



**Stirrup Substation  
Cities of Rancho Palos Verdes,  
Rolling Hills, Rolling Hills Estates,  
and Torrance  
2016**

# Keeping the Grid Reliable For You



- As part of our long-term plan to upgrade and modernize our grid, Southern California Edison (SCE) is making electrical upgrades across the region.
- At SCE, it is our job to make sure that our customers have the robust electrical infrastructure needed to continue to power their future energy needs.
- Upgrading to newer equipment will make the power grid up-to-date and minimize the likelihood of unanticipated and extended outages.

# Improving Reliability and Preparing for the Grid of Tomorrow

## Edison will spend \$12 billion on electric system over next three years

Most of the yearly \$4 billion will be spent on upgrading electric poles, transformers, wires and cables. Roughly \$240 million a year, or about 6%, will go toward new power generation, he said.

"Our challenge is to provide electricity with little environmental impact without choking out economic growth and job creation," Craver said, speaking in downtown Los Angeles at the State of L.A. Infrastructure Summit.

"Today, perhaps more than any other state in the U.S., California has made greenhouse gas reductions a priority," he said. "This state has one of the most ambitious renewable energy mandates."



By Ivan Peun | Contact Reporter

NOVEMBER 4, 2015, 10:33 AM

**S**outhern California Edison plans to spend \$12 billion over the next three years to modernize the electric grid — costs that critics contend aren't justified and are in part the result of the utility's own mishaps.

The state's second-largest investor-owned utility is spending the money as it moves to adjust to changes in technology from rooftop solar and other innovations, Ted Craver, chief executive of parent company Edison International, told the Los Angeles Area Chamber of Commerce this week.



