CALIFORNIA ENERGY CODES & STANDARDS

A STATEWIDE UTILITY PROGRAM

Second Stakeholder Meeting for Nonresidential Lighting (2 of 2)

March 30, 2017

WEBINAR

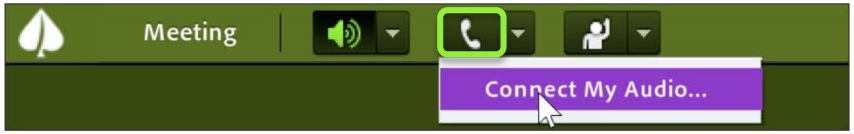
Los Angeles Department of Water & Power | SMUD | SDGE A Sempra Energy utility | SoCalGas A Sempra Energy utility | Southern California Edison | Pacific Gas and Electric Company

Meeting Agenda

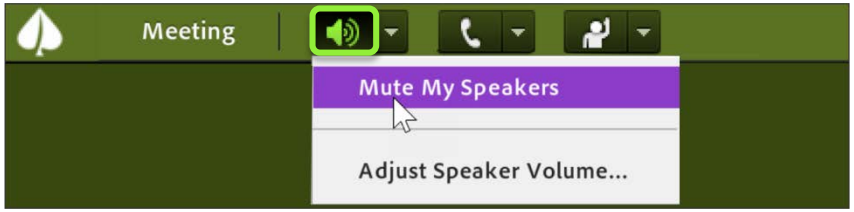
Time	Topic	Presenter
9:00 – 9:15	Introduction	Kelly Cunningham (PG&E)
9:15 – 9:45	Advanced Daylighting Design: Part 1	Eric Shadd (Determinant LLC)
9:45 – 10:15	Advanced Daylighting Design: Part 2	Mudit Saxena (Vistar Energy)
10:15 – 11:05	Outdoor Lighting Controls	Axel Pearson (Energy Solutions)
11:05 – 11:55	Outdoor Lighting Sources	Nancy Clanton, Clanton & Associates Annie Kuczkowski, Clanton & Associates Mike McGaraghan, Energy Solutions Chris Uraine, Energy Solutions
11:55 – 12:00	Review and wrap-up, next steps	Kelly Cunningham (PG&E)

Hear and Be Heard!

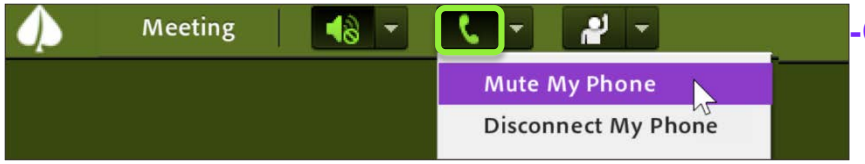
- Click the phone icon at the top of your screen, then follow the prompts



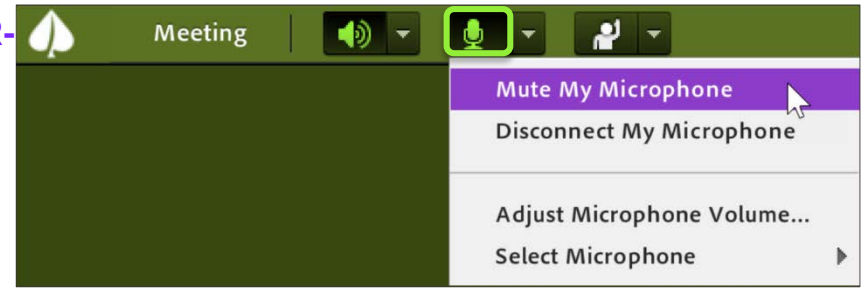
- If you connect via phone, mute your PC speakers to avoid feedback



- Mute your phone or microphone to avoid contributing unwanted background noise — unmute yourself when you want to talk



