



ITEM A

# *SDIA Power Briefing*

July 12, 2012

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San Diego County Regional Airport Authority










# Agenda

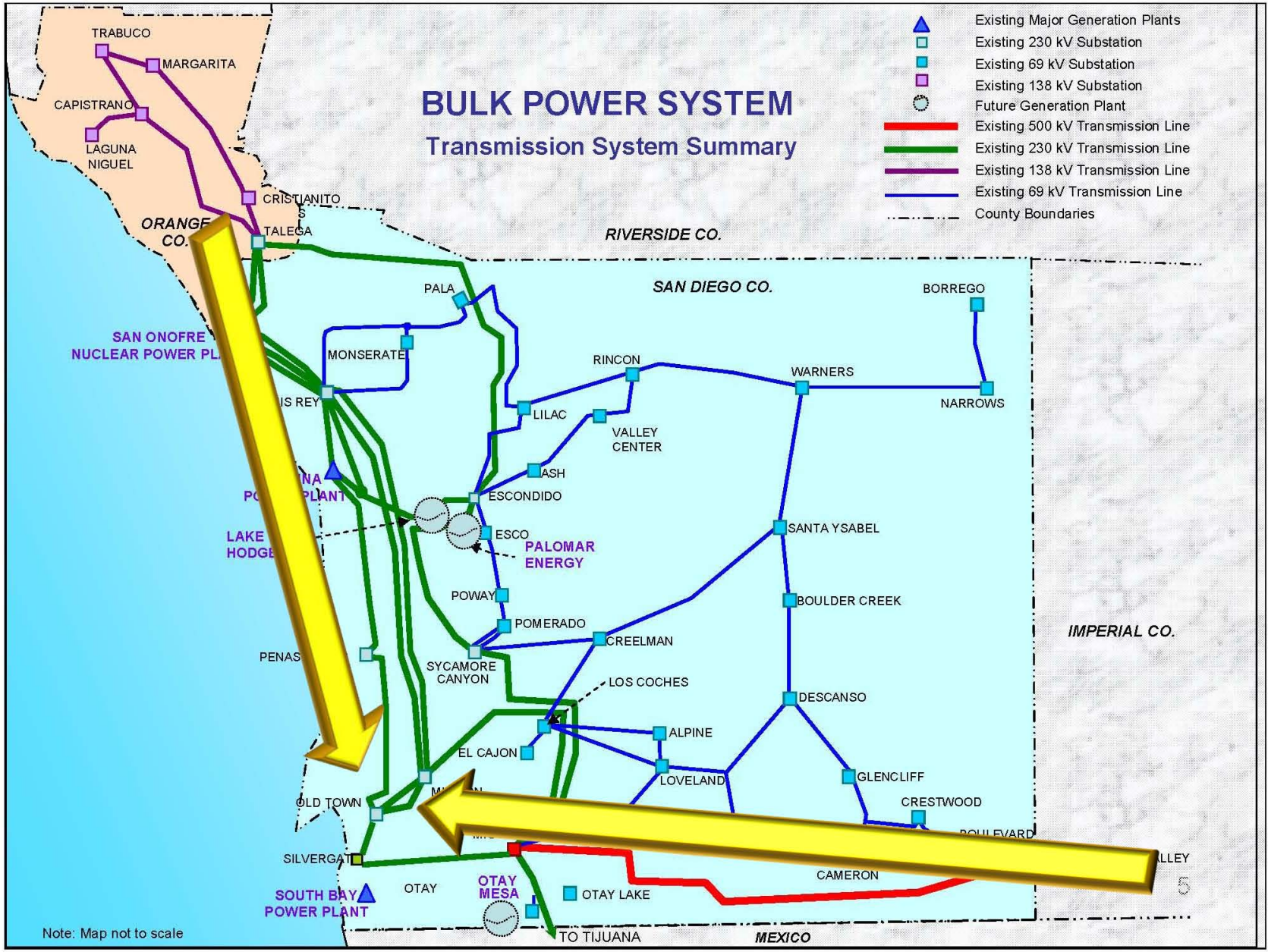
- Where we get power
- How power is distributed
- Terminal Load and Backup Power
- Planned Infrastructure
- Future Demand/Cost
- Future Planning



