

## DOCKETED

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# SCE Presentation at 2017 IEPR Commissioner Preliminary Forecasting Workshop

August 4, 2017

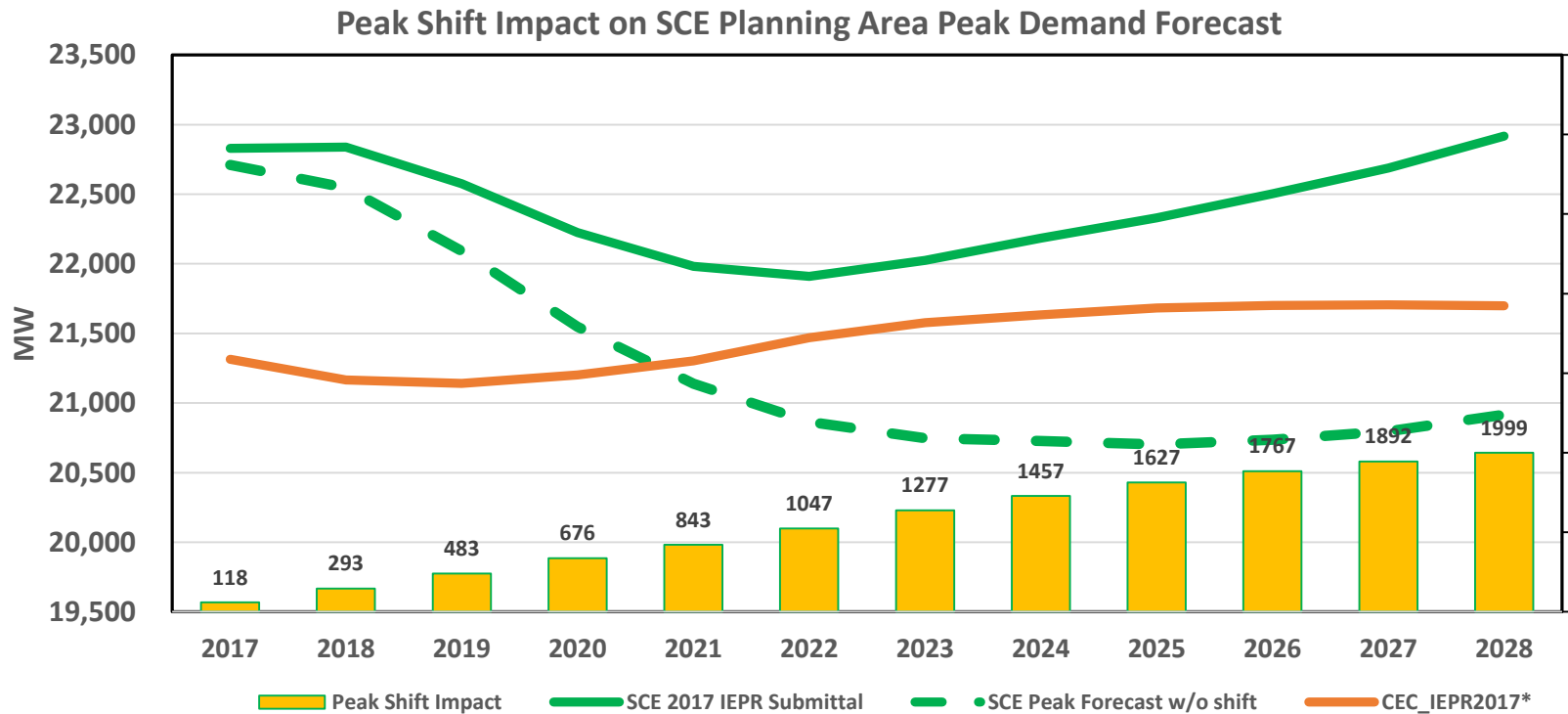


# Highlight of Major Areas of Forecast Differences

- Differences between SCE's and CEC's Annual Peak Demand forecasts would be much reduced when CEC incorporates the peak hour shift impact in the final base demand forecast
- SCE's EV load forecast is much higher than CEC's preliminary forecast due to different methodology and assumptions
- Solar PV forecast differences between SCE and CEC are largely driven by the assumptions about expected future compliance rates and nature of 2020 ZNE mandate