-OR-



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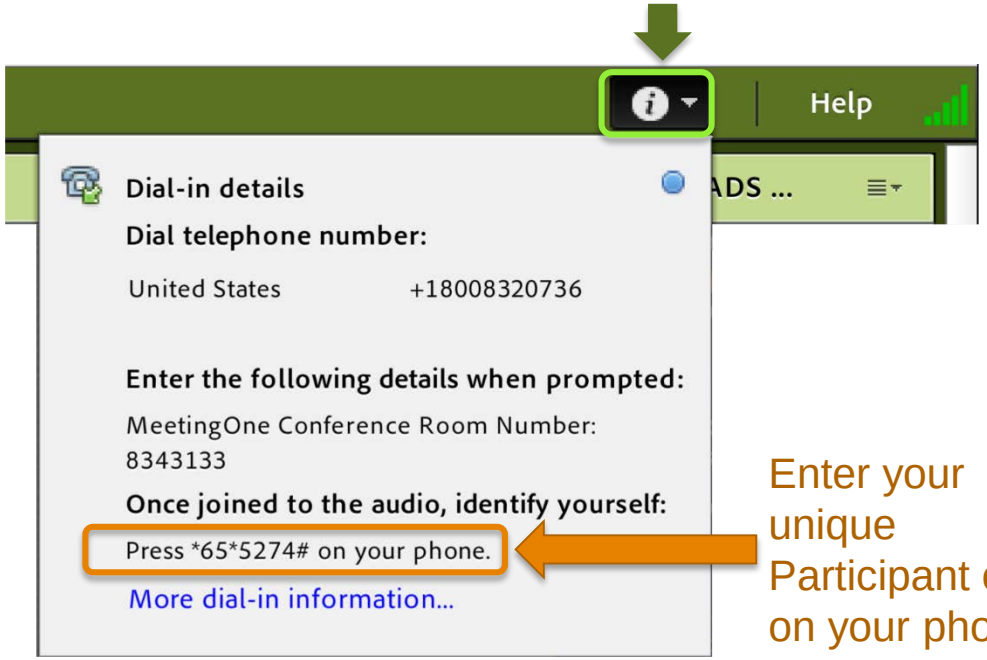
Join your ears and eyes if you dialed in

If you dialed in and did not enter a participant code, please do so now.

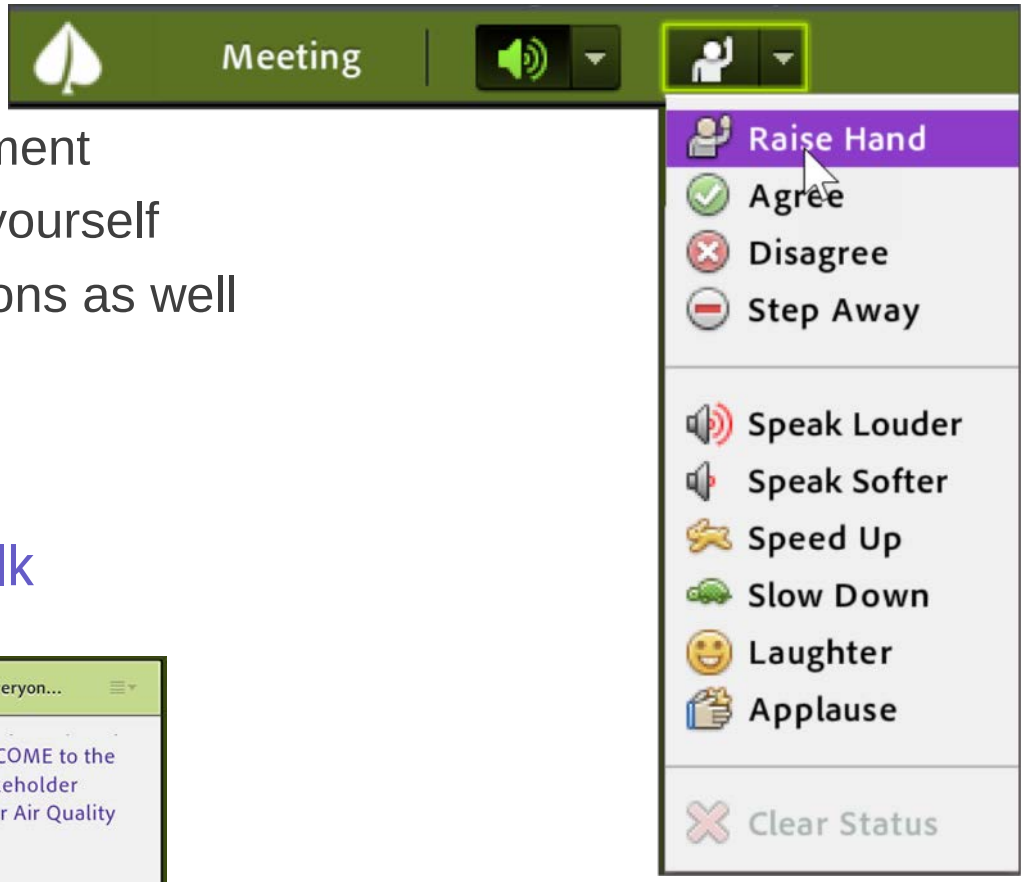
- Click the information button on the right side of the main menu bar
- Enter your unique participant code on your phone



