

**LODI CITY COUNCIL  
SHIRTSLEEVE SESSION  
CARNEGIE FORUM, 305 WEST PINE STREET  
TUESDAY, JUNE 4, 2013**

A. Roll Call by City Clerk

An Informal Informational Meeting ("Shirtsleeve" Session) of the Lodi City Council was held Tuesday, June 4, 2013, commencing at 7:00 a.m.

Present: Council Member Hansen, Council Member Johnson, Mayor Pro Tempore Katzakian, and Mayor Nakanishi

Absent: Council Member Mounce

Also Present: City Manager Bartlam, City Attorney Schwabauer, and City Clerk Johl

B. Topic(s)

B-1 Receive Status Report on 230kV Interconnection Project (EUD)

City Manager Bartlam briefly introduced the subject matter of the proposed 230kV interconnection project.

Electric Utility Director Elizabeth Kirkley provided a PowerPoint presentation regarding the 230kV Interconnection Project. Specific topics of discussion included the existing 60kV grid inter-tie reliability and capacity, CAISO (California Independent System Operator) TAC (Transmission Access Charges) forecast, PG&E area study, CAISO Board approval of Lodi project and reliability projects, 230kV development project, industrial substation expansion, project time line and team, and the next steps for the project.

In response to Council Member Johnson, Ms. Kirkley stated staff asked not to include the CT (combustion turbine) in Lodi in the study so that additional considerations to bring service into town would not be included.

In response to Council Member Hansen, Ms. Kirkley stated both STIG (steam injected gas turbine) plants are included in the study.

In response to Mayor Pro Tempore Katzakian, Ms. Kirkley stated the utility pays both TAC charges because it is using both the high and low grids.

In response to Mayor Nakanishi, Ms. Kirkley stated PG&E should use the 130MW figure instead of 152MW in the study so that it can see the need for capacity.

In response to Mayor Nakanishi, Ms. Kirkley stated without renewables the light and dark green portions of the graph on the forecast slide would be eliminated.

In response to Council Member Hansen, Consultant Mike Keller stated 85% of the load shown on the Lockeford-Lodi Area Study map is service for the City.

In response to Council Member Hansen, Mr. Keller stated PG&E is no longer fighting building the project that was mandated upon it although various decisions pertaining to the actual route, environmental studies, and right-of-way access have yet to be made.

In response to Council Member Hansen, Ms. Kirkley stated the PG&E project increases reliability but other than that it is a separate issue with respect to the proposed line from the west, which

may still have some benefit and will be explored in the future.

In response to Council Member Hansen, Mr. Bartlam confirmed that PG&E may need to pay the City for use of the land shown on the industrial substation expansion slide.

In response to Council Member Johnson, Mr. Bartlam stated approximately half of the property would still be available after 230kV service completion.

In response to Council Member Hansen, Mr. Keller stated two transformers will need to be procured and there is approximately a one-year lead time on them.

In response to Council Member Hansen and Mayor Pro Tempore Katzakian, Mr. Bartlam confirmed that the City will need to upgrade its portion of the substation, which includes the two new transformers, prior to PG&E upgrading its portion, which includes the switching station.

In response to Council Member Hansen, Mr. Bartlam stated the City will need to manage and oversee the PG&E project with PG&E and through CAISO to ensure scheduling and consistency as it pertains to geography, property owner consultation, and environmental studies.

In response to Council Member Johnson, Ms. Kirkley and Mr. Bartlam confirmed that the \$20 million cost should see the project through completion in 2017, the approximate estimated cost of a line to the west is \$40 million, and PG&E's project includes both a double line and a 230kV connection instead of a 60kV connection. Mr. Bartlam stated a line to the west in the future may be beneficial because the City may pay less voltage charges but the proposed 230kV project before the Council currently remains the priority project because it provides both reliability and capacity at a shared cost.

In response to Mayor Pro Tempore Katzakian, Mr. Bartlam confirmed that the substation with the transformers is approximately \$15 million of the \$20 million total project cost.

In response to Mayor Pro Tempore Katzakian, Mr. Bartlam stated for comparable purposes General Mills uses 3MW.

