

**LODI CITY COUNCIL  
SHIRTSLEEVE SESSION  
CARNEGIE FORUM, 305 WEST PINE STREET  
TUESDAY, DECEMBER 6, 2011**

A. Roll Call by City Clerk

An Informal Informational Meeting ("Shirtsleeve" Session) of the Lodi City Council was held Tuesday, December 6, 2011, commencing at 7:00 a.m.

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

Absent: None

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

B. Topic(s)

B-1 Status Report on Westside 60kV Power Line Project (EUD)

Electric Utility Director Elizabeth Kirkley provided a PowerPoint presentation regarding the Westside 60kV Power Line Project. Specific topics of discussion included a status report on grid interconnection, capacity, reliability, transmission operating costs, aerial overview, PG&E and California Independent System Operator (CAISO) proposal, comparison of transmission costs, risk identification, project phases, and next steps.

In response to Mayor Johnson, City Manager Bartlam stated the previous route study is complete and awaiting public review and now they are finishing the remainder of the environmental study.

In response to Mayor Pro Tempore Mounce, Mr. Bartlam stated nothing has changed with respect to the actual route and it is the same as was previously presented to the Council.

In response to Council Member Hansen, Ms. Kirkley stated PG&E would not necessarily need to upgrade if the City does its project because there would be enough capacity.

In response to Council Member Hansen, Ms. Kirkley stated the City is not connected with the western grid.

In response to Mayor Johnson, Ms. Kirkley stated the low- and high-voltage charges are determined and collected by CAISO and then sent to PG&E.

In response to Council Member Katzakian, Mr. Bartlam and Ms. Kirkley stated Combustion Turbine ("CT") is serving some of the City's load, which is why less energy is needed from the grid. They stated CT is more expensive, however, and that is why it is not run all the time.

In response to Council Member Hansen, Ms. Kirkley stated the new Lodi Energy Center will handle a significant portion of the City's base load and the remainder will be picked up by the geysers and hydro.

In response to Mayor Pro Tempore Mounce, Consultant Mike Kellar stated if 230kV is built additional transmission costs on the Transmission Access Charge (TAC) forecast may be avoided.

In response to Council Member Hansen, Mr. Kellar stated the drivers of high costs in the forecast are existing transmission costs and new transmission costs to interconnect renewables for

portfolio requirements.

In response to Council Member Hansen, Mr. Kellar stated the TAC forecast chart is not definite and assumes cost projections including the mandates of AB 32.

A brief discussion ensued between Mayor Pro Tempore Mounce and Mr. Bartlam regarding what needs to be built to meet renewable requirements and related projections remotely located which have no connection to the grid.

In response to Council Member Nakanishi, Mr. Kellar stated based on the chart energy costs will likely rise by 30% due to the AB 32 mandates. Mr. Kellar stated today low and high voltage is fairly equal and represent \$2.5 million per year on average with another \$1 million in grid management.

In response to Mayor Pro Tempore Mounce, Mr. Bartlam provided an overview of the planned route, stating the Harney Lane piece is along the southwestern City boundary.

In response to Council Member Hansen, Mr. Bartlam stated the City cannot stack over the existing PG&E line because there has to be a separation between the lines.

In response to Mayor Johnson, Mr. Bartlam stated the conversation with PG&E is ongoing although the benefit to PG&E would be new poles and an offload of some of its reliability concerns.

In response to Council Member Hansen, Ms. Kirkley stated the City would need to pay for a 230kV upgrade for PG&E from the east.

In response to Council Member Nakanishi, Mr. Bartlam stated the City would be paying for the difference between a 60kV and 230kV upgrade and the exact amount is unknown at this time.

In response to Mayor Pro Tempore Mounce, Mr. Bartlam stated the westside concept is to bring in 60kV and not 230kV, which is a third or quarter of the cost.

A brief discussion ensued between Council Member Hansen and Ms. Kirkley regarding the concept of behind the meter costs.

In response to Mayor Johnson, Mr. Bartlam stated the savings projected by the new Lodi Energy Center coming on line are only relevant when it is running.

In response to Mayor Pro Tempore Mounce, Ms. Kirkley stated the \$800,000 for direct delivery savings is a real number for the new Lodi Energy Center and will take a year of running time to capture.

