



# CPUC Data Dashboard

## Utility System Efficiency

Policy & Planning Division

California Public Utilities Commission  
San Francisco, CA





# Purpose of the Data Dashboard Project

- ✓ Publish key datasets in 9 general data categories to shed light on utility performance in a publicly accessible manner.
  1. Residential Electric Usage and Bill Data
  2. Customer satisfaction
  3. Customer engagement
  - 4. System efficiency**
  5. Safety
  6. Network support services
  7. Environmental goals performance
  8. Utility workforce
  9. Research and development projects
- ✓ Enable customers to have visibility to how their usage and rates compare with others and gain insights into the overall energy infrastructure and performance in the state
- ✓ Provide policy makers an added tool to better guide their decision-making and to increase the transparency on utility activities in areas that impact the public.



# What is System Efficiency?





# Electricity Losses

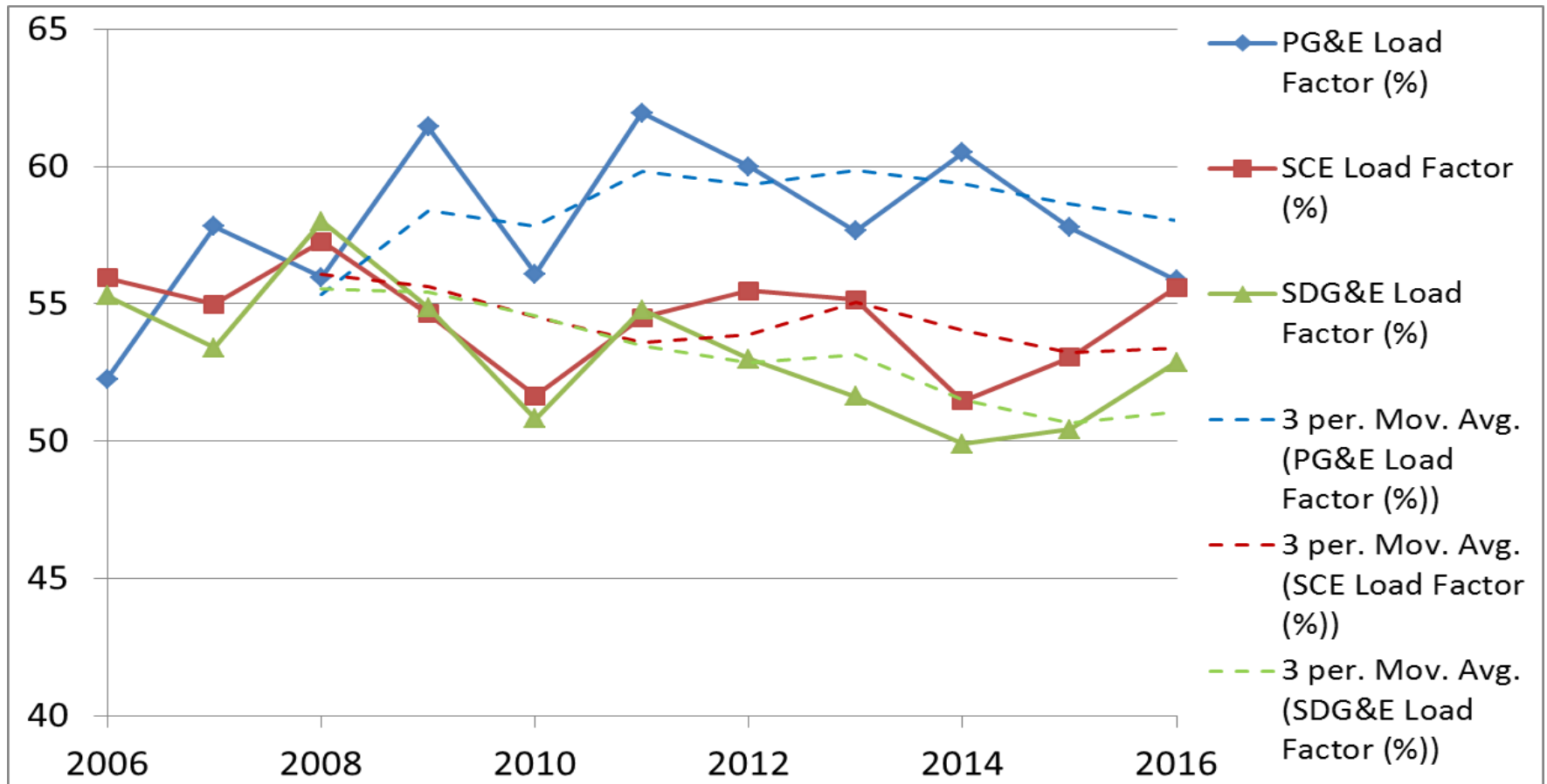
*The percentage of electricity losses reflects the efficiency of delivering electric generation to load. PG&E electricity losses are close to twice the amount present in SCE and SDG&E service territories.*





