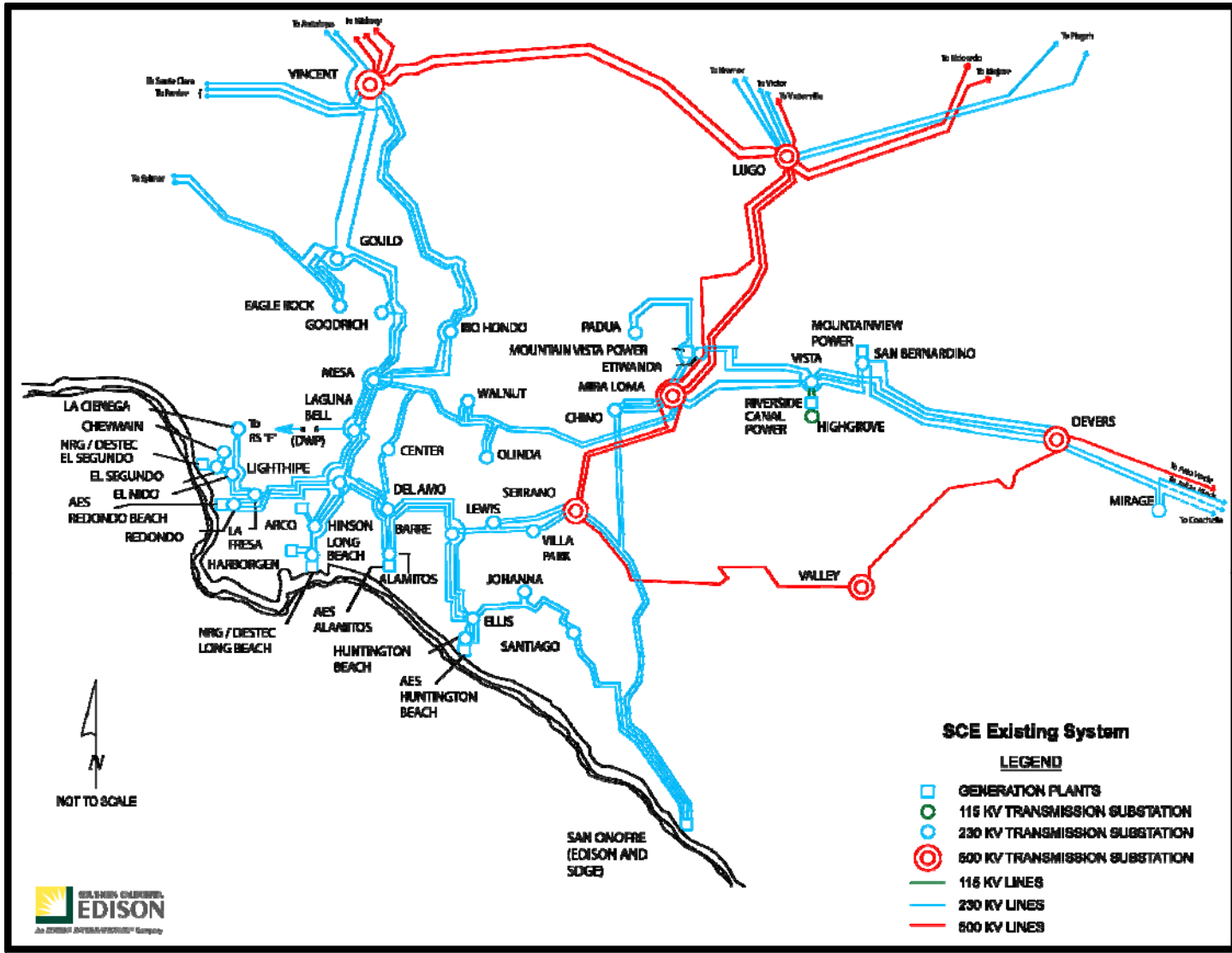
Estimate Power Needs

- Assume twice the load of Green and Blue Lines (38MW)
- SCE peak load was 23,000 MW
- One Distribution Substation transformer is 28 MW
- Possible loads are not large relative to electric system
- General issues
 - 33% RPS
 - Once Through Cooling Coastal Plant Shutdown