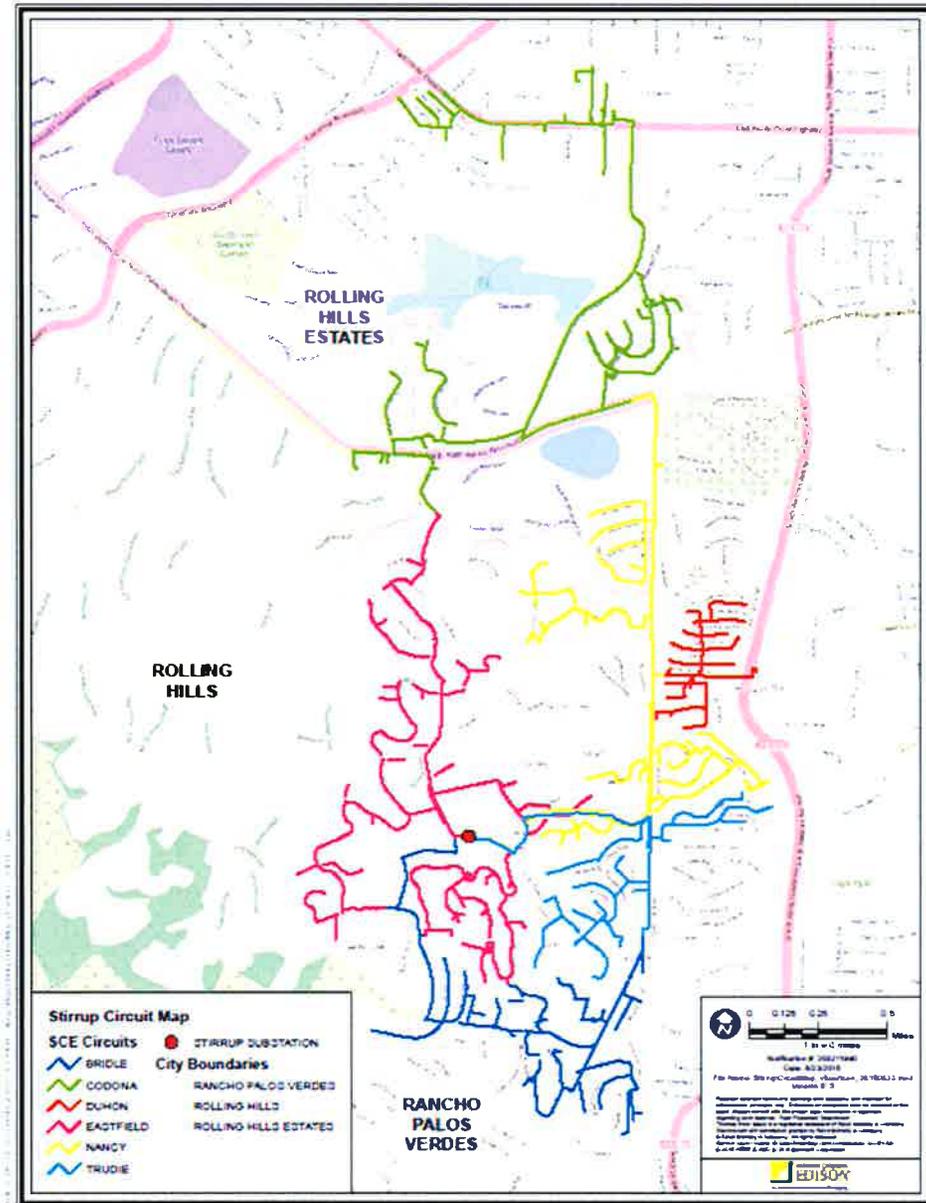


## Project Need and Benefits

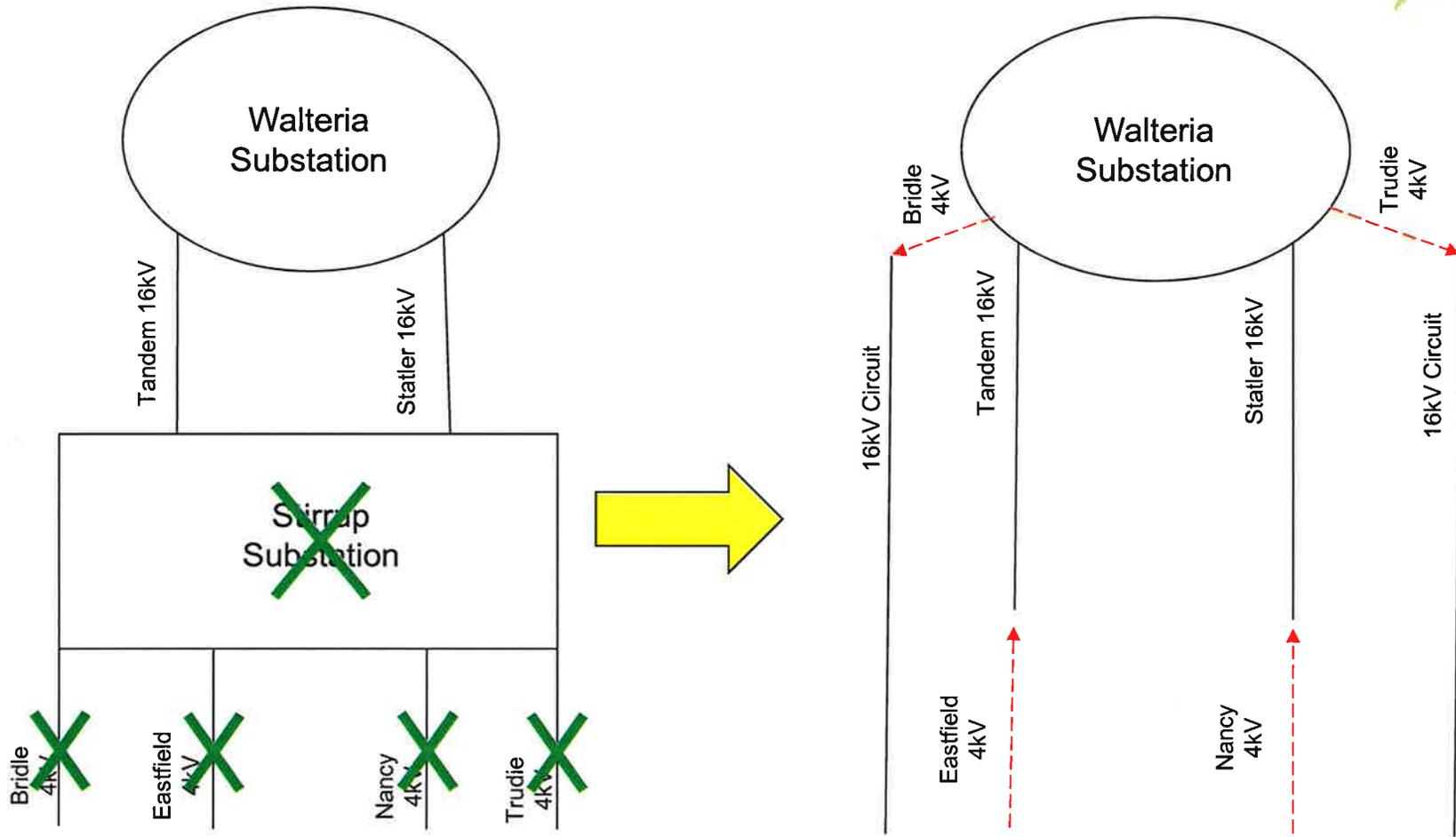
- Stirrup project is part of SCE's long-term plan to upgrade 4 kV infrastructure to 16 kV. Stirrup substation will be decommissioned after the circuit upgrades.
- Stirrup substation and 4 kV circuits are currently overloaded. SCE would need 4 times as many 4 kV circuits as 16 circuits to feed the same amount of load.
- Stirrup substation does not have many ties to surrounding 4 kV systems. The limited number of circuit ties makes it difficult to restore load in the event of an emergency and outages may last longer.
- This project will improve overall system reliability.

# Project Area

- **City of Rancho Palos Verdes**
- **City of Rolling Hills**
- **City of Rolling Hills Estate**
- **City of Torrance**
- **Cal Trans**



# Proposed Project



\*Please note that this is conceptual only. It may or may not reflect actual circuit ties.



## What To Expect

- In design phase. More info. to come.
- Dates: Construction most likely will start in early 2016 and continue through Q3 2016.
- Circuits: Bridle, Eastfield, Nancy, Trudie, Duhon, Codona
- Pole Sets may require cranes or helicopters.



## Anticipated Work Activities

- This project is currently in design phase. Forecasted construction start is 2016.
  - This schedule may change due to weather and other factors
- Crews may need to access private properties to replace poles.
- During construction, there will be lane closures. SCE will use a combination of traffic control signs and crew members with flags to ensure vehicle and pedestrian safety.
- For crews to work safely, it will be necessary to de-energize our power lines for short periods of time. In these cases, SCE will send notices to affected customers at least 72 hours prior to maintenance outages.