In response to Council Member Hansen, Mr. Kellar stated the risk identification is a subjective opinion based on best available information at the time and includes project financing, land rights, reliability standards, interconnection to the ring bus, and environmental impacts.

In response to Council Member Hansen, Mr. Bartlam stated there is only one privately-owned property in question with a single owner.

In response to Council Member Hansen, Ms. Kirkley stated that, even though the City is only doing a 60kV project, the connection to the 230kV ring bus may trigger additional registration requirements.

In response to Mayor Johnson, Mr. Kellar stated the risk identification list is a live list and additional risks will be identified and added to the list as they come forward while others may be cleared off the list.

In response to Council Member Hansen, Mr. Bartlam stated the project would be permitted by a variety of agencies including the City, PG&E, Northern California Power Agency, and others.

In response to Myrna Wetzel, Ms. Kirkley stated the studies will include both eastside and westside considerations. Mr. Bartlam stated the load is a combination of both existing users utilizing more energy and new users coming on line.

C. Comments by Public on Non-Agenda Items

None.

D. Adjournment

No action was taken by the City Council. The meeting was adjourned at 8:17 a.m.

ATTEST:

Randi Johl  
City Clerk



**CITY OF LODI  
COUNCIL COMMUNICATION**

**AGENDA TITLE:** Status Report on Westside 60 kV Power Line Project

**MEETING DATE:** December 6, 2011

**PREPARED BY:** Electric Utility Director

**RECOMMENDED ACTION:** Receive presentation of the status report on Westside 60 kV Power Line Project.

**BACKGROUND INFORMATION:** The Lodi Electric Utility Department has been investigating issues related to constructing a power line to the west with a 230 kV grid interconnection at the Northern California Power Agency's Combustion Turbine Project #2 and Lodi Energy Center facilities located next to the City's White Slough Water Pollution Control Facility.

Staff has prepared a status report to provide the City Council as well as the community an update of this effort. The presentation also includes proposals staff has received from Pacific Gas and Electric Company and the California Independent System Operator.

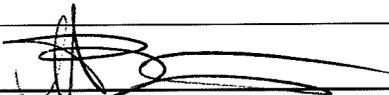
**FISCAL IMPACT:** Not applicable.

**FUNDING AVAILABLE:** Not applicable.

  
Elizabeth A. Kirkley  
Electric Utility Director

EAK/lst

APPROVED:

  
Konradt Bartlam, City Manager

# WESTSIDE 60KV POWER LINE PROJECT

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Shirtsleeve Presentation to the  
Lodi City Council  
On December 6, 2011

# PURPOSE OF PRESENTATION

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- Status Report on Grid Interconnection
  - Westside 60kV Power Line Project
    - Fatal flaw technical studies
    - Comprehensive environmental study
    - Obtain land rights when appropriate
    - System studies
    - Articulate SWOT and compare to PG&E approach
  - PG&E/CAISO Eastside 60kV Upgrade Plans
    - PG&E/CAISO preferred configuration
    - Explore 230kV interconnection possibilities
    - Articulate SWOT and compare to Westside approach