Enter your unique Participant code on your phone

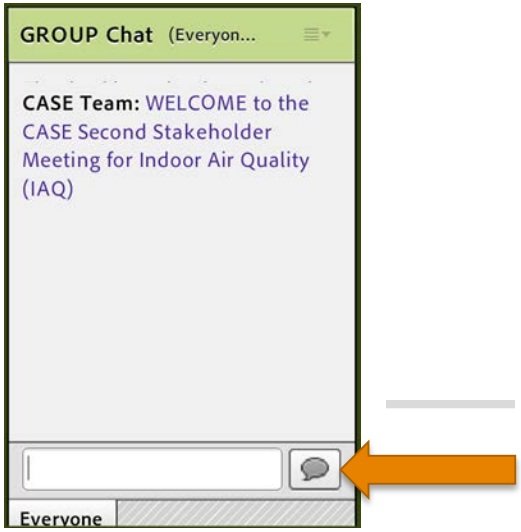
Communicate with icons

- Raise your hand
  - We'll call on you in a moment
  - Don't forget to "unmute" yourself
- Feel free to use the other icons as well



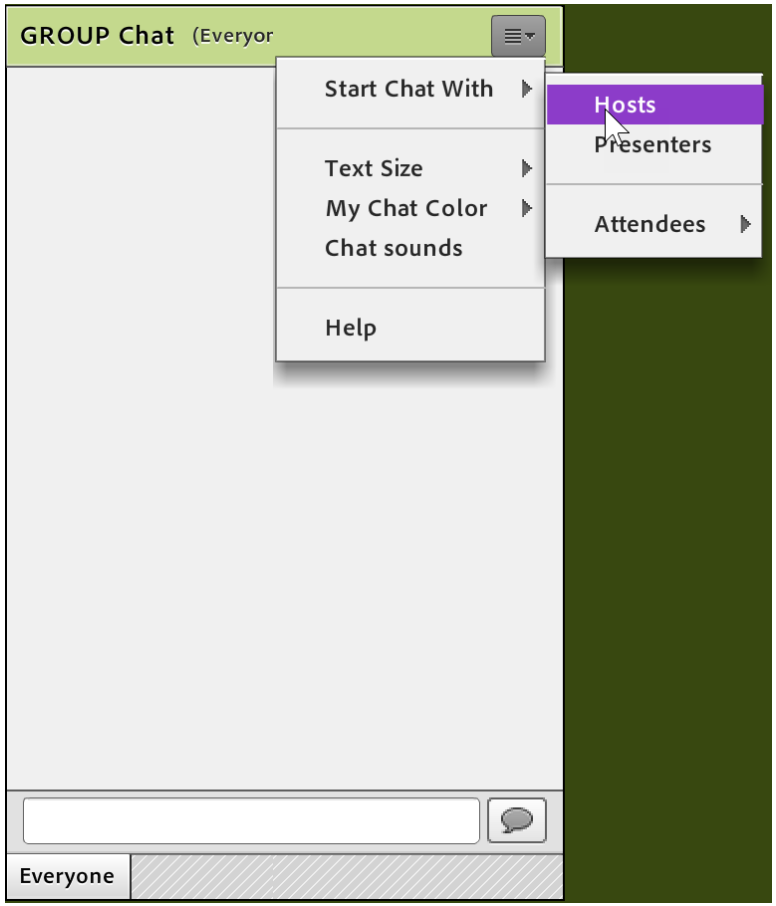
Use Chat if you don't want to talk

- The Chat pod is consistently found in the lower left of your screen



Type here and press Enter on your keyboard

Technical Support for the Meeting Room



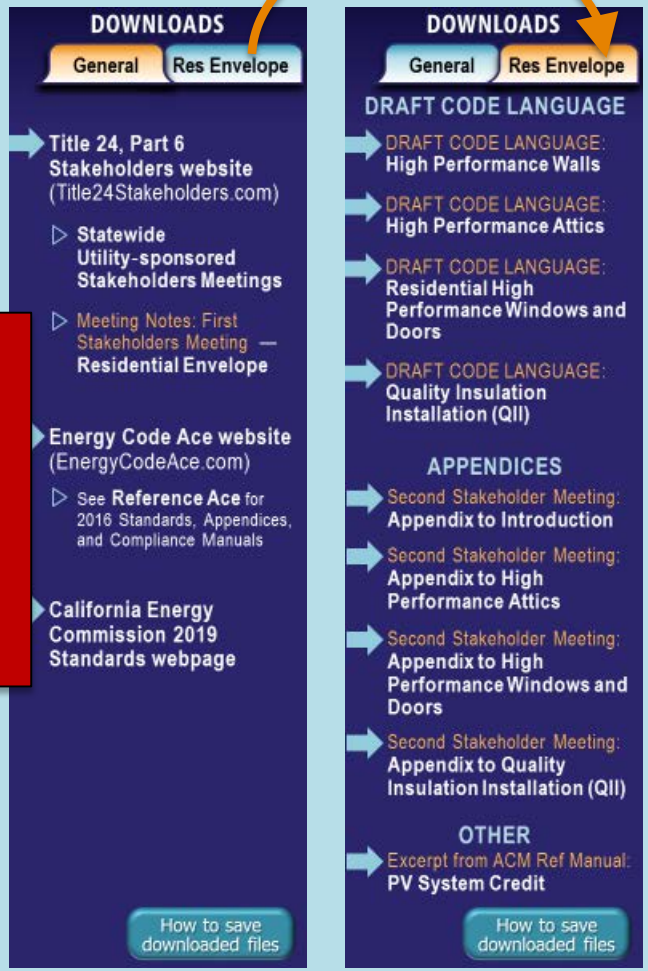
Tech support is standing by

- Use “Chat” (lower left of your screen)
- Direct your question or comment to “Hosts”
- Give us a moment to chat back

Supporting Resources

- Click on links in the Downloads pod
- Use “tabs” to switch between general downloads and topic-specific downloads

Click on a “tab” to switch between views