# Peak Shift Impact on SCE Annual Peak Demand Forecast

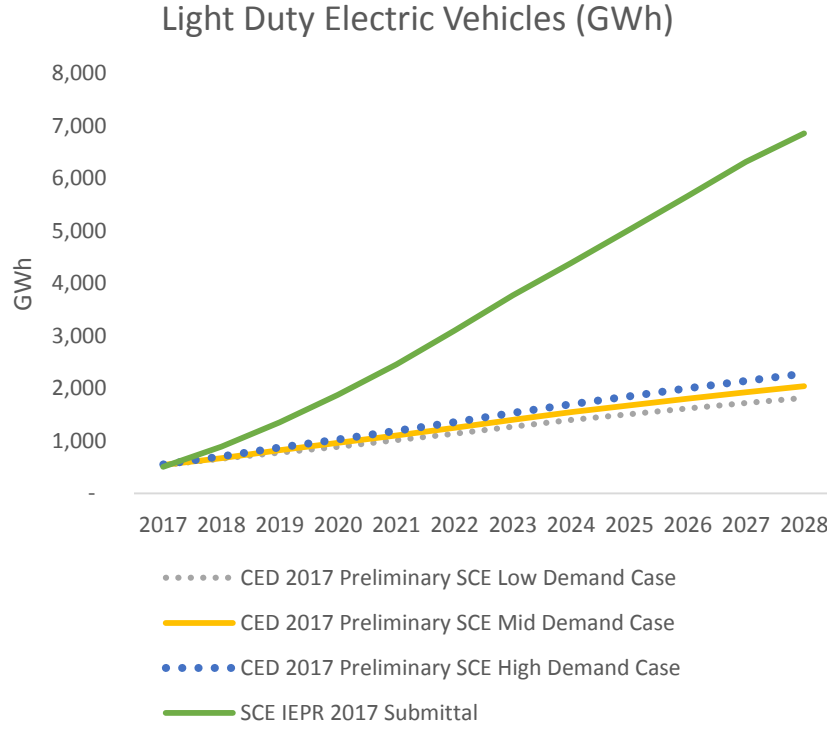
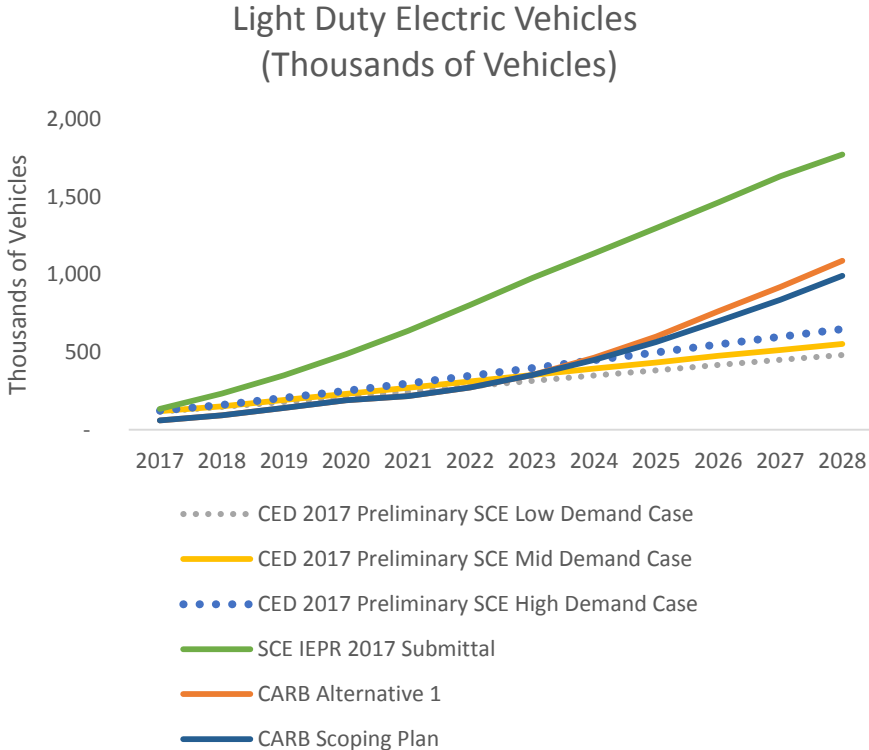
Peak hour shift impact is significant in driving the changes in SCE's projected peak demand growth trend. It accounts for almost 2,000 MW difference in 2028 between SCE's forecast with and without considering peak shift impact.



\*TN220395\_20170726T155040\_CED\_2017\_Preliminary\_SCE\_Mid\_Demand\_Case, form 1.5 1-in-2 case

# Comparison of SCE 2017 IEPR Submittal with CED 2017 Preliminary SCE Forecast

By 2028, SCE expects that there will be almost 1.8 million light-duty electric vehicles within SCE’s service territory. This far exceeds CEC’s preliminary forecast level of 552k in the Mid Demand Case by 2028.