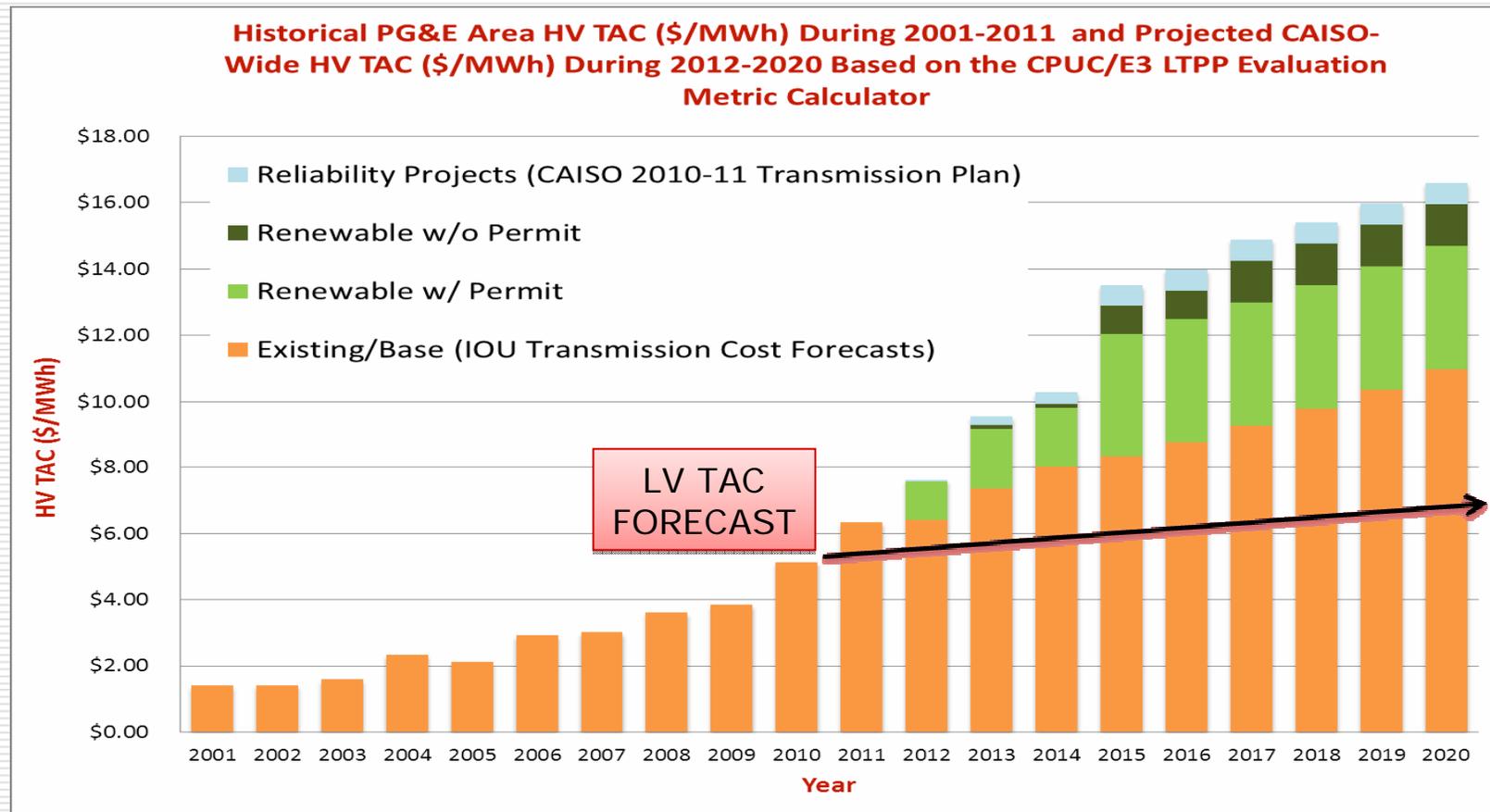
# EXISTING 60KV INTERCONNECTION

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- Capacity
  - Grid interconnection limits load serving capacity to ~ 130 MW w/o Lodi CT, ~ 152 MW with CT running
  - Lodi all-time high peak @ 145 MW on July 25, 2006 (current peak @ 116 MW on July 5, 2011)
  - EU met with CAISO & PG&E on Nov. 14<sup>th</sup> re: their transmission capacity plans
- Reliability
  - 4 Reported “city-wide” outages in the past 7 years, the longest ~2.4 hours
- Transmission Operating Costs
  - Currently ~\$6,000,000/year & increasing faster than inflation (caused by H.V. TAC)