# System Load Factor Trends

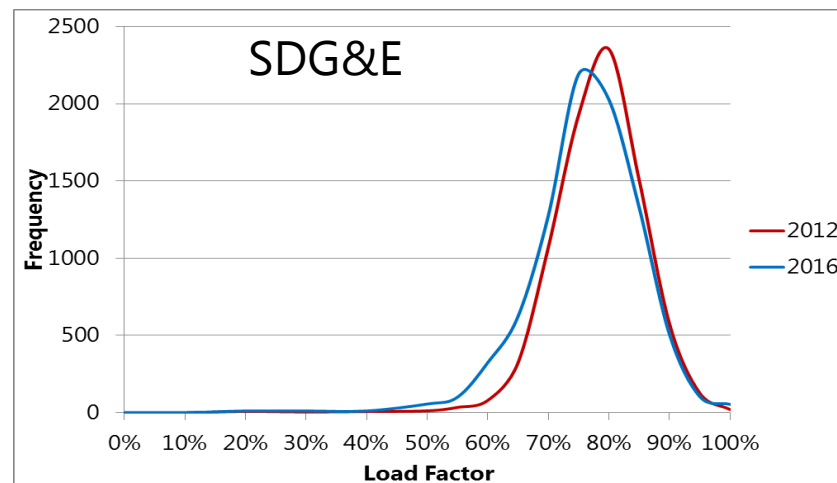
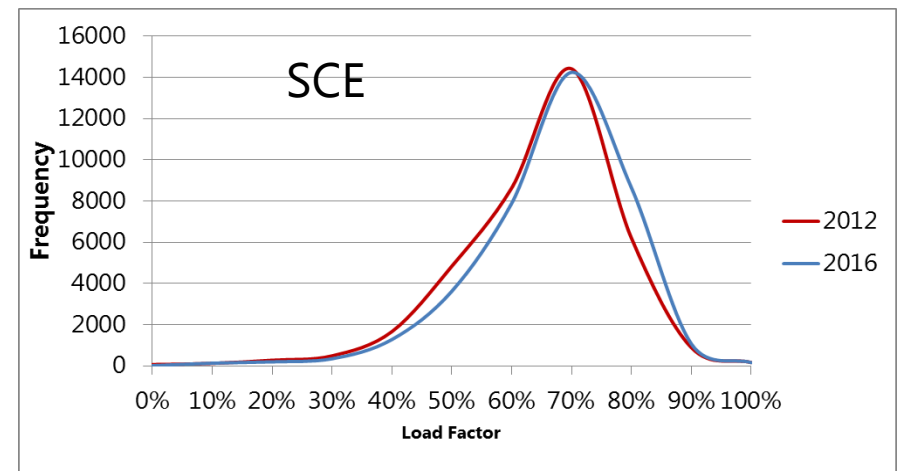
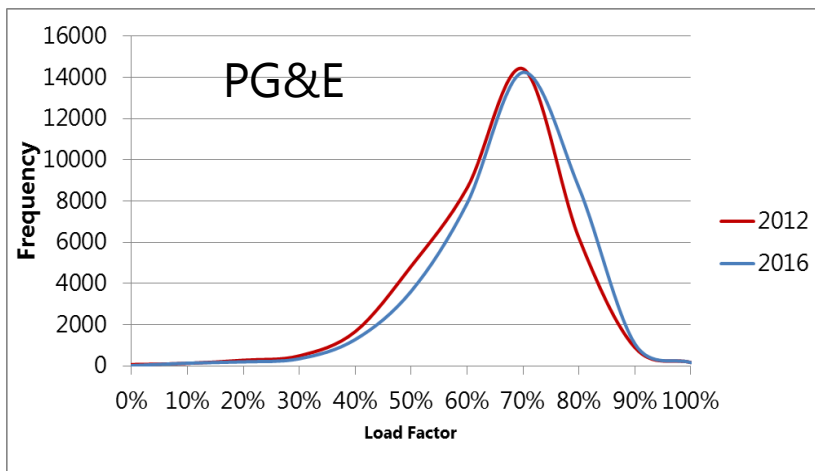
*System load factor is a measure of system capacity utilization. From 2012 to 2016, PG&E system load factors ranged from 55% to 60% whereas SCE and SDG&E had lower values that ranged from 50% to 55%.*