# BULK POWER SYSTEM

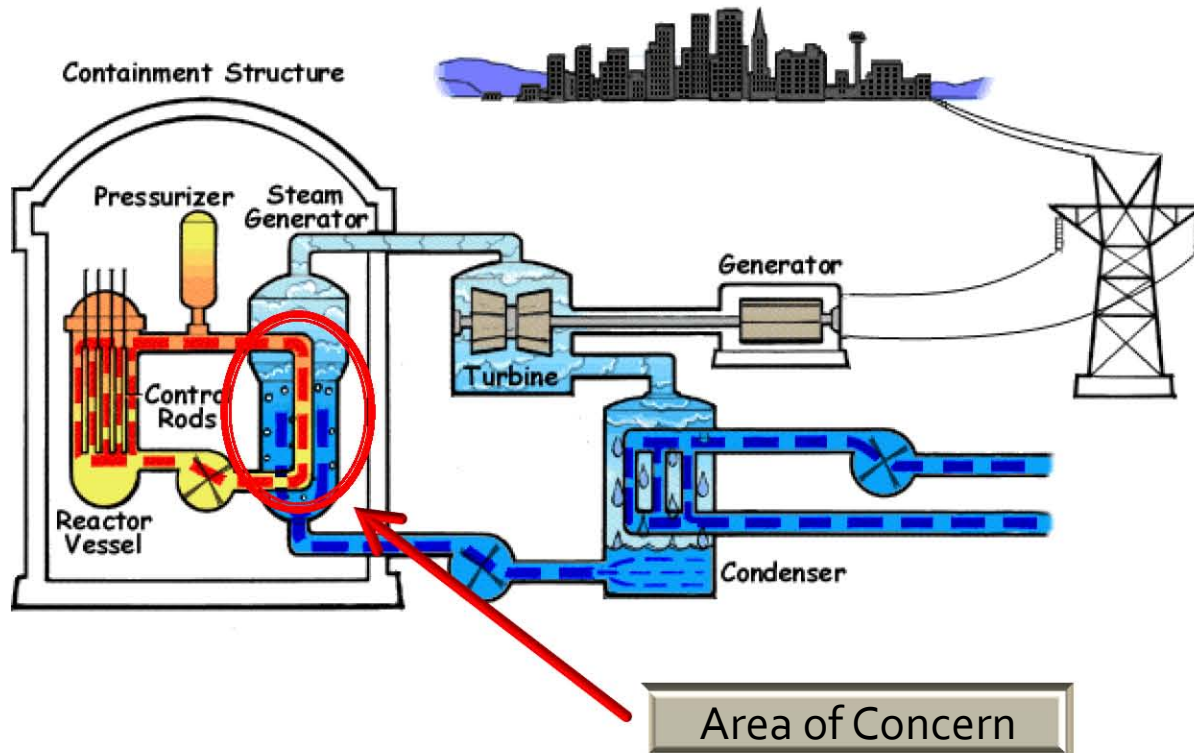
## Transmission System Summary

-  Existing Major Generation Plants
-  Existing 230 kV Substation
-  Existing 69 kV Substation
-  Existing 138 kV Substation
-  Future Generation Plant
-  Existing 500 kV Transmission Line
-  Existing 230 kV Transmission Line
-  Existing 138 kV Transmission Line
-  Existing 69 kV Transmission Line
-  County Boundaries



