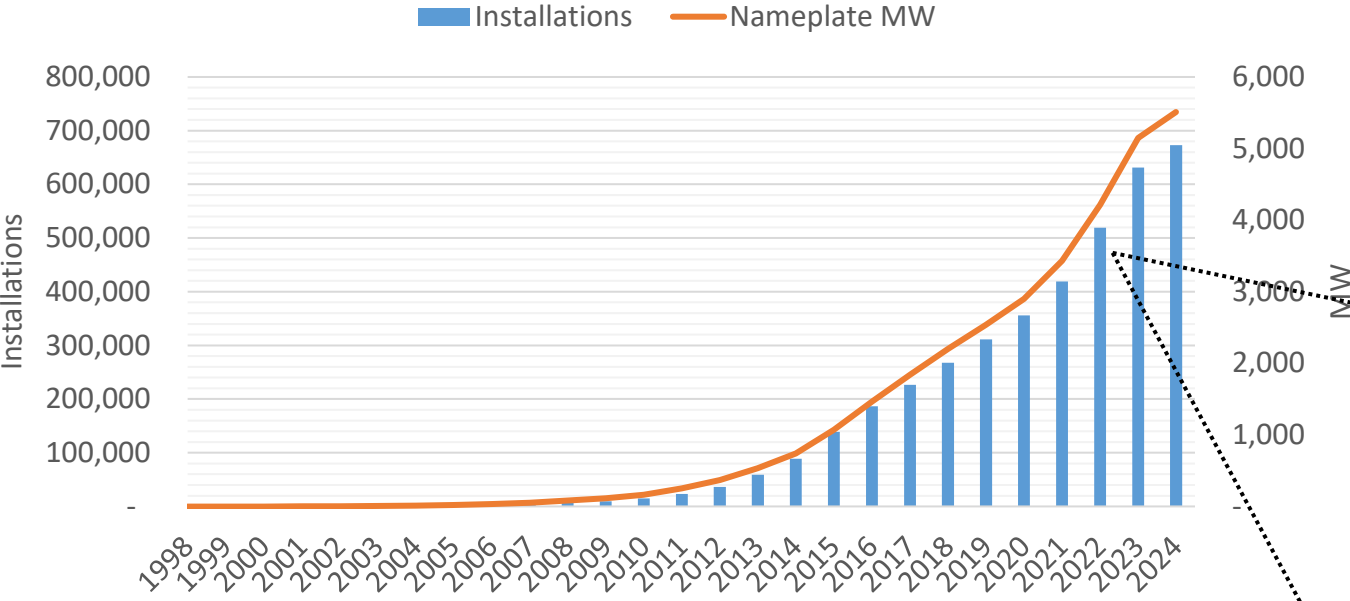


SCE Special Topic Discussion on: Post Net Billing Tariff Solar PV Adoption, Climate Impact Consideration of EV Charging Load, and Regional Impacts of Economic and Demographic Growth

