Powering the Pivot

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California Public Utilities Commission (CPUC)
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Topics for Discussion

1. CA Energy Goals and Transitions
2. Response to Climate Change/Wildfires
3. PG&E bankruptcy
About the CPUC

- The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies.

- Electric and Natural Gas Utilities
- Communications
- Rail
- Passenger & Moving
- Water
California’s Current GHG Emissions & Future Targets

CALIFORNIA GREENHOUSE GAS EMISSIONS (MMTCO₂e)

- 2020 Target: 1990 levels
- 2030 Target: 40% below 1990 levels
- 2050 Target: 80% below 1990 levels

Current rate of emission reduction

Source: California Air Resources Board
California Has Decoupled GHG Reductions & Economic Growth

Source: California ARB California Greenhouse Gas Emissions for 2000 to 2016- Trends of Emissions and Other Indicators
Renewable Energy

- Renewable Portfolio Standard
  - SB 1078 (2002): 20% by 2017
  - SB1x (2011): 33% by 2020
  - SB 350 (2015): 50% by 2030
  - SB 100 (2018): 60% by 2030; zero carbon by 2045

- Incentives for Distributed Generation
  - Self-Generation Incentive Program
  - Net Energy Metering

- Solar PV Required on All New Homes in 2020
Local Government Role in Procuring Energy Operational, Planned, and Potential Future CCAs

**Operational:**
- Apple Valley Choice Energy
- Clean Power Alliance of Southern CA
- Clean Power San Francisco
- East Bay Community Energy
- King City Community Power
- Lancaster Choice Energy
- Marin Clean Energy
- Monterey Bay Community Power
- Peninsula Clean Energy
- Pico Rivera Municipal Energy
- Pioneer Community Energy
- Redwood Coast Energy Authority
- Rancho Mirage Energy Authority
- San Jacinto Power
- San Jose Clean Energy
- Solana Beach Community
- Sonoma Clean Power
- Silicon Valley Clean Energy
- Valley Clean Energy Alliance

**Recently Filed Implementation Plans/Soon to be Operational:**
- Baldwin Park
- City of Commerce
- City of Palmdale
- City of Pomona
- City of Hanford
- Desert Community Energy Authority
- Western Community Energy of Severn Cities

**Prospective/Actively Exploring**
- Carlsbad
- Del Mar
- El Monte
- Encinitas
- Oceanside
- San Diego
- City of Santa Paula
- Butte County
- County of Santa Barbara
- Fresno County
- Nevada County
- City of Rialto
CCA Planned Customer Enrollments: 2010-2020*

*Based on approved and currently pending CCA Implementation Plans. Actual enrollment numbers will vary.
Departing Load Growth: 2017 - 2019

* Based on CEC’s Energy Demand Forecast Update:
  2017 IEPR demand forecast (GWh): CAISO Load Modifiers (Corrected) Mid Baseline
  2018 IEPR demand forecast (GWh): Final CAISO Load Modifiers Mid Baseline
  2018 IEPR demand forecast (GWh): Corrected LSE and BA Tables Mid Baseline, Form 1.1c
* California Distributed Generation Statistics—used in estimation of Net Energy Metering (NEM) load data
Additional GHG Reduction Strategies

• Energy Efficiency

• Distributed Solar and Storage - NEM, SGIP

• Micro Grids

• Building Electrification - SB 1477

• Transportation Electrification
Energy Efficiency -RENS

Continue to explore ways to broaden the ways we support Energy Efficiency beyond typical IOU programs

• December 2019 -- extended the use of Regional Energy Networks to continue the role of local governments in administering energy efficiency;

• Launched a $250 Market Transformation Initiative run by a single statewide administrator
Net Energy Metering

- Has driven enormous adoption of distributed solar
- Undertaking an evaluation of NEM 2.0 to inform future changes to the program
- Sustainability depends on improved equity of solar
Role of local jurisdictions ensuring NEM consumer protections in PACE

- Story of Huron and Parlier
- 3 agencies coordinating: CPUC, CSLB, DBO with County DA’s and AG office
- In 2019 CSLB received 859 complaints, in 2018 more than 1,000
- DBO is lead agency with new oversight over PACE, including ability to pay requirements as of April 2019
- Cities and Counties authorize program-some have opted out: Visalia, Bakersfield, Kern County
- Does your city/county allow PACE assessments on property taxes? Are you receiving complaints from homeowners about their tax assessments?
CPUC’s California Solar Consumer Protection Guide

- Solar Providers required to collect customer initials and signature to interconnect in PG&E, SCE, and SDG&E portals starting **September 30, 2019**