In response to Mayor Nakanishi, Mr. Keller stated the CAISO operates PG&E-owned transmission lines throughout the State. Mr. Keller stated PG&E is the largest owner and he will provide the relevant information as to who owns the transmission lines percentage wise throughout the State.

In response to Ed Miller, Mr. Bartlam stated the substation is located at Thurman Street and Guild Avenue east of Highway 99 and payback on the proposed project with cost and finance charges is approximately ten years.

C. Comments by Public on Non-Agenda Items - None

D. Adjournment

No action was taken by the City Council. The meeting was adjourned at 8:00 a.m.

ATTEST:

Randi Johl  
City Clerk



**CITY OF LODI  
COUNCIL COMMUNICATION**

**AGENDA TITLE:** Receive Status Report on 230 kV Interconnection Project  
**MEETING DATE:** June 4, 2013  
**PREPARED BY:** Electric Utility Director

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**RECOMMENDED ACTION:** Receive presentation of the status report on the 230 kV Interconnection Project.

**BACKGROUND INFORMATION:** At a City Council Shirtsleeve Session held on December 6, 2011 the Electric Utility staff provided a status report regarding the City's electric transmission grid intertie. The presentation also included proposals staff had received from Pacific Gas and Electric Company and the California Independent System Operator (CAISO).

A number of meetings have been held since that time as part of the CAISO's 2012-2013 transmission planning process. This presentation will apprise the Council of the outcome of this process as well as outline the next steps the Electric Utility will be taking regarding the City's transmission grid intertie.

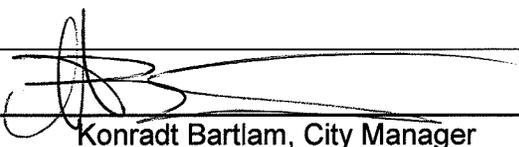
**FISCAL IMPACT:** Not applicable.

**FUNDING AVAILABLE:** Not applicable.

  
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Elizabeth A. Kirkley  
Electric Utility Director

EAK/lst

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**APPROVED:**   
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Konradt Bartlam, City Manager

June 4, 2013

City Council Shirtsleeve Session

# 230 kV Interconnection Project



# 230 kV Interconnection

- Existing 60 kV Grid Intertie
- Transmission Access Charges (TAC)
- PG&E Lockeford-Lodi Area Study
- CAISO Board Approved Projects
- 230 kV Project Timeline
- 230 kV Project Team
- Next Steps – FY 2013/14