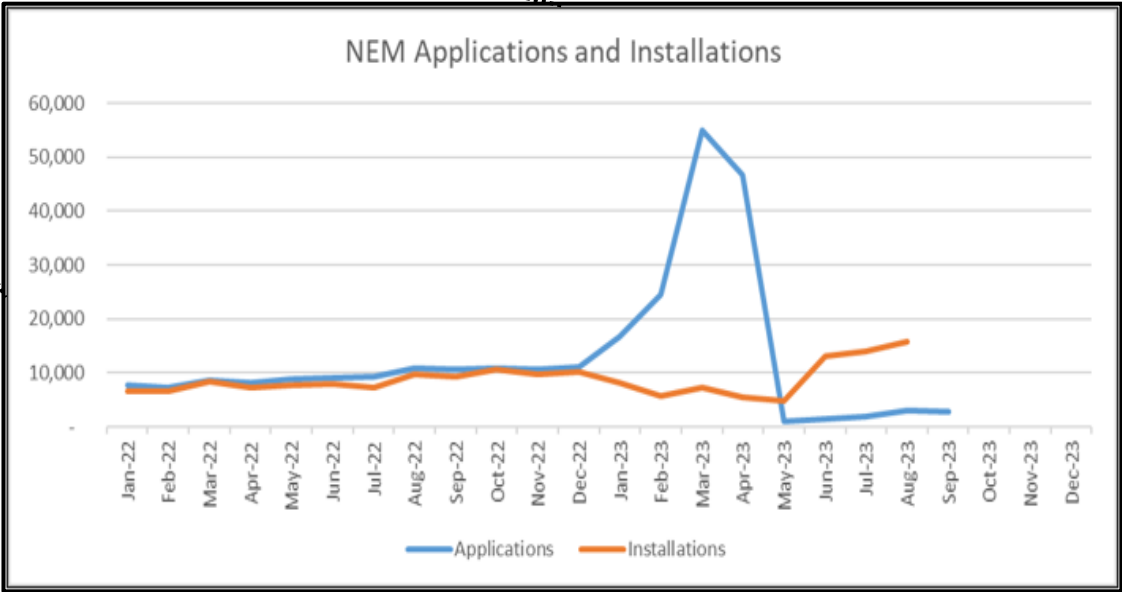
CEC 2024 IEPR DAWG Workshop

August 21, 2024

SCE's Solar PV Adoption Changes Post Net Billing Tariff

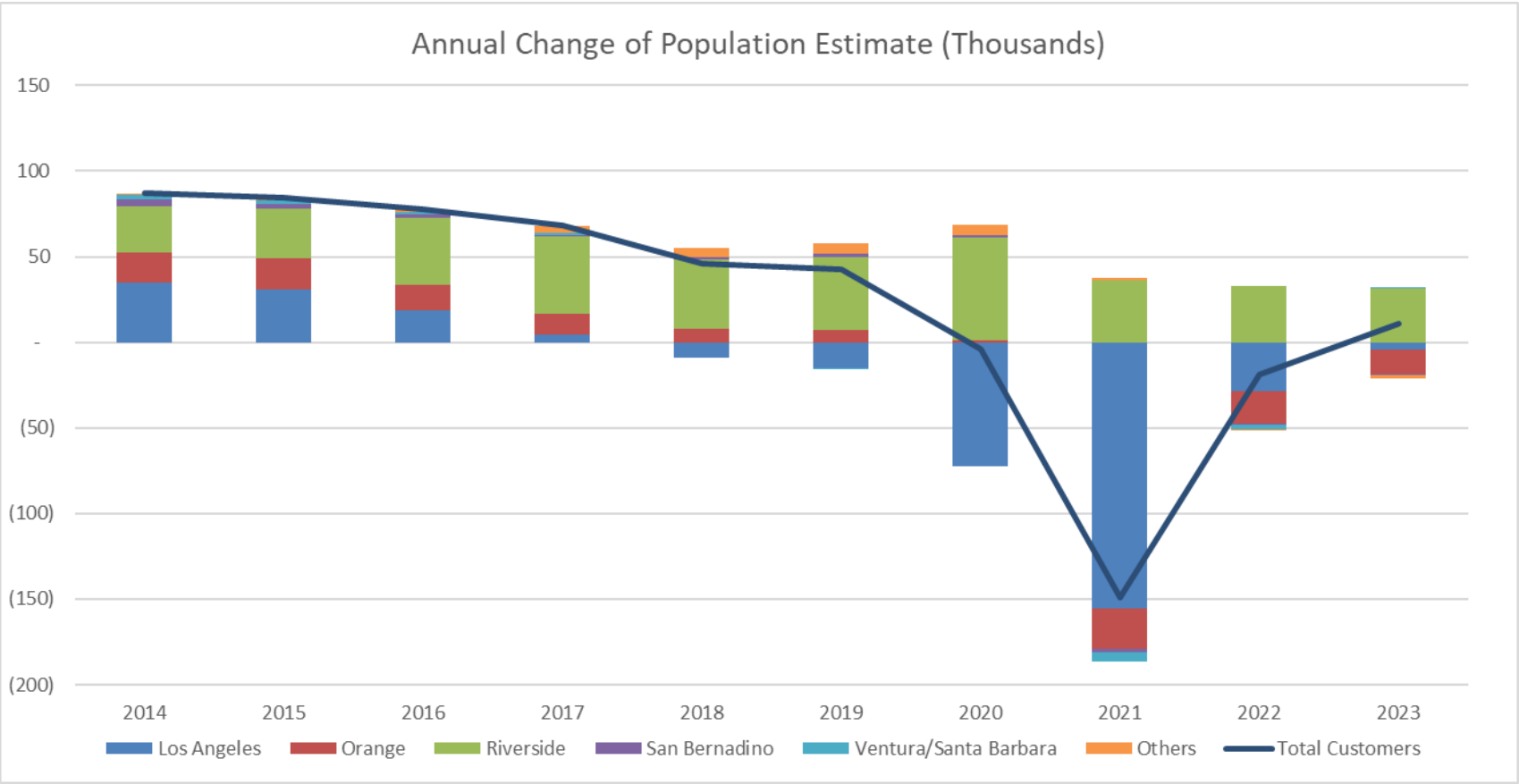


- As of July 2024, SCE’s BTM PV installations reached over 670k, representing over 5.5 GW installed capacity.
- NBT passage generated an unprecedented inflow of applications at the start of 2023, but annualized installation growth for 2024 appears to be moderating toward previous normal levels.