- On **February 6, 2020**, the CPUC approved a Decision clarifying regulations around the use of electronic signatures on the Consumer Protection Guide, a future citation program, and a potential restitution fund

- All salespeople should be registered Home Improvement Salespeople with CSLB, still grappling with lead generators and bad contractors.
Opportunities for Clean Energy in Disadvantaged Communities

- DAC-GT
  - Example: City of Fresno leasing property
- DAC Community Solar
  - Be a sponsor!
- Solar on Multifamily Affordable Housing (SOMAH)
SGIP

- $830 million in new funding for the Self-Generation Incentive Program, for a total of $1.2 billion over the next five years.
- Once a generation program, Jan. 2020 decision shifted the focus of SGIP towards energy storage, equity and resiliency.
- Rule changes in 2019 required discharging in ways that ensure GHG reductions.
- Encouraging active outreach to help the program become less developer-dependent.
Microgrids for Resilience

- Interconnection reforms for reducing costs and time
- Local government portal for transparency into distribution system
- Rate and rules changes for energy storage and solar
Building Electrification

- Residential and commercial gas use
- Title 24 reforms
Building Electrification - SB 1477 (Stern)

CPUC to develop 2 programs to promote building electrification with **$50 million per year** over 5 years of gas cap and trade program funds. 1/3 for low-income and disadvantaged communities.

- Technology and Equipment for Clean Heating (TECH) Initiative, target key low-emission space and water heating technologies -- $120 million
- Building Initiative for Low-Emissions Development (BUILD) Program, require the natural gas utilities to provide incentives for near-zero-emission building technologies to reduce GHG emissions from buildings -- $80 million
Clean Cars & ZEVs

• Greenhouse gas auto emission standards
• Designed to increase fuel economy from 35 mpg to 54.5 mpg by 2025 (nationwide)
  • Under attack by federal government
• Zero-Emission Vehicle (ZEV) mandate
  • 1.5 million by 2025
  • 5 million by 2030
• Sustainable freight action plan
  • Maximize use of near-zero emission vehicles and RE-powered equipment
  • Deploy 100,000 ZEV trucks and equipment by 2030
Transportation Electrification Investments in IOU territories

• Total approved investments of $780 million
  • PG&E - $266 million
  • SCE - $360 million
  • SDG&E – $155 million

• Medium/Heavy duty, residential infrastructure, public DC fast charging, rate design, offroad infrastructure (ports, airports)
Wildfire Mitigation Plans, incl. Public Safety Power Shutoffs

• The warmer, drier climate is causing California’s fire season to become longer and more severe.

• Poorly-maintained utility infrastructure contributes significantly to our fire threat: 8 of the top 20 most destructive fires in California history were caused by utility power lines, including 2018’s Camp Fire, the deadliest and most destructive wildfire in California history.

• Every year, California’s investor-owned electric utilities and transmission owners must submit wildfire mitigation plans explaining what they are doing to reduce wildfire threat—including, but not limited to, plans to de-energize power lines when the situation demands.

• In 2019, the California Legislature created a new Wildfire Safety Division within the CPUC to review wildfire mitigation plans.
Public Safety Power Shutoff

• Updated ruling taking comments now, proposals include:
  • Utilities should meet at least monthly with local & tribal governments, public safety partners, and representatives from the AFN community;
  • Utilities should conduct de-energization exercises with CPUC, CalFire, and CalOES.
  • Utilities should improve who receives notice of pending PSPS events, how and when they receive that notice, and the content of that notice.
  • Utilities should open more Community Resource Centers during PSPS events, should keep them open longer, and should work with local governments to ensure that CRCs meet the needs of the community.
  • Utilities should restore power no later than 24 hours after dangerous conditions end.
  • Utilities should ensure transportation resiliency.
  • Utilities should ensure that they meet the needs of the AFN community.

• The CPUC will also meet with local and tribal governments, and with members of the public, in the runup to this year’s fire season.
February 18, 2020 ruling President Batjer asked parties to comment on 10 issue areas, including:

- Makeup and appointment of PG&E’s Board and senior management;
- Appointment of an independent safety advisor;
- Restructuring the utility into regional operating units;
- New safety and operating metrics;
- Tying executive compensation to safety and operational goals; and
- A six-step process of escalating penalties for failing to comply with safety measures, starting with increased oversight, and progressing to the appointment of a receiver or yanking the utility’s license to serve California customers.
Final Thoughts

- Big role for local (city and county) governments to play in the energy transition!
- Opportunity for more leadership and coordination on energy transition
- Participate in proceedings (i.e. Joint counties party in Bankruptcy proceeding)
- Help us connect with wildfire high hazard regions (coordinate townhalls, etc.)
Any Questions?

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