Note: Map not to scale

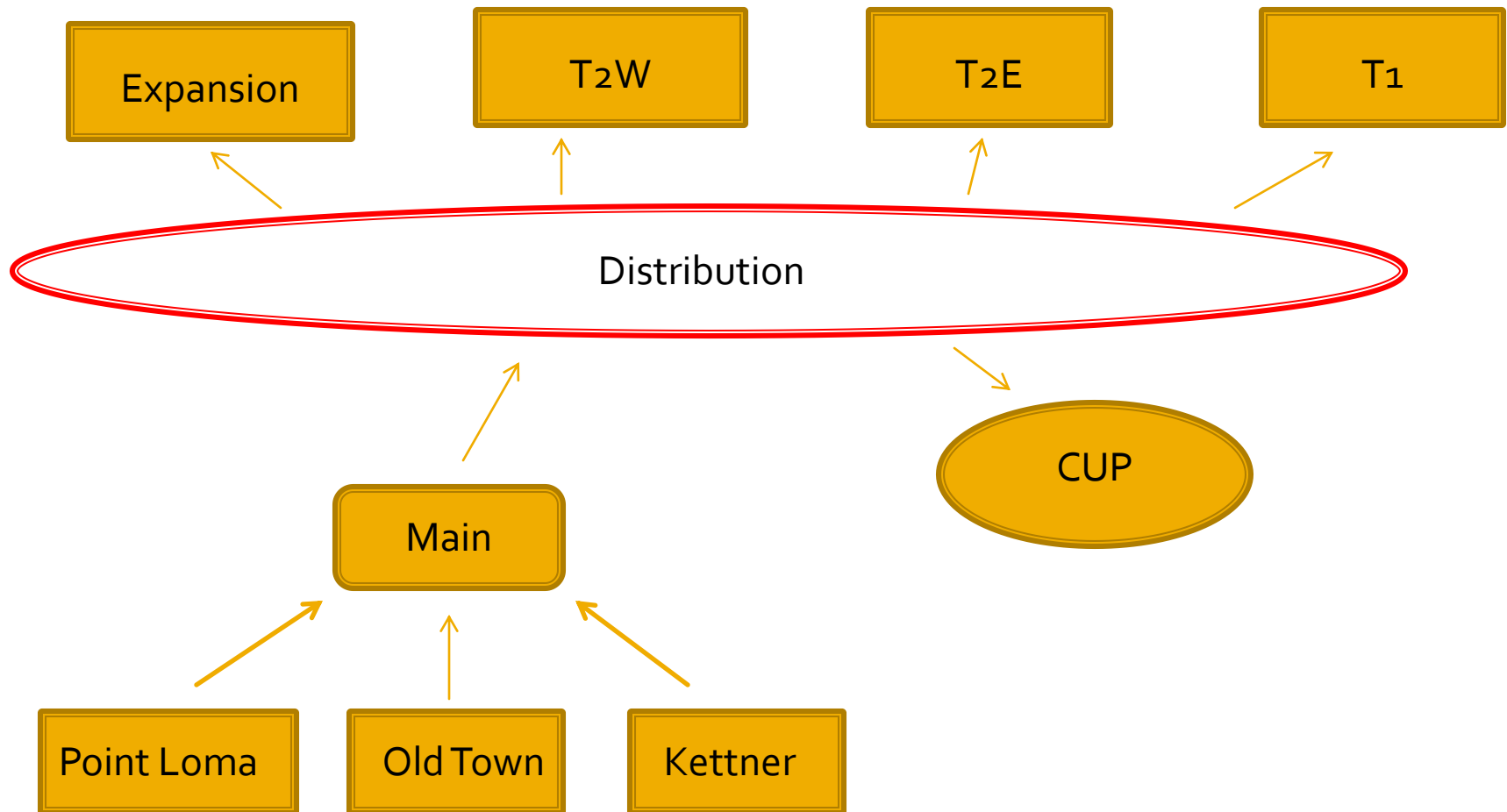
# Reactor Cycle



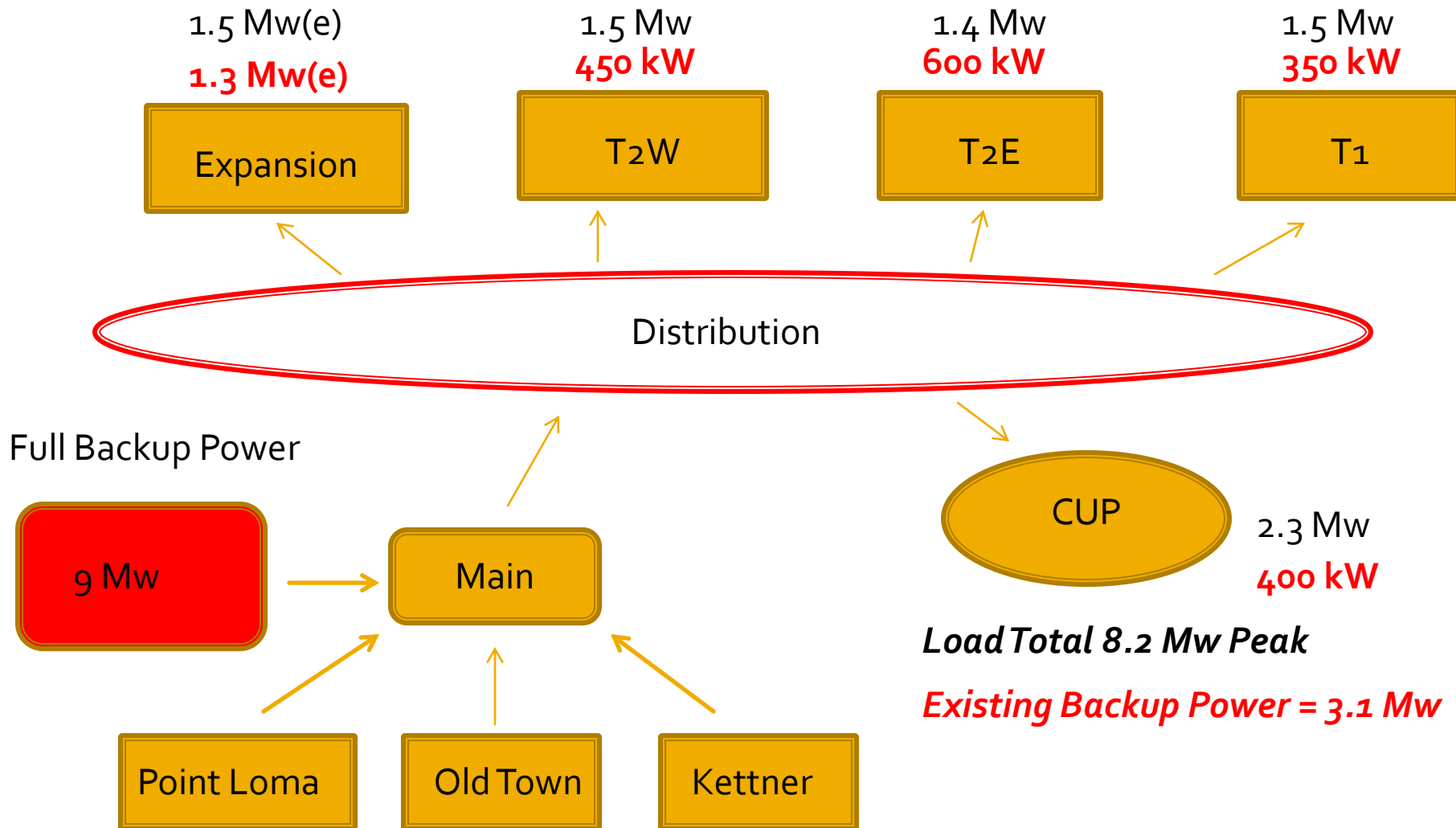
# Local Supply Points



# Terminal Distribution

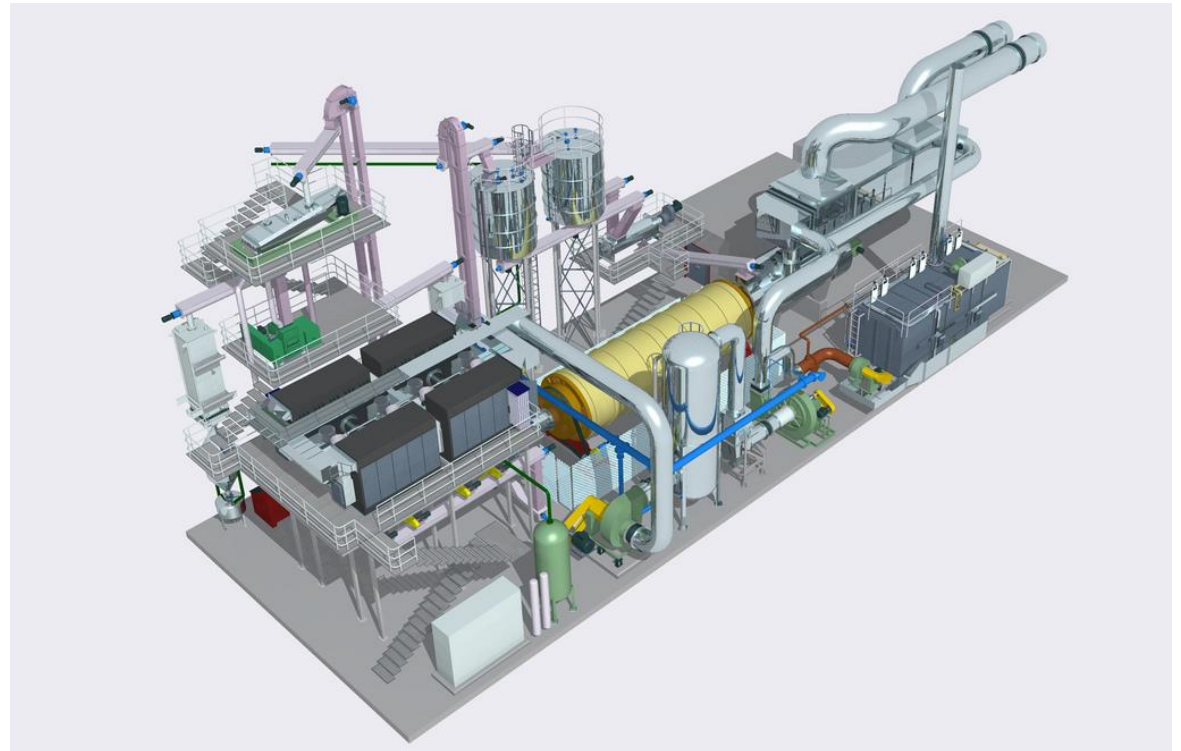


