



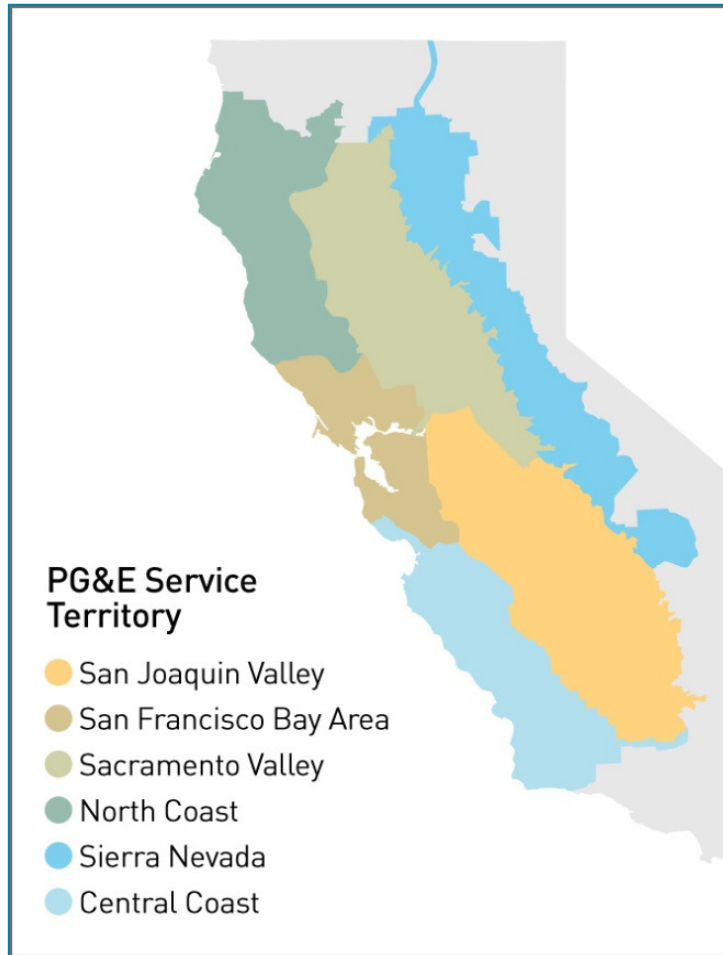
# OpenADR LIVE Virtual Summit CalFlexHub Utility Perspective

Pacific Gas and Electric Company





# PG&E: One of the Largest Utilities in the United States



- **Serves nearly 1 in 20 people in the United States**
  - Nearly 16 million people in our service area
    - 5.3 million electric distribution accounts
    - 4.4 million natural gas distribution accounts
- **70,000 square mile service territory**
  - 159,100+ circuit miles of electric lines
  - 49,200+ miles of natural gas pipelines



# Why Auto DR and LM are important?



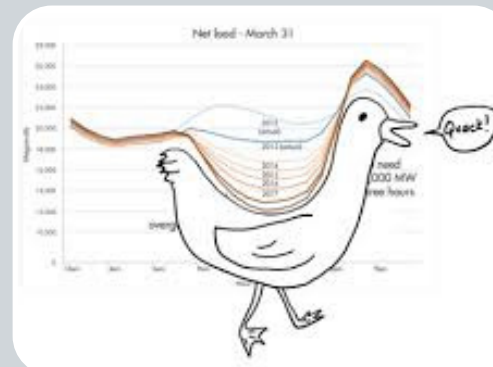
## Global Climate Change

Wild fires  
Drought  
PSPS  
Solar



## Technology Adoption

Building automation  
EV –VGI, V2G, V2H  
Battery



## Dynamic Rate

CEC LMS  
Digital Rate  
RTP



# CalFlexHub and PG&E Goals

CalFlexHub Goals	PG&E Goals
Demonstrate cost-effective and scalable technologies that provide flexible loads to reduce overgeneration and shift demand to lowest GHG (cleanest) times of day, improve grid reliability, provide ramping services.	<ul style="list-style-type: none"><li>• Leverage technologies to help TOU customers</li><li>• RTP pilot rollout</li><li>• Digital Rate DRET study</li></ul>
Develop a robust methodology and key performance metrics (KPMs) to value and prioritize load flexible technologies and strategies and identify high-priority pathways.	<ul style="list-style-type: none"><li>• Auto DR Program – residential ADR technology selection process</li></ul>
Enable widespread adoption and reliable reception of digital tariffs and greenhouse gas (GHG) signals that allow buildings, storage systems, and EVs to automatically respond to these signals with predictable and persistent changes in load.	<ul style="list-style-type: none"><li>• Collaborate with LBNL to evaluate: Define “widespread”</li><li>• FM Public Service Broadcast</li></ul>
Mitigate financial and health impacts of electrification and dynamic rates on disadvantaged (DA) and low-income (LI) communities.	<ul style="list-style-type: none"><li>• PG&amp;E DR DAC Pilot and low-income program</li></ul>
Ensure stakeholders and innovators have clear information on best practices for tech transfer.	<ul style="list-style-type: none"><li>• Collaborate with major manufacturers and vendors</li></ul>



# Questions