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Docket Number:	16-OIR-06
Project Title:	Senate Bill 350 Disadvantaged Community Advisory Group
TN #:	238911
Document Title:	Item 5 - Presentation - Load Flexibility, Part 2
Description:	7-16-2021 Meeting
Filer:	Dorothy Murimi
Organization:	California Energy Commission
Submitter Role:	Public Advisor
Submission Date:	7/15/2021 3:31:37 PM
Docketed Date:	7/15/2021

ITEM 5

Load Flexibility Part 2

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California Energy Commission

Equity Implications for SB 49 and Load Management Standards Rulemaking

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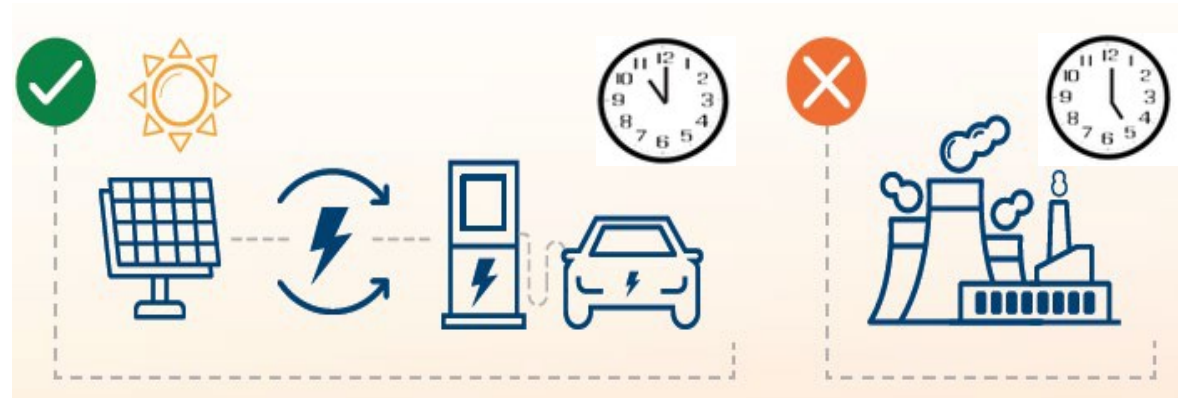
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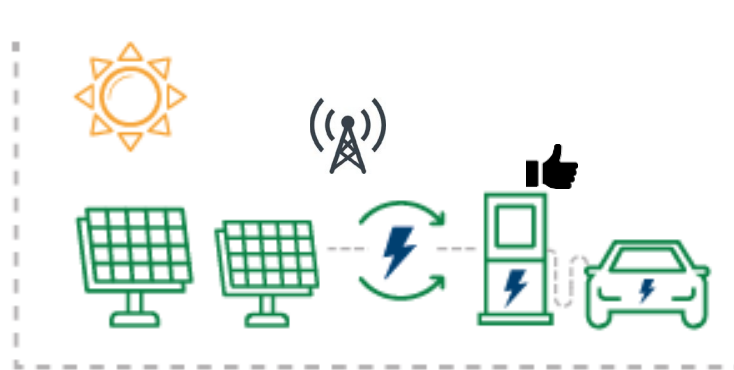
Flexible Demand Standards (SB 49)

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





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



Whirlpool Electric Dishwasher Delay Feature



Frigidaire Dishwasher Delay Feature



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).



Equitable Flexible Appliances

➤ 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)



Questions?

- What are critical questions or concerns we should be exploring/analyzing.