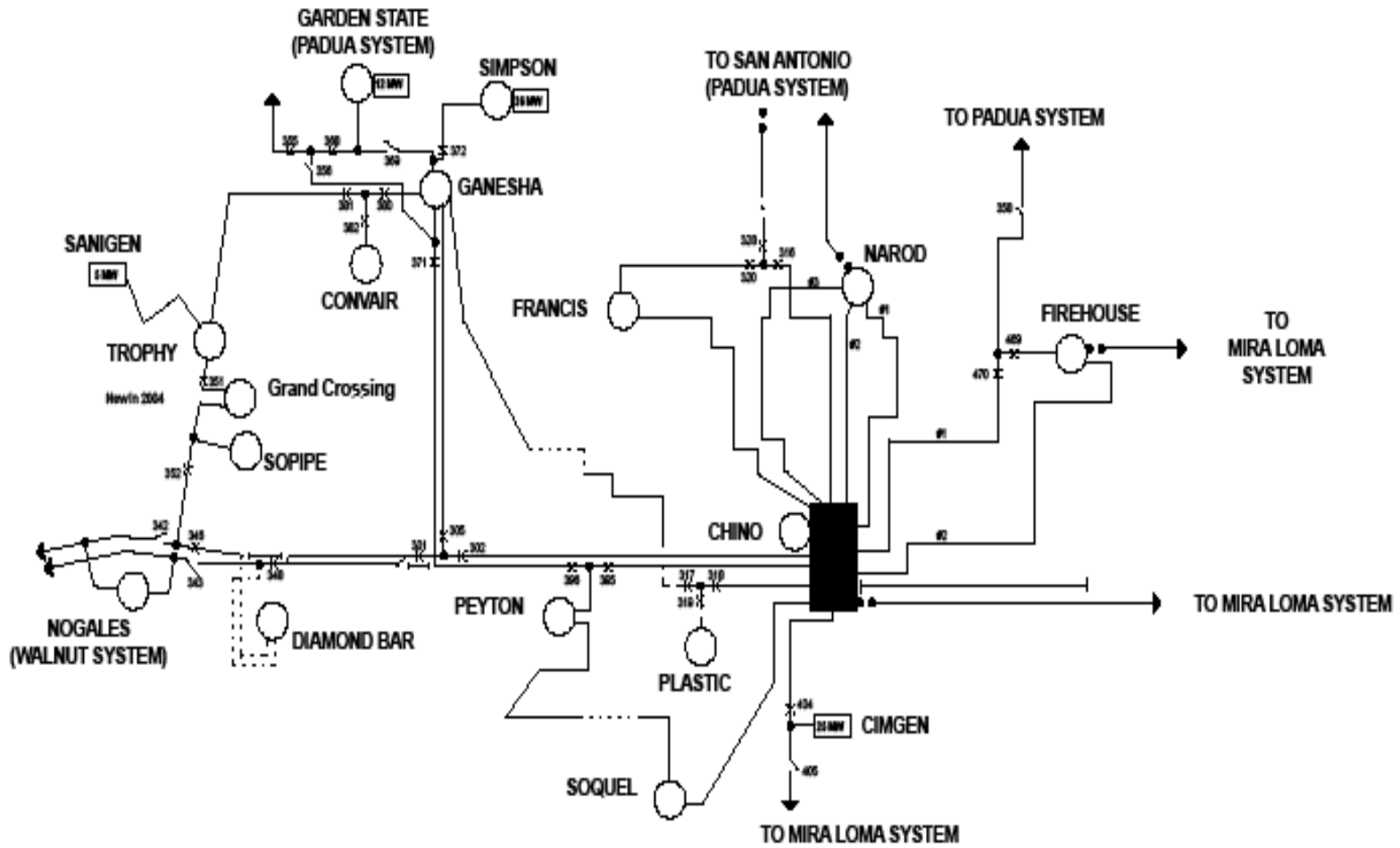
Our System



Our Transmission System



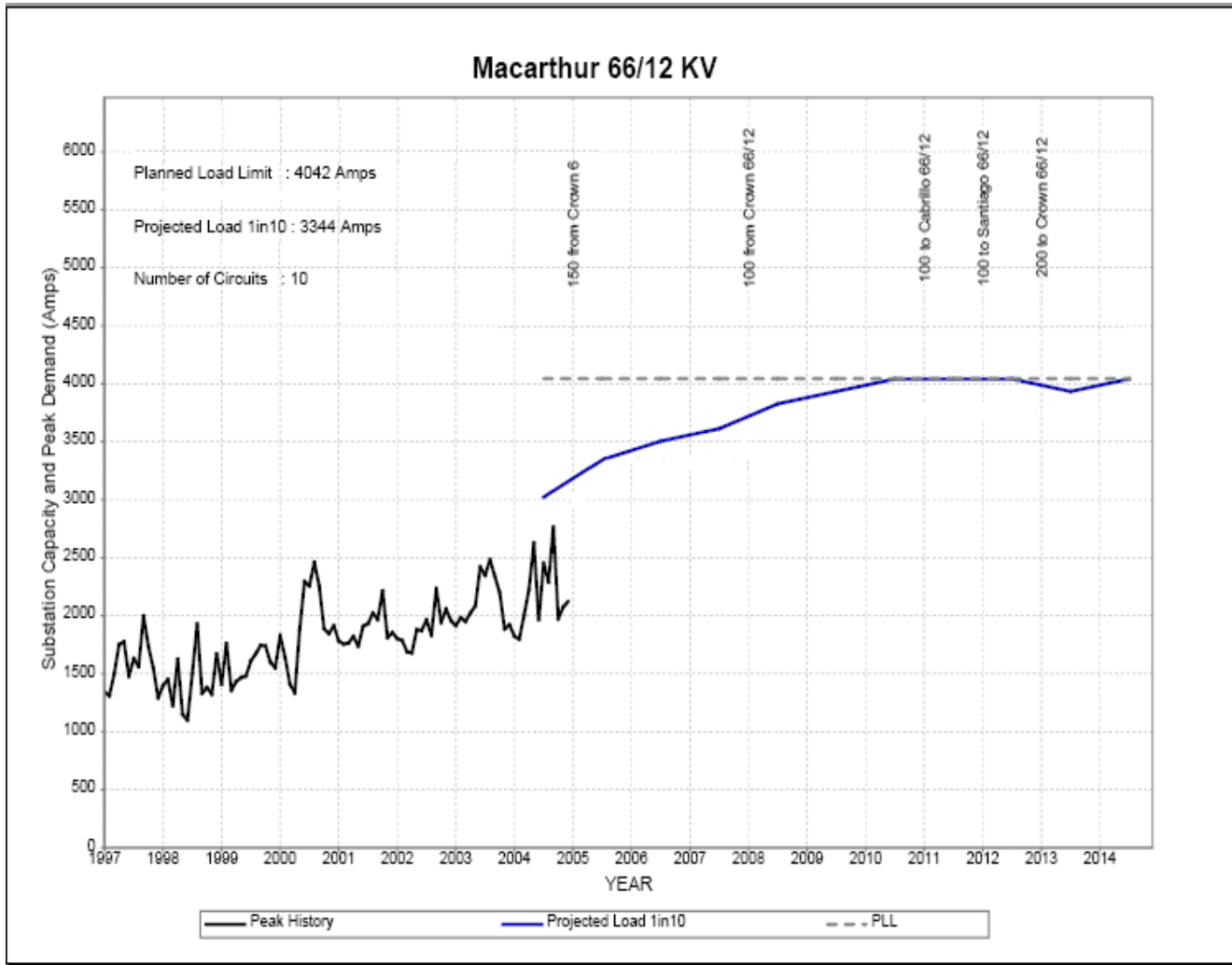
The Chino Subtransmission System



Load Growth Methodology

- Bottom-Up Forecast
 - By distribution substation
 - Historical growth rates
 - Known projects Area studies
- Top-Down Reconciliation
 - Comparison to economic forecasts

Typical Substation



Substation Capacities

- Three Large "A" Transmission Substations along I-710 projected to have 450 MW of surplus capacity in 2019.
 - Hinson, Lighthipe, Laguna Bell
- Eighteen "B" Distribution Substations along I-710 projected to have 235 MW of surplus capacity in 2019.

Conclusion

- SCE will have more than adequate power to supply any electric goods movement system along the I-710 corridor.
- SCE's planning process reviews load growth annually and adjusts to ensure load is served.
- Adjustments to electrical system can be made to support any transportation project.