# Existing 60 kV Grid Intertie

## ● Reliability

- 4 reported “city-wide” outages in past 7 years, the longest ~2.4 hours

## ● Capacity

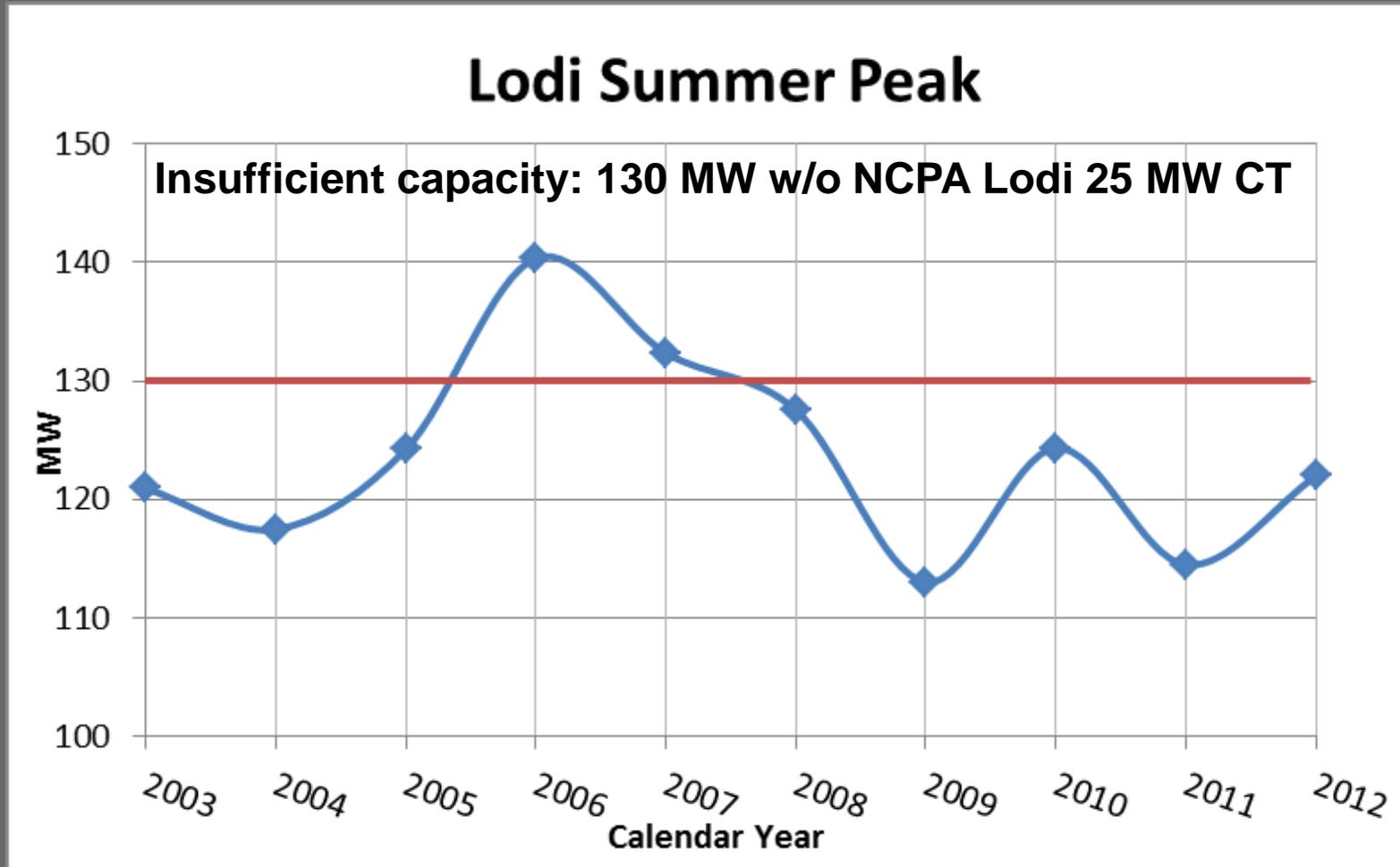
- ~130 MW w/o NCPA’s Lodi CT
- ~152 MW with CT running