# Key Barriers for Electric Vehicle Adoption Are Being Addressed

## **Technology cost is still high but dropping faster than expected and additional purchase incentives are available**

- Persistent battery cost declining trend: continuous drop of more than 70% by 2030 (Bloomberg)
- Strong purchase incentives existing to date: SCE Clean Fuel Reward Program , California Clean Vehicle Rebate Project Rebate , California AB 1184, Federal tax rebate

## **Charging infrastructure continues to lag behind EV growth but public and private investments are ramping up**

- SCE's Charge Ready Program Pilot targets more than 1,000 charging ports
- Utilities' continuous expansion of slow and fast charging in residential and commercial locations per SB 350
- VW settlement funds are to begin in 2018

## **Manufacturer and national government announcements pushing product development**

- Automaker announcements: Volvo (100% "electrified" by 2019), Tesla (half-million presale, Model 3 production >20k/month by end 2017), Chevy Bolt, Honda Clarity, etc.
- National governments' no petroleum goals: Norway (2025), India (2030), France (2040), UK (2040)

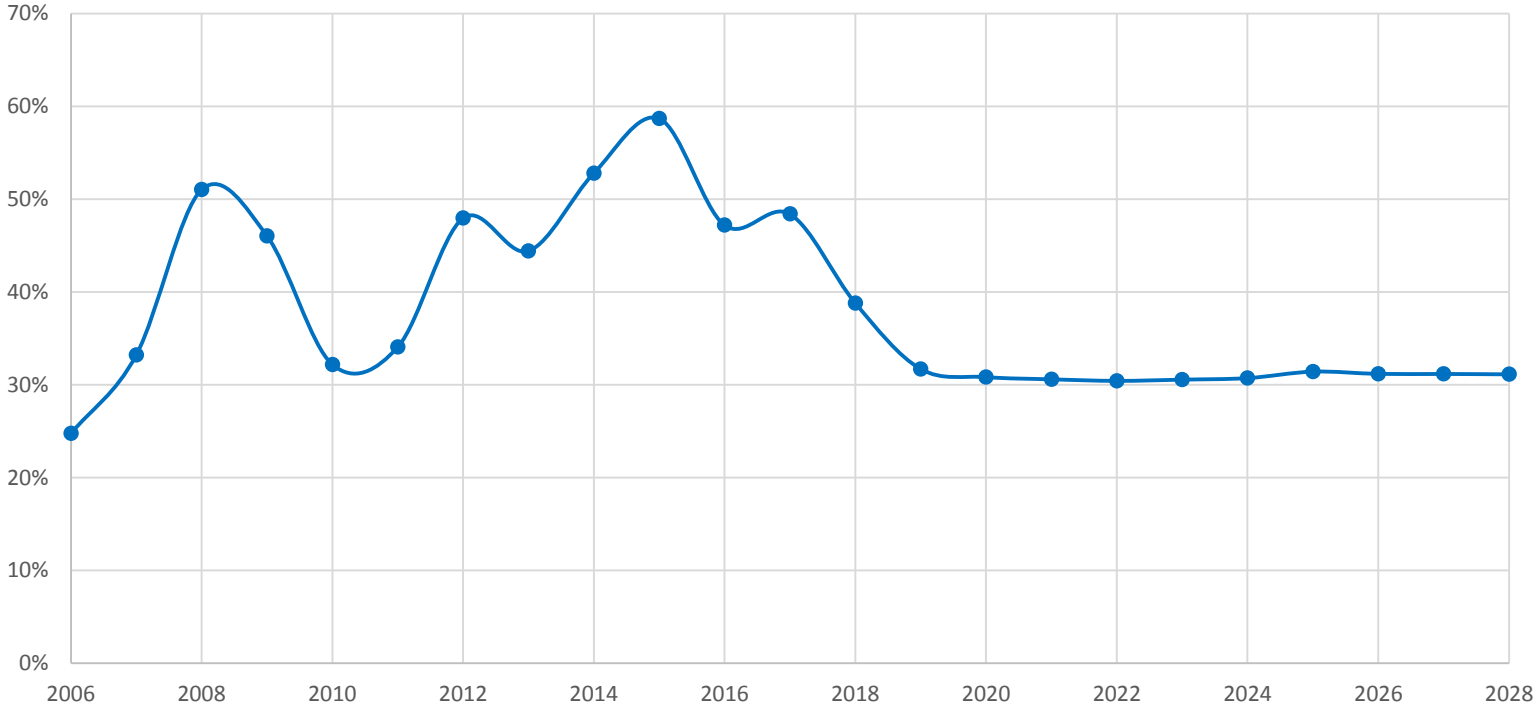
## **Funding being directed to education and outreach activities to overcome low consumer awareness**

- DOE's and utilities' programs and funding to promote consumer awareness and education
- Increasing local and state awareness campaigns: Veloz, Plug-in America events, Utility-funded events, etc.

# ZNE Compliance Impact on Solar PV Installations

Multifamily starts account for a significant portion of the total housing starts in SCE’s service territory. SCE believes that it is important for CEC to expand its ZNE impact consideration from applying to single-family only to including both single and multi-family starts.

Multi-family Ratio of Total Housing Starts in SCE’s Service Territory



Data Source: Moody’s Data Buffet, July 2017

# Back Up



# Long-term EV Outlook Comparison