# Terminal Load and Backup Power



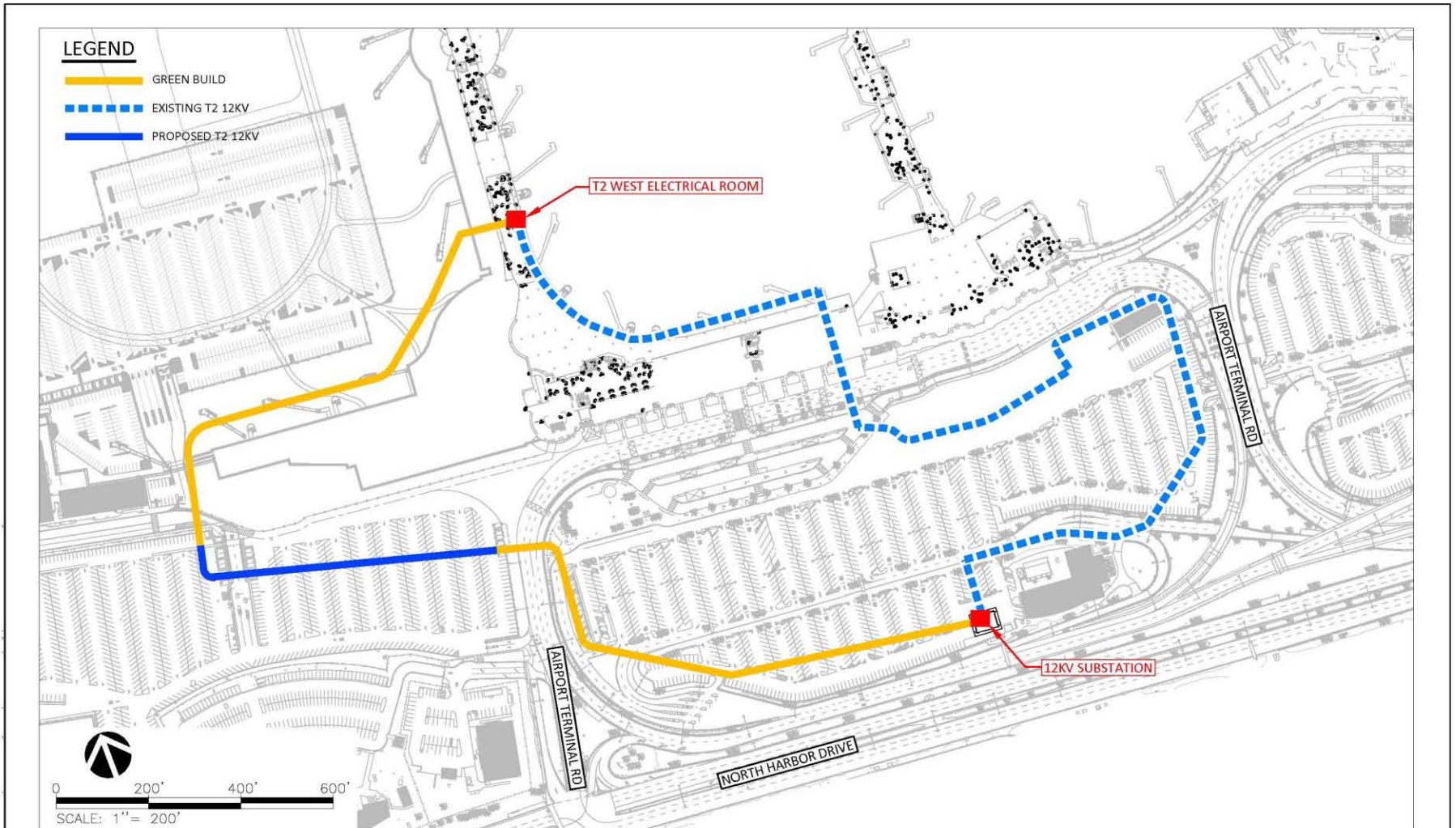
# Backup System

- Potential Project Cost for 9Mw
  - \$13M to \$20M



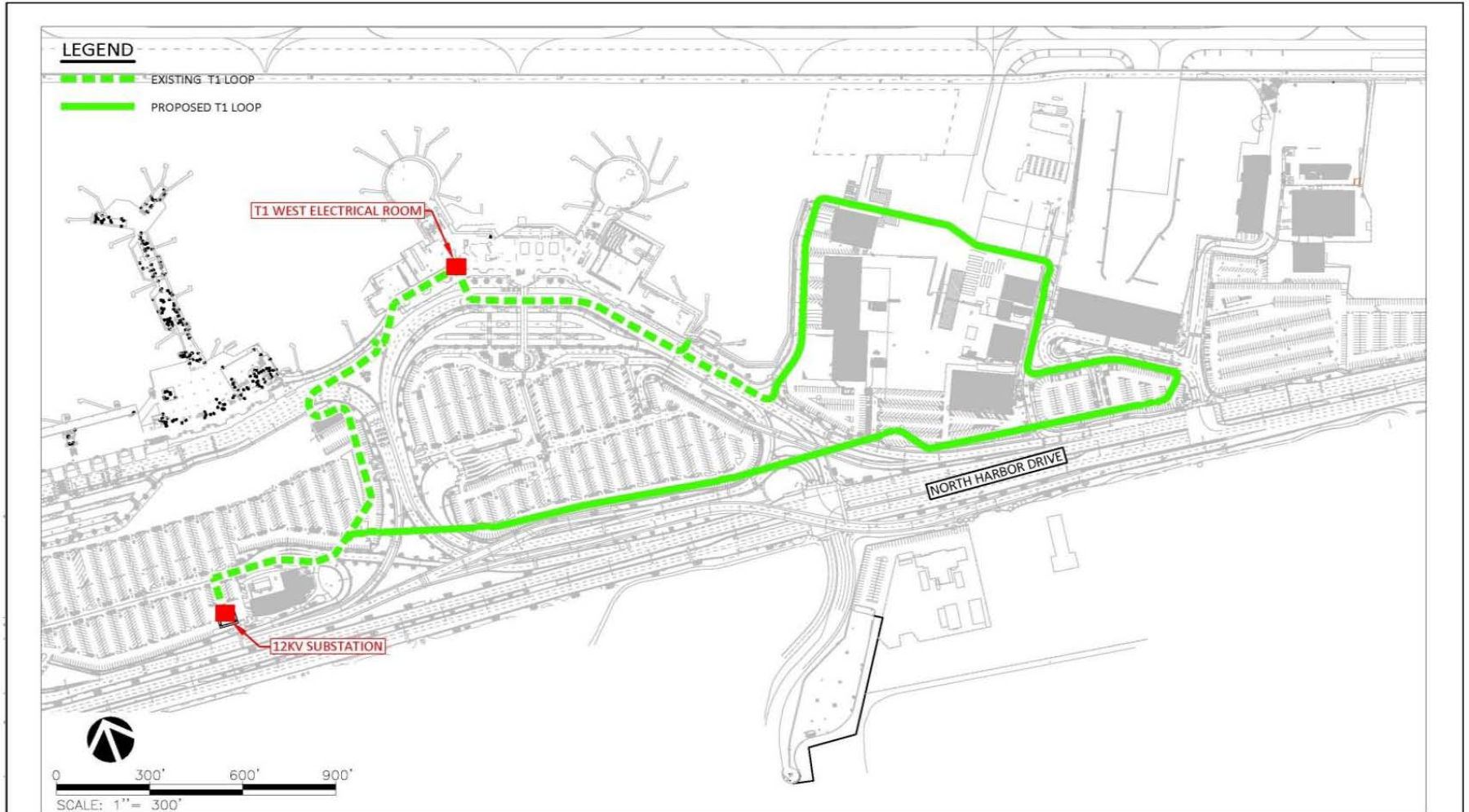


# Terminal 2 Loop



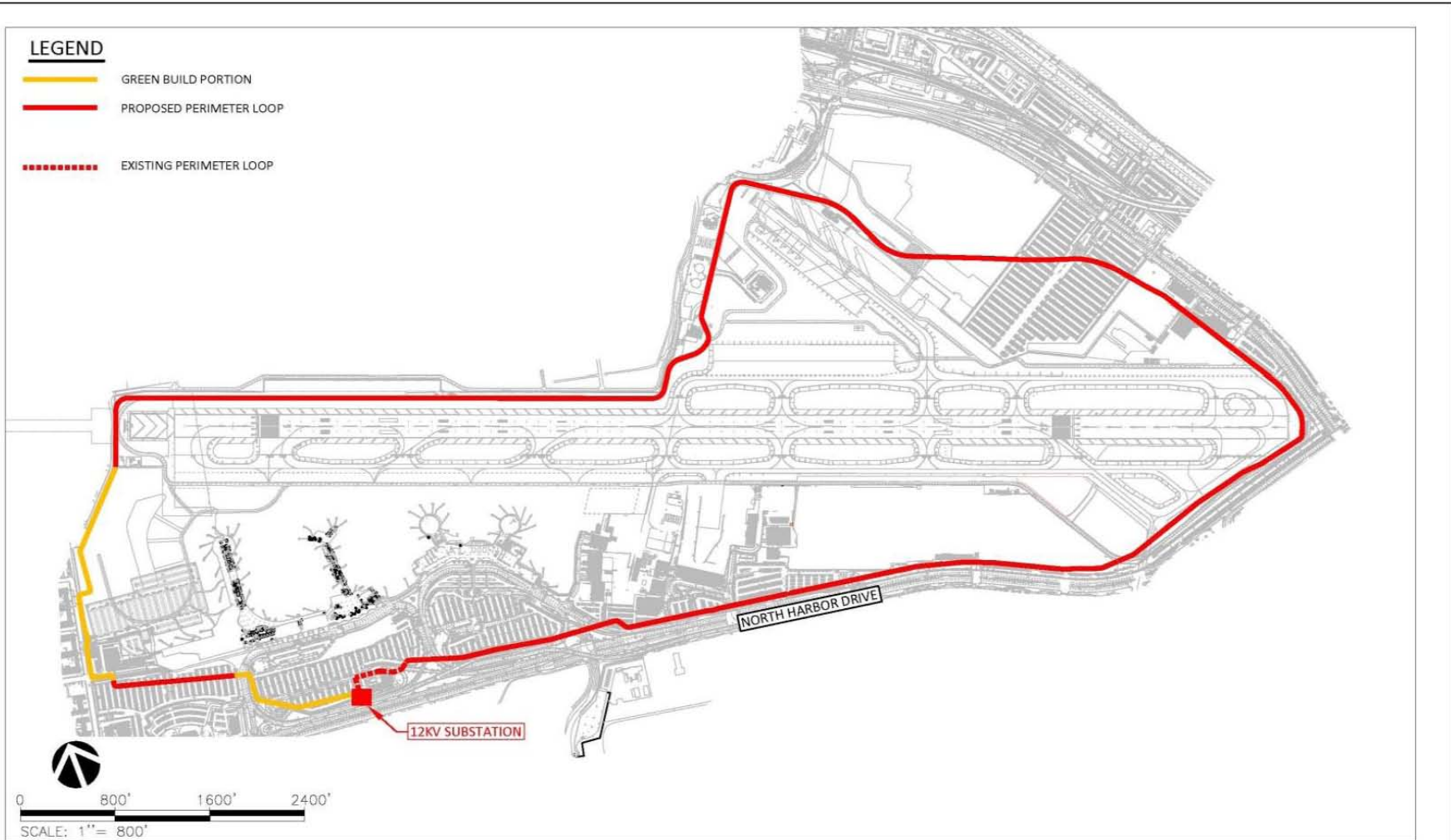
T2 LOOP