## ● Transmission Access Charges (TAC)

- Low Voltage TAC ~ \$2.5 M annually
- High Voltage TAC ~ \$3 M annually

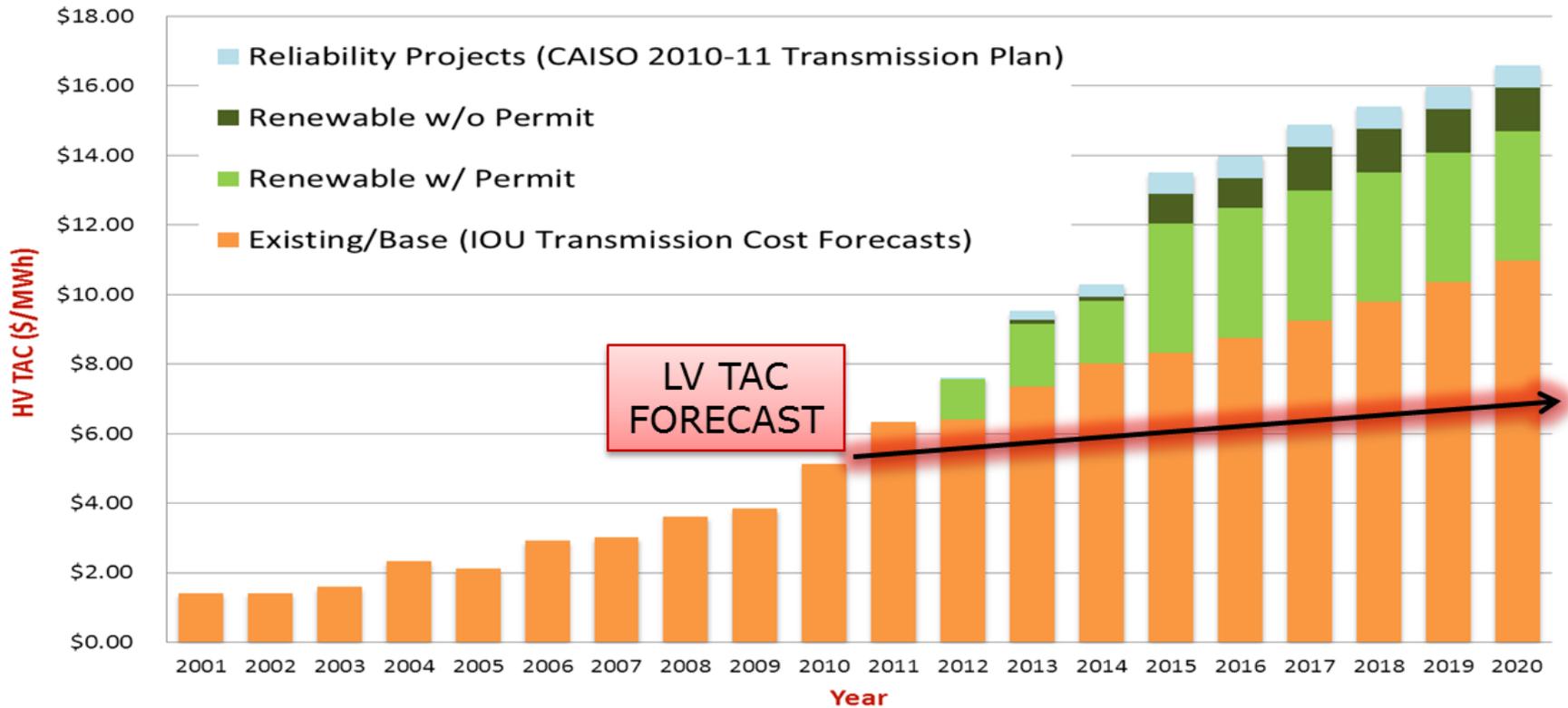


# Existing 60 kV Grid Intertie



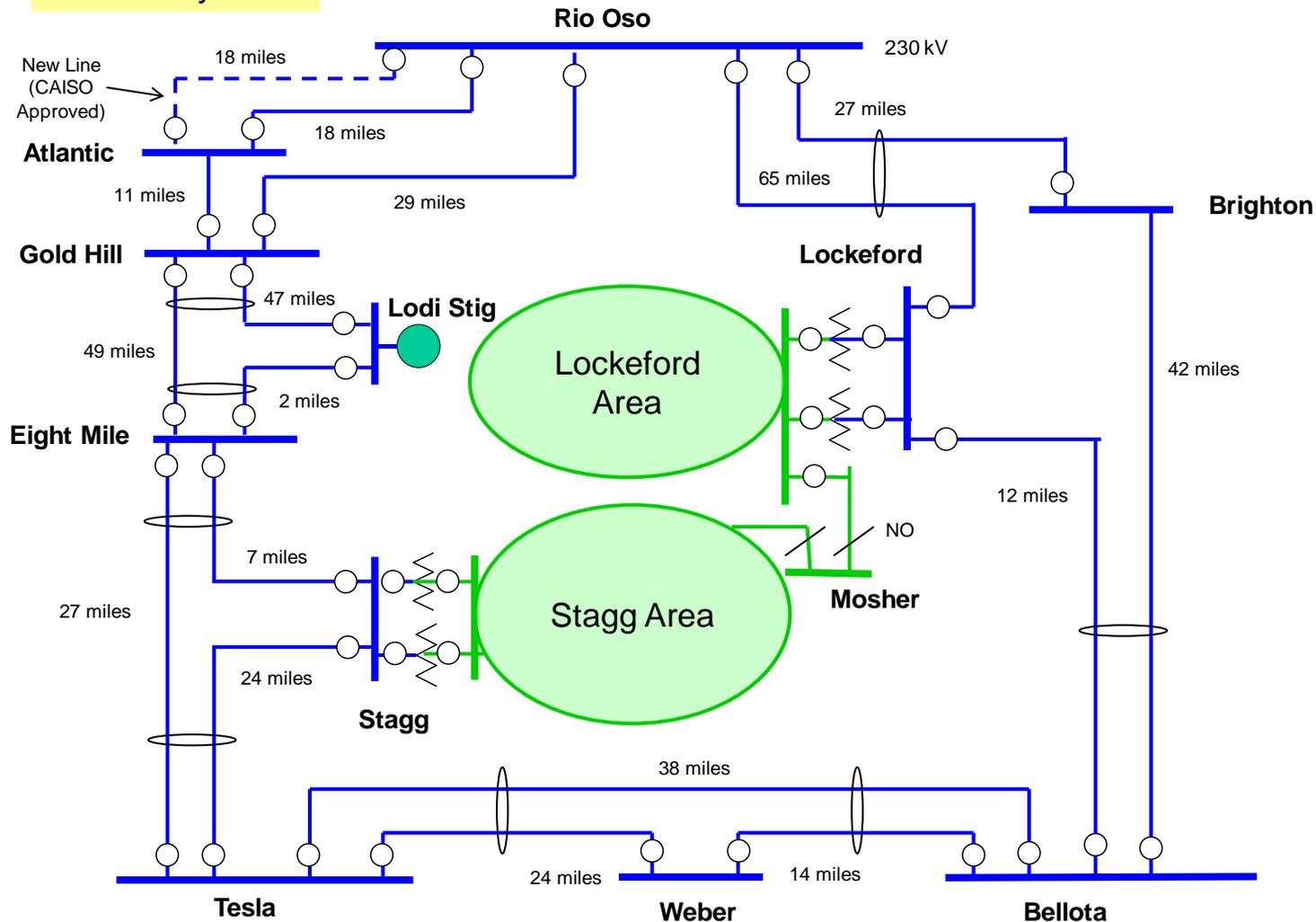
# CAISO TAC Forecast

**Historical PG&E Area HV TAC (\$/MWh) During 2001-2011 and Projected CAISO-Wide HV TAC (\$/MWh) During 2012-2020 Based on the CPUC/E3 LTPP Evaluation Metric Calculator**