# Distribution Load Factors

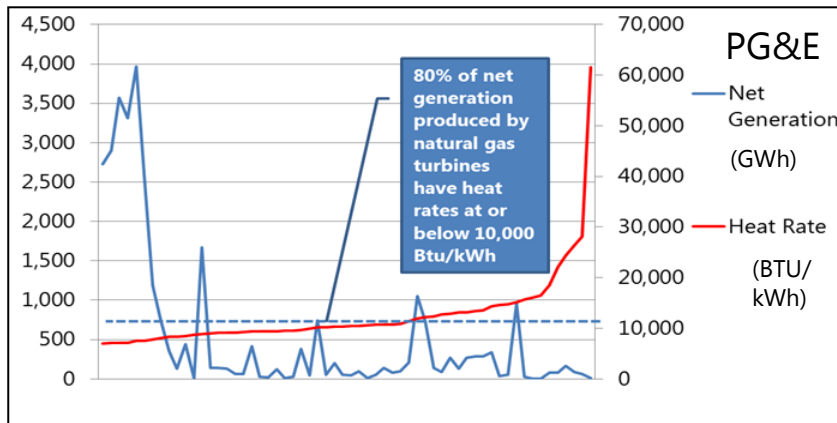
*Distribution load factor is a measure of distribution capacity utilization. In 2012 and 2016, PG&E's and SCE's monthly distribution load factors most frequently were in the range of 65%-75%, while SDG&E's were in the range of 75%-85%.*



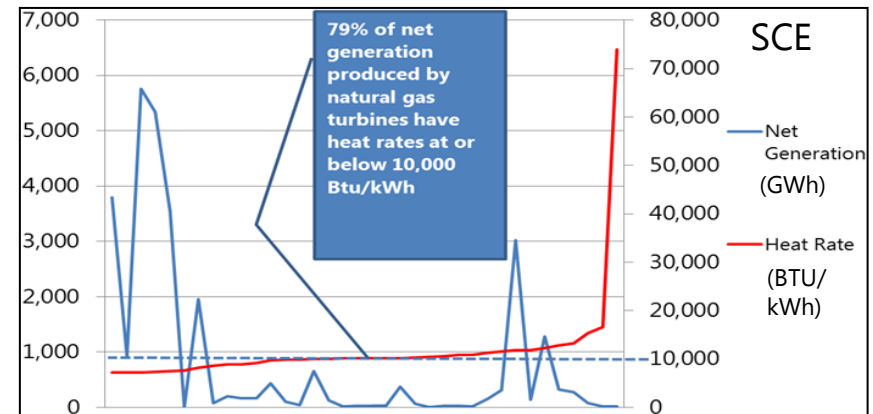


# Natural Gas Generation Efficiency

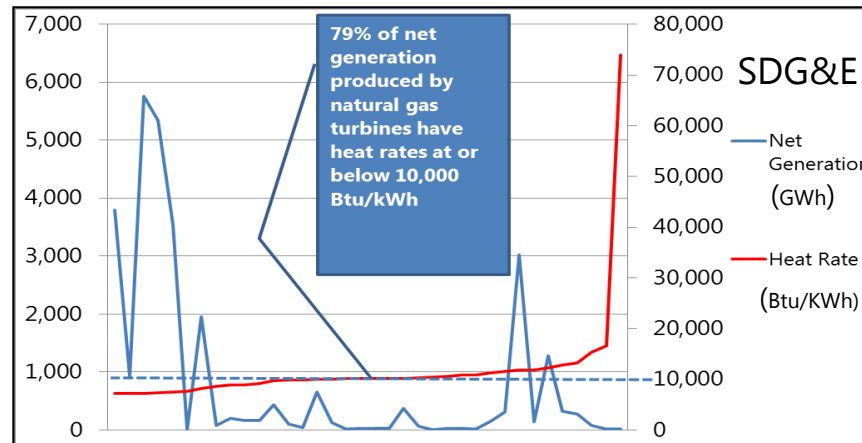
Natural gas generation (NG) efficiency reflects the amount of heat energy required to generate a kWh of electricity. In 2015, approximately 80-95% of net generation produced by California IOU NG resources had heat rates at or below 10,000 Btu/kWh, the approximate heat rate for a peaker plant.



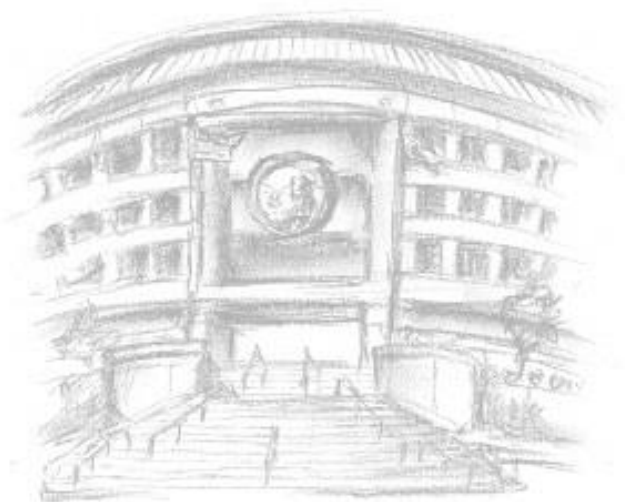
Natural Gas Generators



Natural Gas Generators



Natural Gas Generators



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