# Terminal 1 Loop



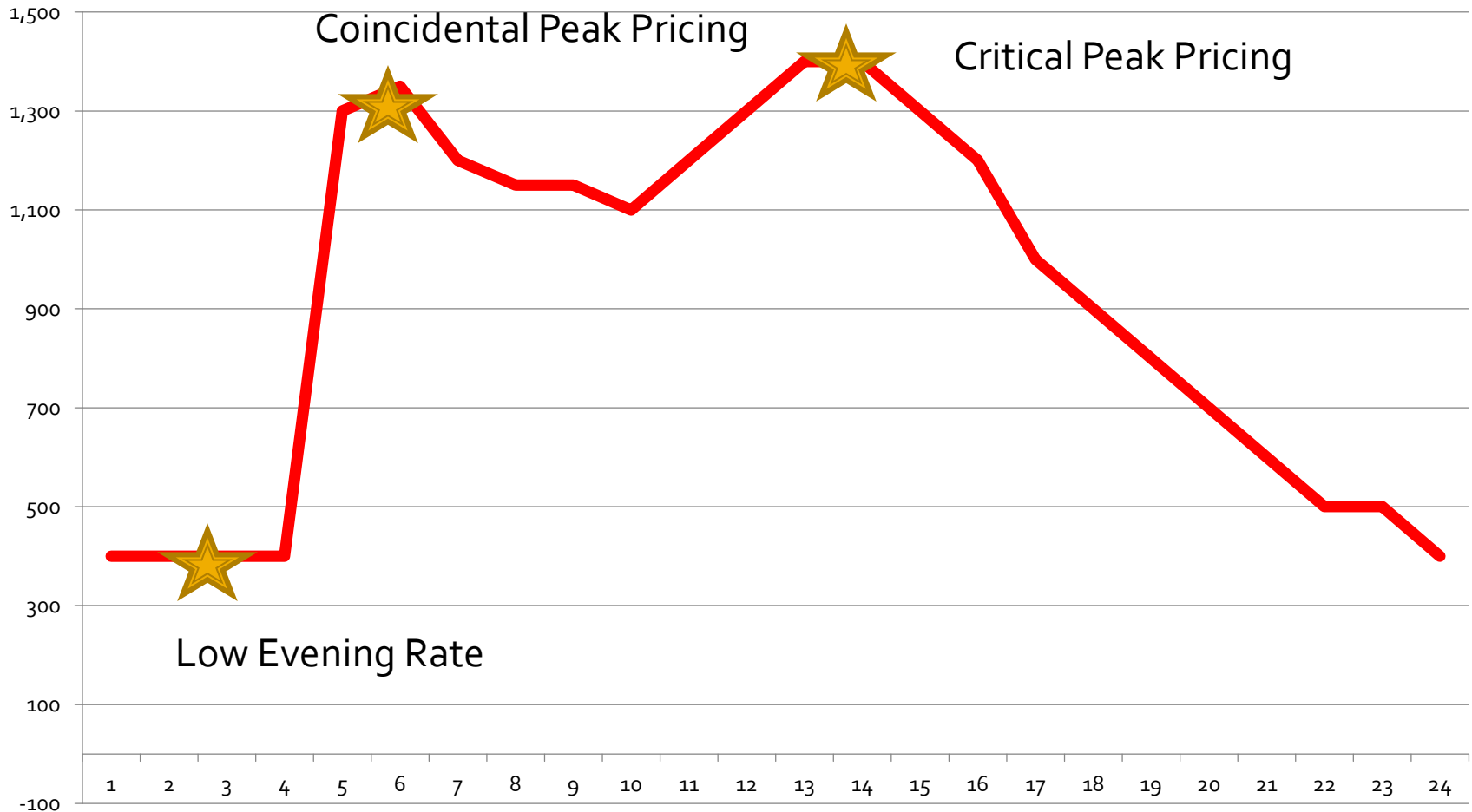
T1 LOOP

# Perimeter Loop

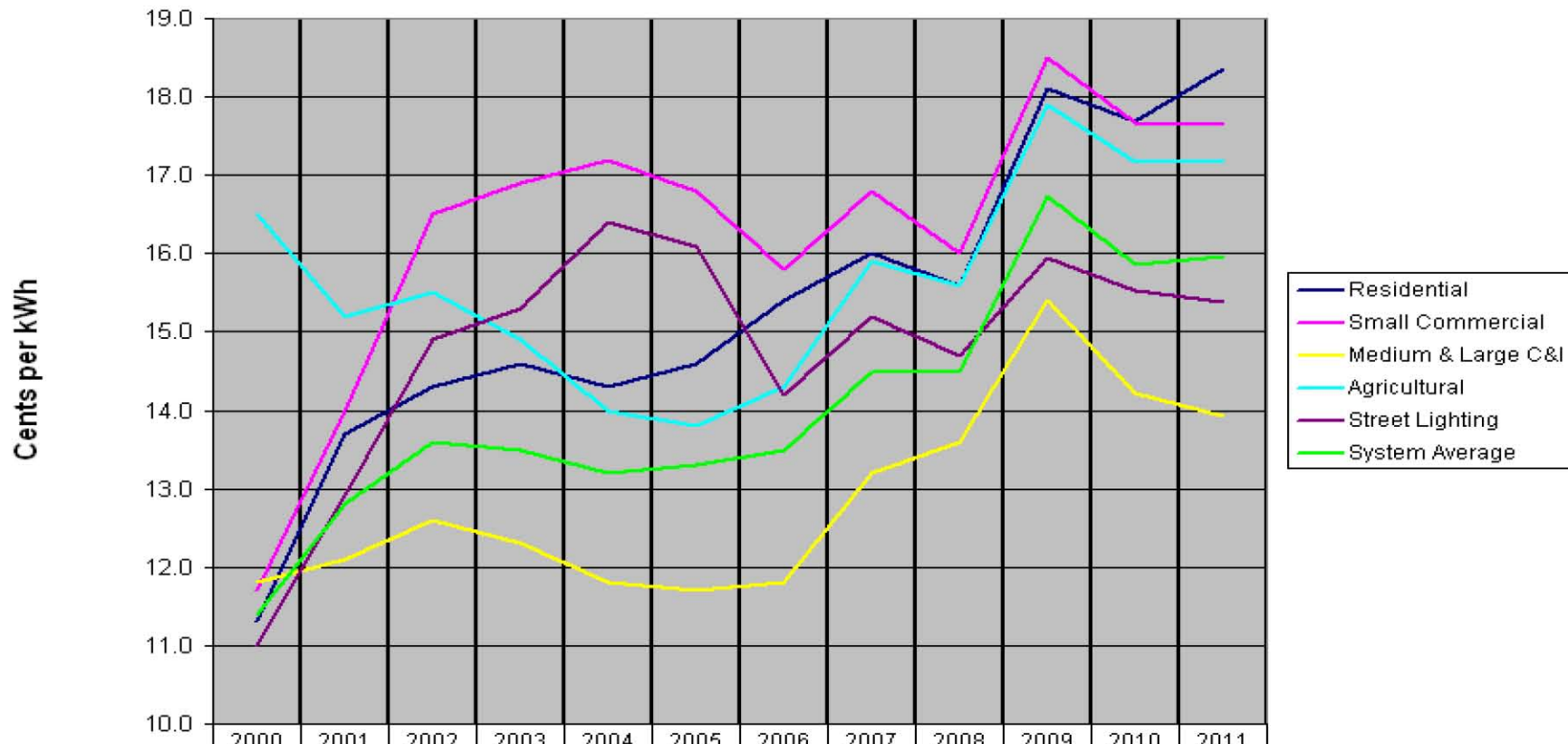


PERIMETER LOOP

# Airport Load Profile



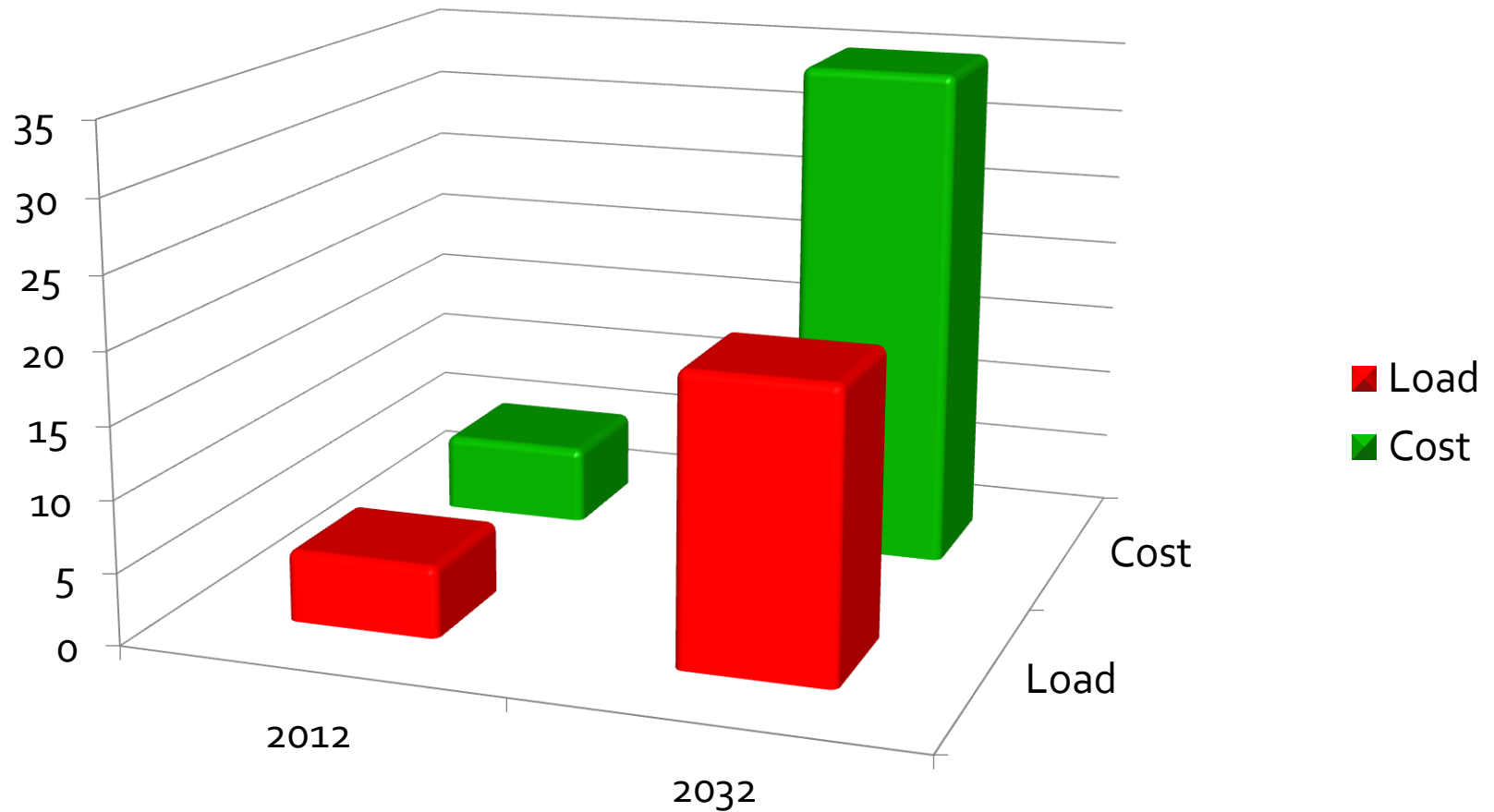
# SDG&E Average Bundled Rates by Class: 2000-2011



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Residential	11.3	13.7	14.3	14.6	14.3	14.6	15.4	16.0	15.6	18.1	17.7	18.4
Small Commercial	11.7	14.0	16.5	16.9	17.2	16.8	15.8	16.8	16.0	18.5	17.7	17.6
Medium & Large C&I	11.8	12.1	12.6	12.3	11.8	11.7	11.8	13.2	13.6	15.4	14.2	13.9
Agricultural	16.5	15.2	15.5	14.9	14.0	13.8	14.3	15.9	15.6	17.9	17.2	17.2
Street Lighting	11.0	12.9	14.9	15.3	16.4	16.1	14.2	15.2	14.7	15.9	15.5	15.4
System Average	11.4	12.8	13.6	13.5	13.2	13.3	13.5	14.5	14.5	16.7	15.9	16.0