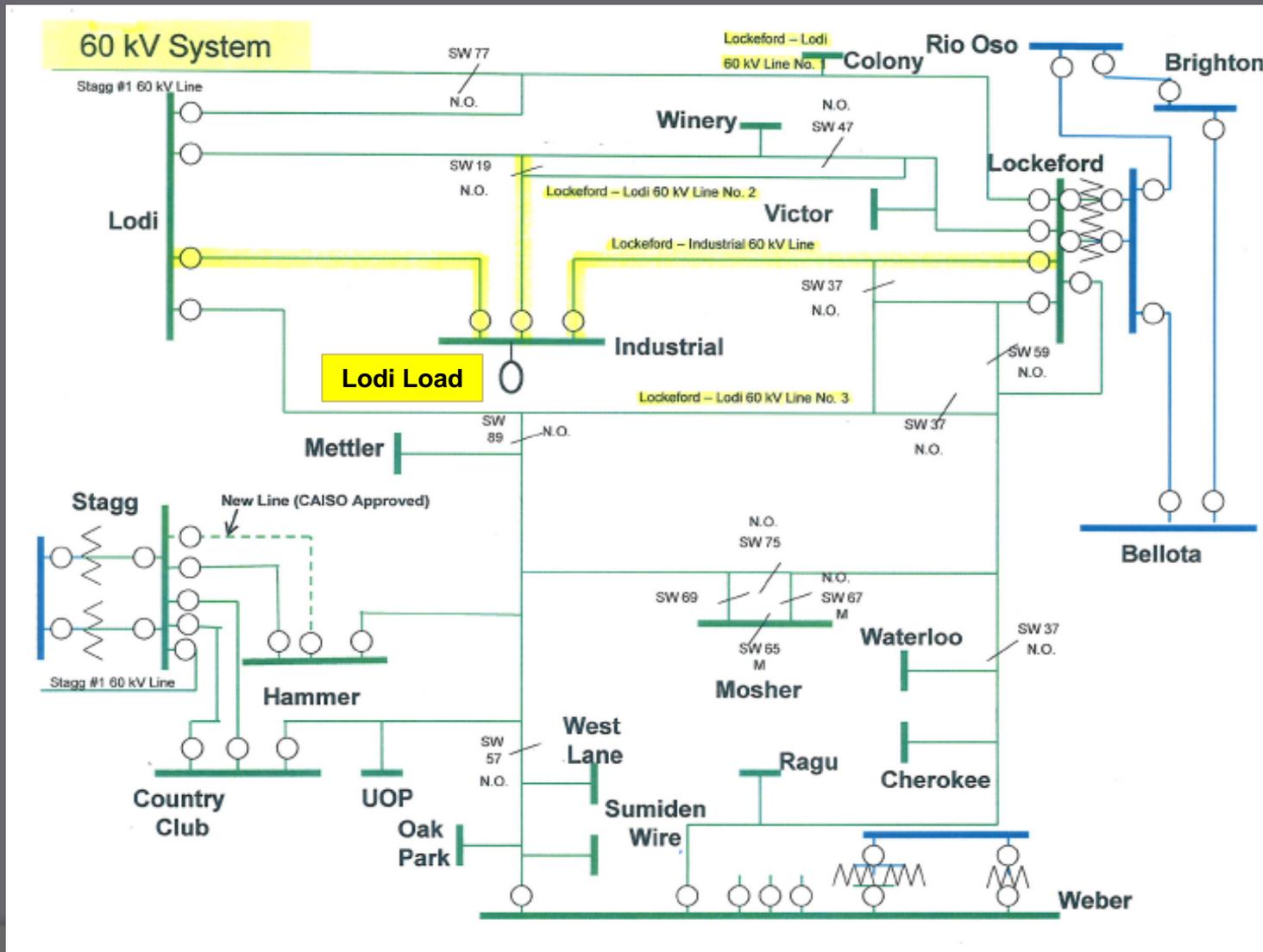


# PG&E Lockeford-Lodi Area Study

## 230 kV System



# PG&E Lockeford-Lodi Area Study





# CAISO Board Approved Reliability Projects

Table 2 – Summary of Needed Reliability Driven Transmission Projects in the ISO 2012-2013 Transmission Plan

Service Territory	Number of Projects	Cost
Pacific Gas & Electric (PG&E)	31	\$1,168 M
Southern California Edison Co. (SCE)	1	\$75 M
San Diego Gas & Electric Co. (SDG&E)	4	\$100 M
Valley Electric Association (VEA)	0	0
Total	36	\$1,343 M



# Lockeford-Lodi Area 230 kV Development Project

- Mitigate
  - NERC Category B & C overloads
  - NERC Category B voltage deviations
  - NERC Category C low voltages
- \$80-105 M
- In-service 5/31/2017
- Solve Lodi's capacity (200 MW) & reliability constraints
- Lodi cost ~\$20 M