Differential Regional Growth Patterns in SCE Service Territory: Population

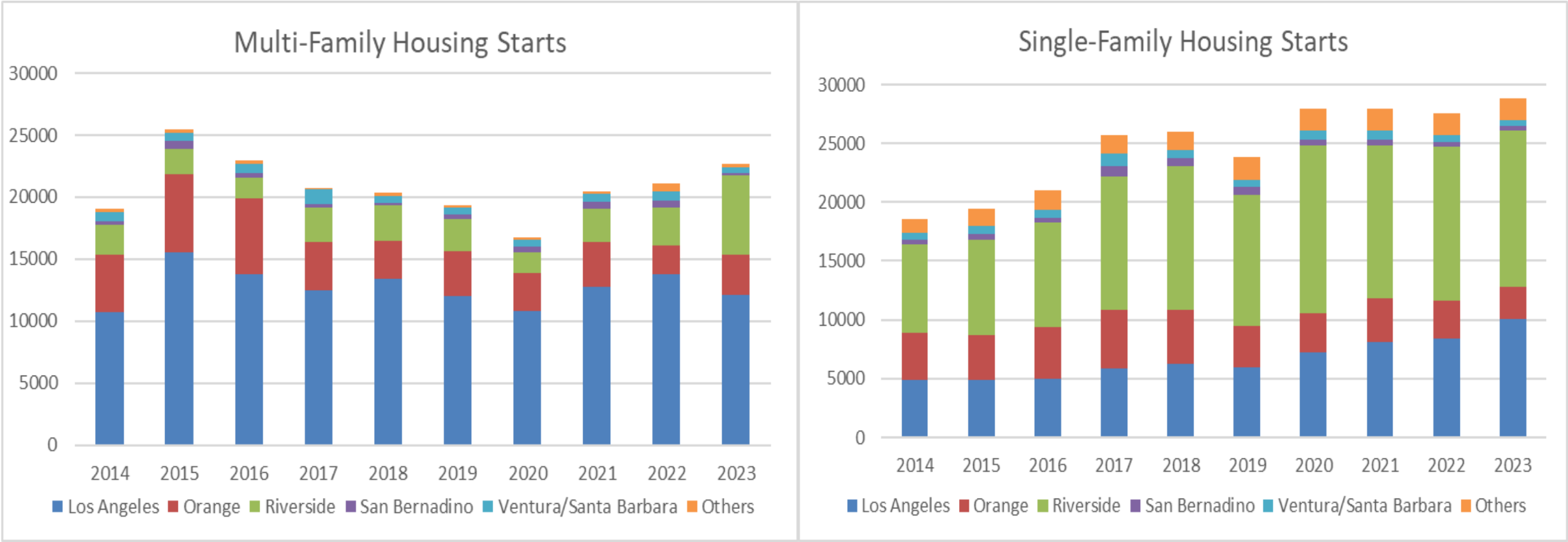
SCE experienced differential impacts from population growth across regions. Inland Empire area such as Riverside county continued to pick up positive population growth in contrast to other regions such as Los Angeles county with recent population declines.