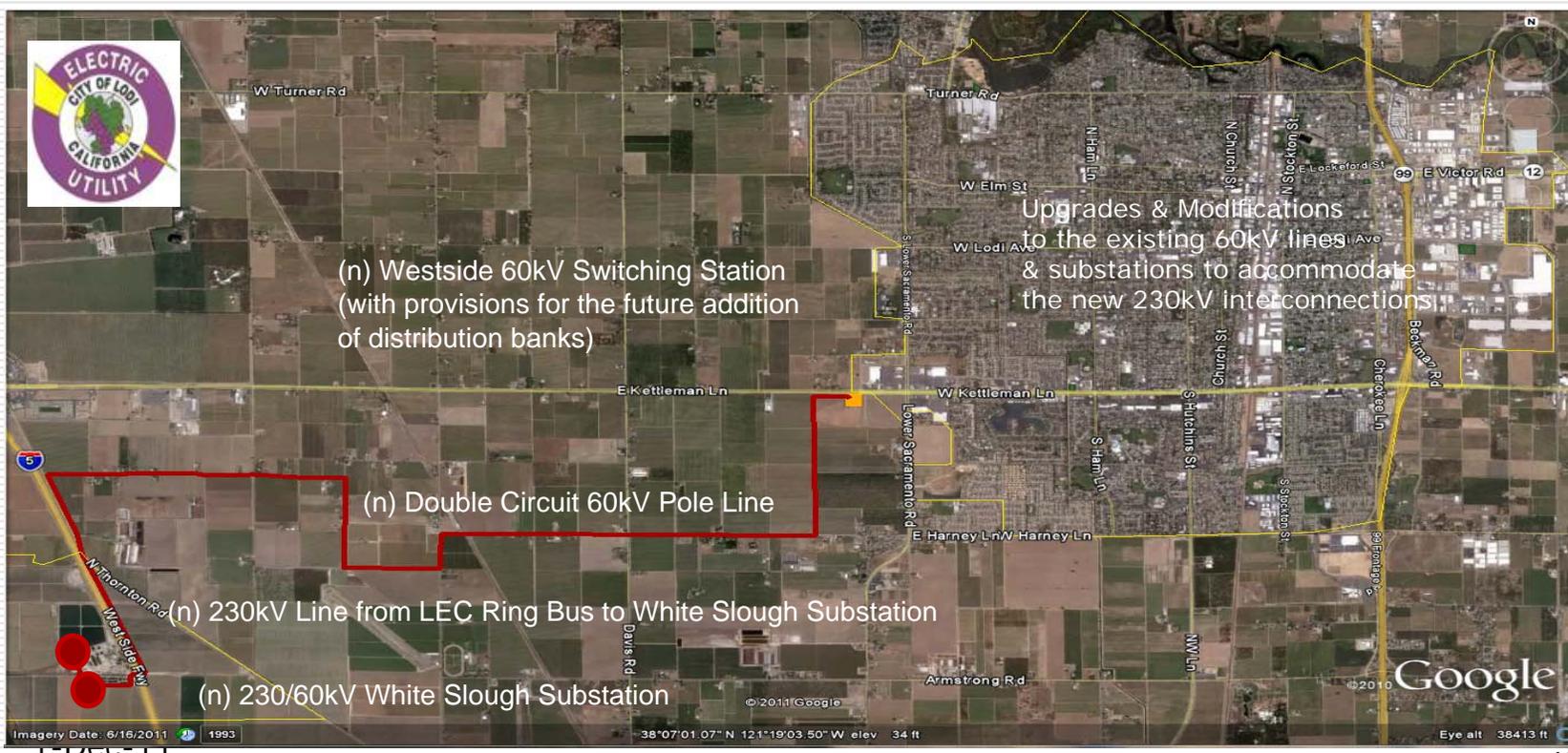
# TRANSMISSION COSTS

## HIGH VOLT. TAC FORECAST



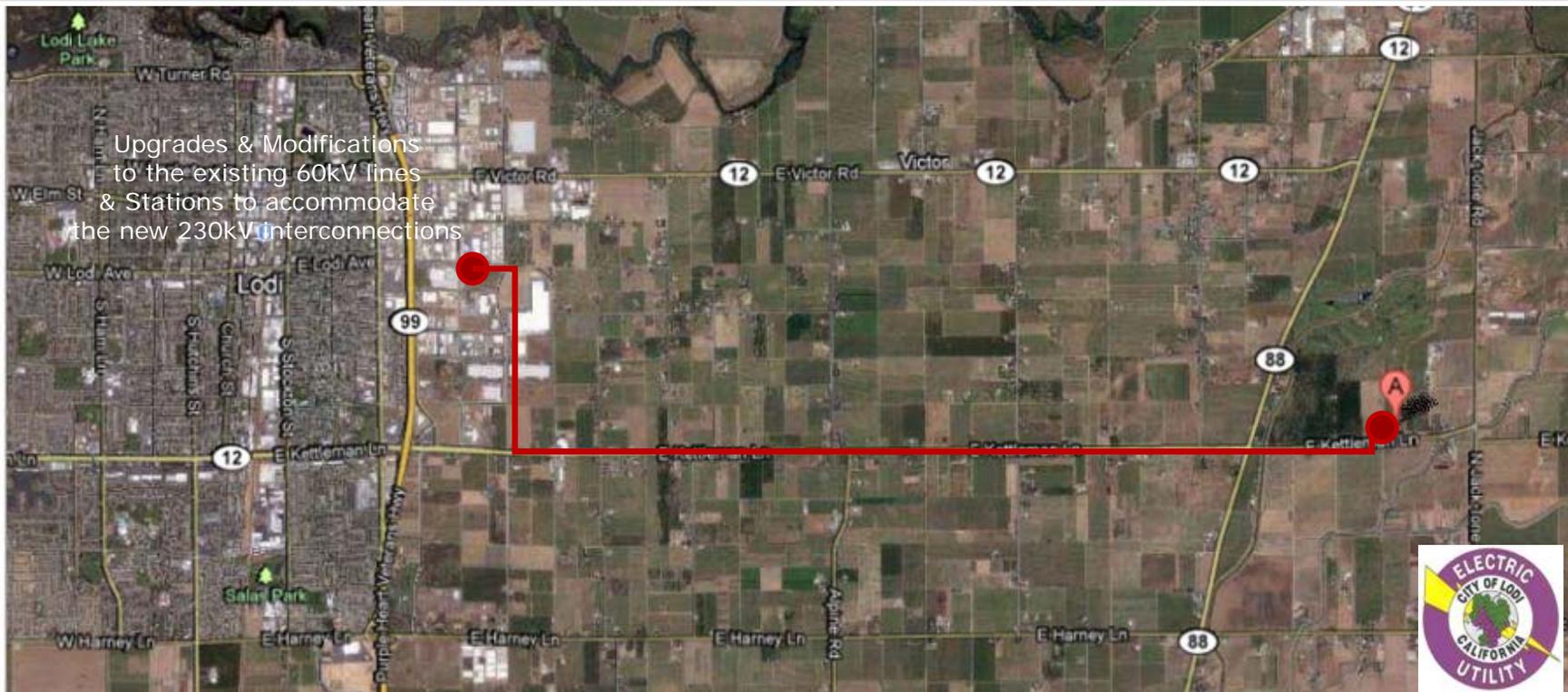
# WESTSIDE 60KV POWER LINE AERIAL OVERVIEW

- ❑ White Slough Substation provides a 230kV interconnection
- ❑ Project Costs @ \$\_TBD\_ & 3–5 years to permit, design, and construct



# EASTSIDE 60KV UPGRADE PG&E / CAISO PROPOSAL

- ❑ Provides 2 additional 60kV Lines into Industrial Sub and EU project costs very small compared to 230kV interconnection proposals
- ❑ EU to explore proposal modifications to provide 230kV interconnection



# COMPARISON OF TRANSMISSION OP. COSTS

COST COMPONENT	PG&E/CAISO 60kV Proposal	Westside Project	PG&E/CAISO 230kV Option
High Voltage TAC (Now \$6.50/MWHR - Huge forecasted increases)	\$3,000,000	\$3,000,000	\$3,000,000
Low Voltage TAC (Now \$5.50/MWHR – Inflation forecasted increases)	\$2,500,000	\$0	\$0
Other CAISO Expenses	\$500,000	\$500,000	\$500,000
LEC “Direct” Delivery (High Probability of captured savings)	\$0	-\$800,000	\$0
LEC “Pooled” Delivery (Unknown probability of captured savings)	\$0	-\$1,200,000	\$0
<b>TOTAL Transmission Costs</b> (Per Year using 2010 Loads & Rates)	<b>\$6,000,000</b>	<b>\$2,700,000</b> <i>(MAYBE \$1,500,000 with pooled delivery)</i>	<b>\$3,500,000</b>