# Industrial Substation Expansion

PROPOSED 230KV SERVICE  
TO THE CITY OF LODI  
**AERIAL VIEW**



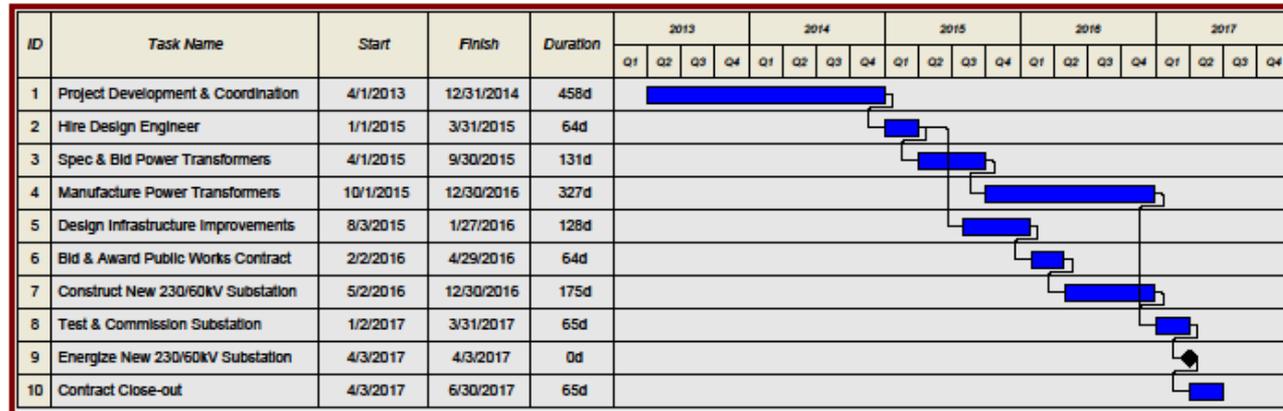
Sketch MK20111108



# 230 kV Project Timeline

Sunday, March 17, 2013

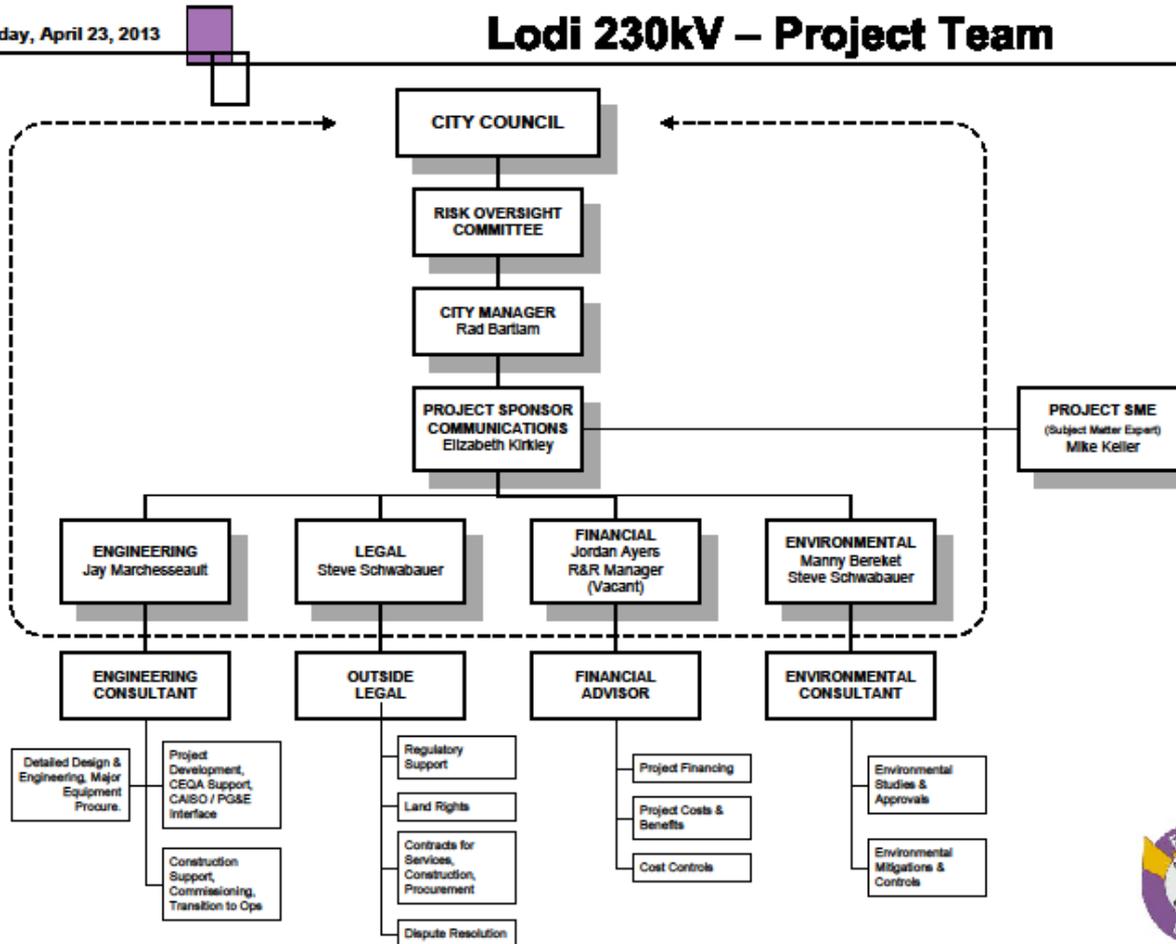
## New Industrial 230/60kV Substation



# 230 kV Project Team

Tuesday, April 23, 2013

## Lodi 230kV – Project Team



# Next Steps – FY 2013/14

- Lodi Project Team Kick-off Meeting
- City Council approval PSAs
  - Project Subject Matter Expert
  - Engineering Consultant
  - Outside Legal Counsel
  - Financial Advisor
  - Environmental Consultant