# Projected Cost

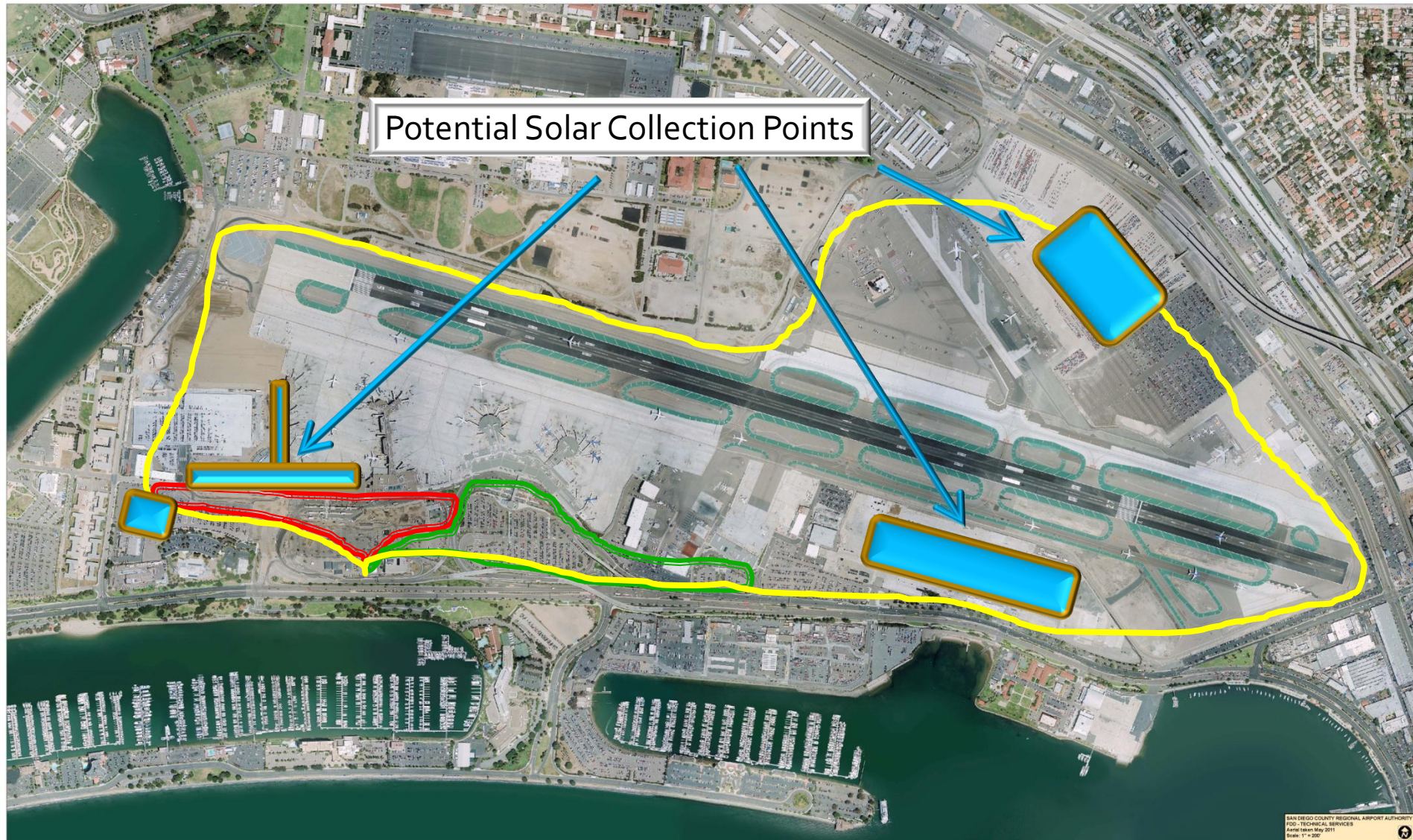


# Goal: Long term energy independence

- Installation of allowable Solar Power Systems
- Exploration of Co-generation
- Installation of low energy equipment
- Utilization of “Net Zero” energy designs
- Continued energy reduction initiatives

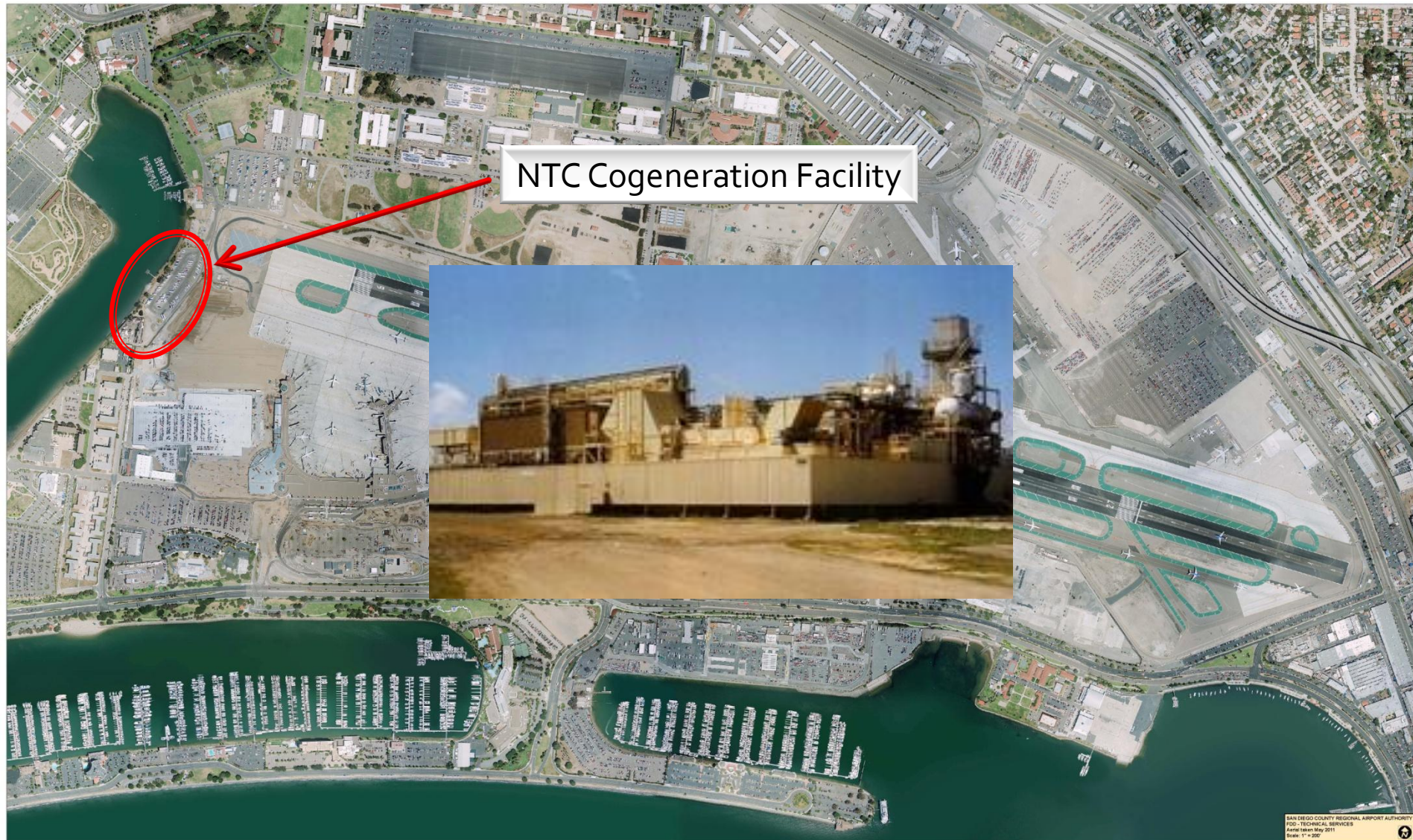


# Potential Solar Sites





# Co-Gen Viability



NTC Cogeneration Facility

# Questions