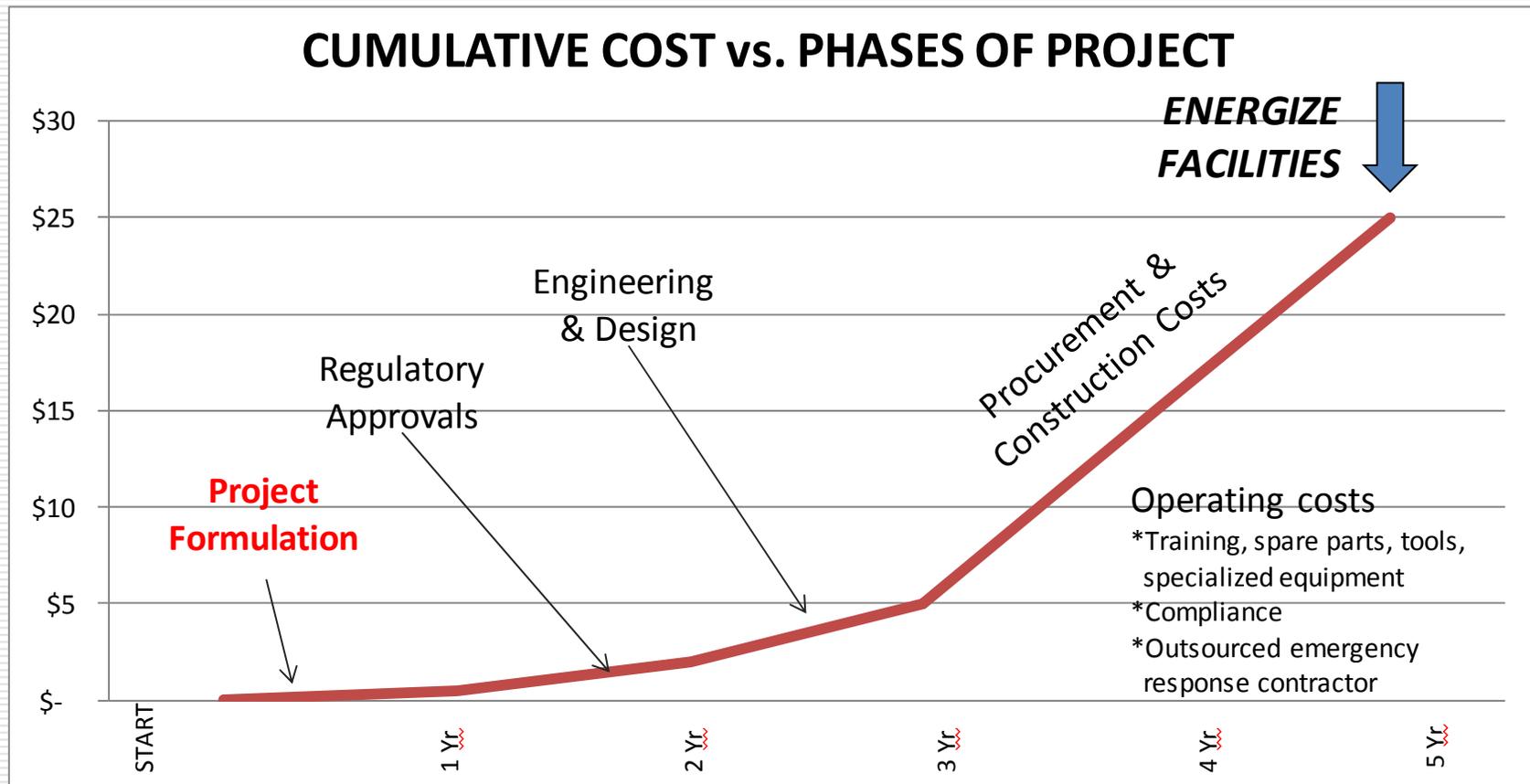
# RISK IDENTIFICATION

## WESTSIDE 60KV PROJECT

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RISK SCORE	RISK TITLE / DESCRIPTION
8	Project financing – tight credit markets could delay project implementation
4	Land rights for 60kV – inability to obtain land rights for 60kV double circuit pole line could be fatal to the project
1	NERC Reliability Standards – ownership of 230kV facilities may result in “TO/TOP” WECC registration (additional personnel, equipment, and/or out-sources services may be required)
1	Interconnection to ring bus – NCPA could find technical reasons preventing interconnection to 230kV ring bus
1	Environmental impacts – CEQA study of entire project could find significant, unmitigated environmental impacts or unacceptable mitigation costs

# PROJECT PHASES



# NEXT STEPS

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- NCPA studies
  - Physical connection at STIG/LEC ring bus
  - Reliability analysis
- PG&E/CAISO studies
- SWOT comparison for Westside and Eastside grid interconnections
- Comprehensive environmental study