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ITEM 5
Load Flexibility Part 2

Messay Betru, Efficiency Division CEC
California Energy Commission

Equity Implications for SB 49 and Load Management Standards Rulemaking

Gabriel Taylor, Messay Betru

7/16/2021
Flexible Demand Standards (SB 49)

What is the goal of SB 49?

Car charging example:

- Business as usual night-time flex
- Utilizing now cheapened noon-time flex
- Combined strategy flex

Credit: California Energy Commission
More on Flexible Demand Standards

Other requirements in SB 49:
- Ensure cost-effectiveness to consumers
- Reduce carbon or GHG emissions
- Customer consent and user-friendly
- Cybersecurity considerations
Equitable Access Defined

- Define energy equity in the context of appliances
- Identify the role of energy equity in programs

Residential ovens for San Joaquin Valley wood-burning, propane appliance replacement program
Credit: Merced Sunstar.

Display of older model and newer model refrigerators, and information on utility Appliance Rebate Programs.
Credit: Pacific Gas & Electric (PG&E).
Why equitability focus for flexible appliances - Marginalization

Qualified SCE customers are eligible for several appliance upgrades or energy-saving services:

- Cooling Measures
  - Evaporative Cooler
  - Window or Wall AC Replacement
  - Central AC Replacement
- Refrigerator Replacement
- Clothes Washer Replacement
- Freezer Replacement
- Pool Pump Replacement
- Weatherization Services
- Lighting
  - Light Emitting Diode (LED) bulbs
  - LED torchiere lamps
  - Replacement outdoor fixtures with LEDs
- Smart Power Strip
- Smart Thermostat
Need for Equitable Standards

What does an equity lens look like?

Key recommendations:

- Align with current and future agency rulemakings
- Equal distribution of flexible appliances, regardless of income
- Ensure use of appliance does not impact house comfort
Focus on Hurdles & Effectiveness

What are some pitfalls or concerns with ignoring the equity implications of flexible demand appliance standards?

• What are most common significant concerns?

What does long-term success look like for Flexible Appliances?

• Which metrics to consider?
• What is the value of increasing equity?
• Coordination with CEC efforts (e.g., SB 350, AB 3232)
What are critical questions or concerns we should be exploring/analyzing.