

<b>DOCKETED</b>	
<b>Docket Number:</b>	21-IEPR-03
<b>Project Title:</b>	Electricity and Natural Gas Demand Forecast
<b>TN #:</b>	243222
<b>Document Title:</b>	05 Item 05 Adoption of Demand Scenarios
<b>Description:</b>	May 24, 2022, CEC Business Meeting - Item 5: Demand Scenarios Adoption
<b>Filer:</b>	Raquel Kravitz
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	5/23/2022 9:28:36 AM
<b>Docketed Date:</b>	5/23/2022



# Item 5: Demand Scenarios Adoption

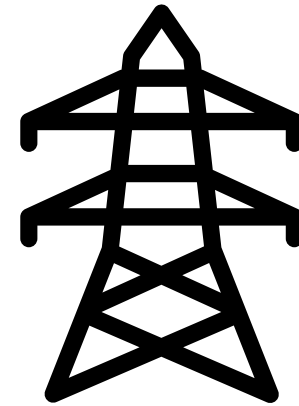
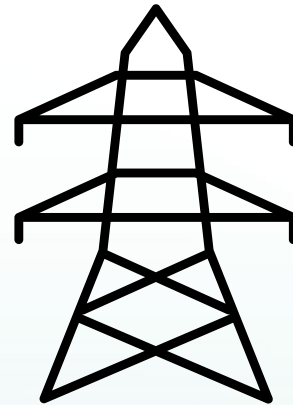
May 24, 2022 Business Meeting

Heidi Javanbakht, Manager  
Energy Assessments Division, Demand Analysis Office



# Benefits to Californians

- Inform planning for state's goals
- Reduce GHG emissions
- Maintain grid reliability





# Overview of Demand Scenarios

---

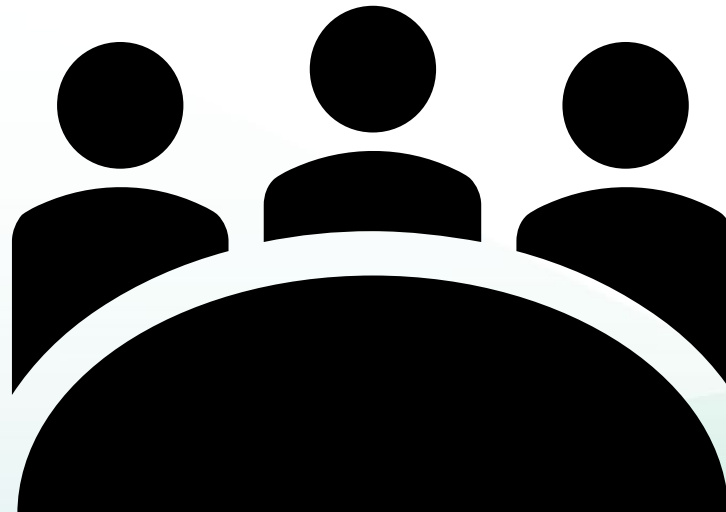
- **Purpose:** Assess statewide annual energy consumption through 2050
- **Scenarios:**
  - 1) Reference - Extends 2021 IEPR forecast to 2050
  - 2) Policy Compliance - Includes proposed policies and programs
  - 3) Mitigation - Includes additional strategies



# Stakeholder Process

---

- One Demand Analysis Working Group meeting 9/15/21
- Two IEPR workshops 12/2/21 and 4/7/22
- Joint Agency Steering Committee discussion





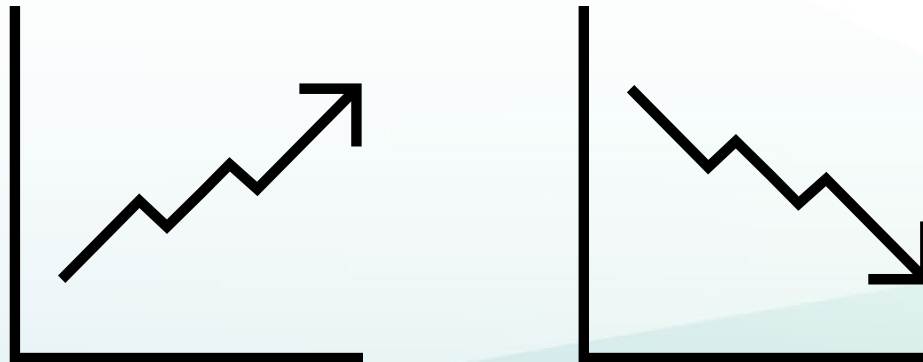
# Demand Scenarios Findings

Scenario	2030 GHG Target	2050 GHG Target
Reference	Does not meet	Does not meet
Policy Compliance	Does not meet	Does not meet
Mitigation	Meets	Does not meet



# Scenarios for Grid Planning

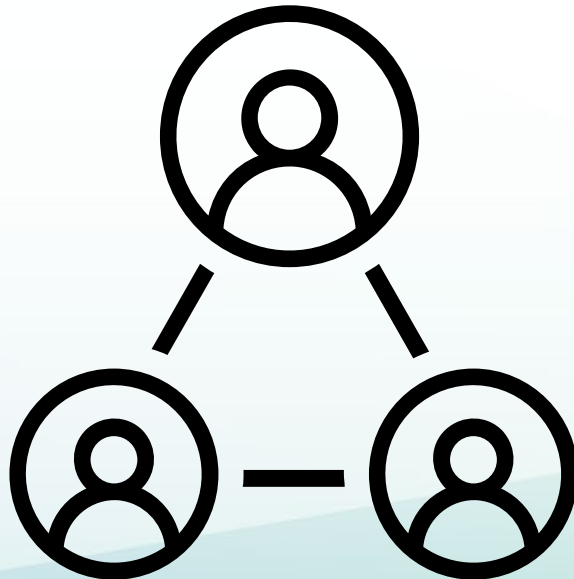
- Grid upgrades require a long lead time
  - CPUC and CAISO requested scenarios to inform grid planning for electrification
- CEC staff developed 2 scenarios (see appendix)
  - Interagency High Electrification Scenario
  - Additional Transportation Electrification Scenario





# Deviation from 2021 IEPR Forecast

- CPUC, CAISO, and CEC agreed to higher levels of electrification for:
  - CAISO 2022-2023 Transmission Planning
  - CPUC's Integrated Resource Plan to develop 2023-2024 Transmission Planning Process portfolio







# Staff Recommendation

---

- Adopt demand scenarios to support planning for state's GHG reduction targets
- Adopt scenarios for grid planning



# Appendix

## Scenarios for Grid Planning: Framework and Results



# Scenarios for Grid Planning: Framework

	Mid-Mid (CED 2021)	Interagency High Electrification (Interagency HE)	Additional Transportation Electrification (Additional TE)
Baseline Demand Case	Mid Case	Mid Case	Mid Case
Electric Vehicles	Mid Case	Policy	Mid 2021 - 2027 Policy 2028 - 2035
Additional Achievable Energy Efficiency	Scenario 3	Scenario 4	Scenario 3
Additional Achievable Fuel Substitution	Scenario 3	Scenario 4	Scenario 3
CARB State Implementation Plan NOx Rules	—	Included	—



# Seasonal CAISO System Peaks