Source: Moody's Analytics July 2024 Historical Estimates

Differential Regional Growth Patterns in SCE Service Territory: Housing Starts

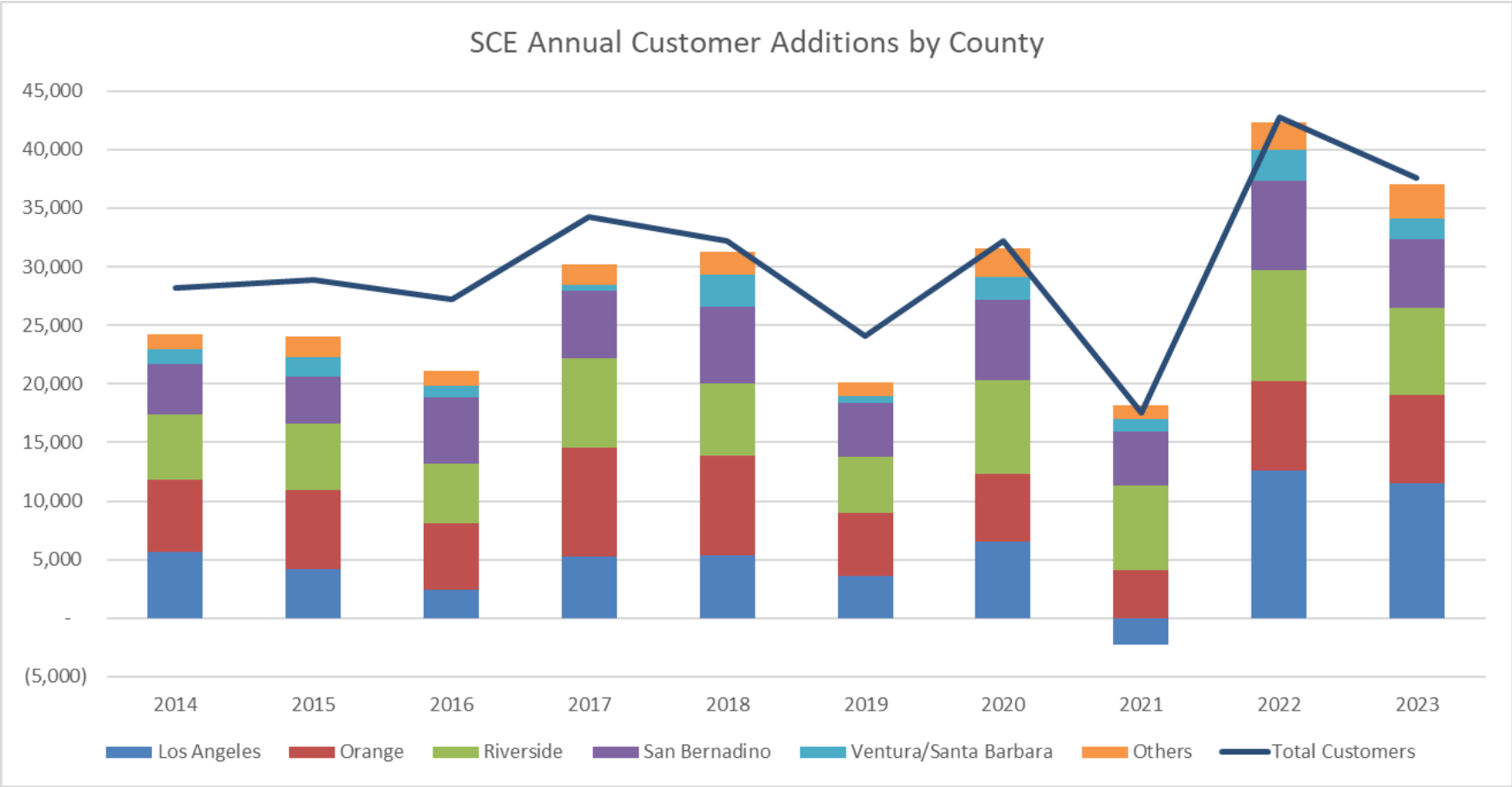
Despite of the pandemic impact SCE continued to pick up more new housing development especially from Inland Empire area with more land availability for single-family houses.



Source: Moody's Analytics July 2024 Historical Estimates

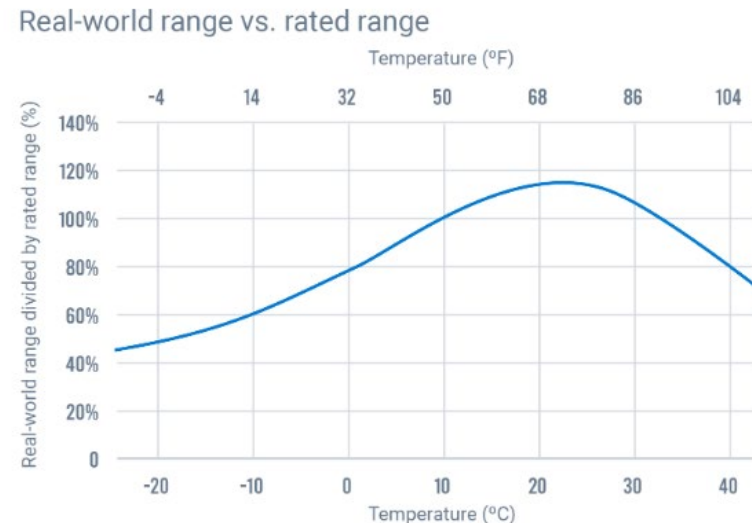
Annual Growth of SCE Residential Customers by County

SCE continues to pick up strong positive customer growth over time especially from Inland Empire area due to continuous population growth and new housing development.



Climate Change Impact on TE

- Recent studies show that extreme temperatures could significantly impact EV driving range and ultimately EV charging load. SCE started to incorporate some climate impact effect on EV charging.
- Geotab looked at anonymized data from 5.2 million trips taken by 4,200 EVs representing 102 different make/model/year combinations and analyzed average vehicle trip efficiency by temperature.* Their analysis showed that:
 - Most EVs follow a similar temperature range curve, regardless of make or model.
 - While both cold and hot temperatures impact range, colder climates have a larger impact.
 - 70F (21.5C) is the vehicle trip efficiency sweet-spot.



*<https://www.geotab.com/blog/ev-range/>

Climate Informed Impact on LDV Charging

In this illustrative example below, the overall climate impact on annual LDV load is around 2 percent in 2045 in addition to the base LDV load but it varies by month with up to more than 5% impact in August.