(It changes your view, but not others’)



REPLACE

Statewide Utility Team Title 24, Part 6 Advocacy Support

- The Utilities support the California Energy Commission by proposing changes to the Building Energy Efficiency Standards that are:

  Feasible | Cost effective | Enforceable | Non-proprietary

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Statewide Utility Team Title 24, Part 6 Advocacy Support

- For information on the Energy Commissions' rulemaking process, visit: http://www.energy.ca.gov/title24/2019standards

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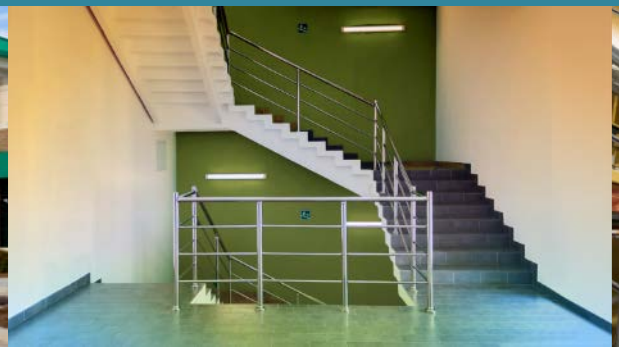
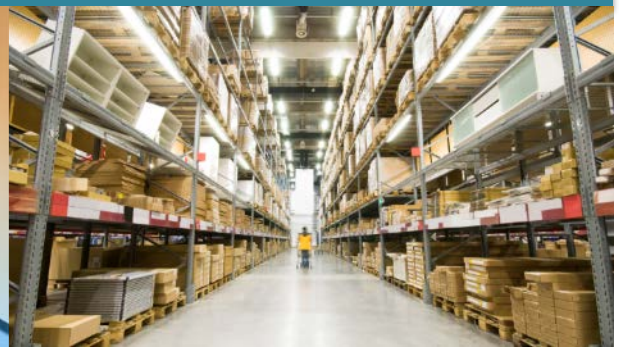
Objectives of Today's Discussion

Discuss and get input on:

- Code change proposals
- Technical and market feasibility
- Compliance and enforcement
- Cost effectiveness results (preliminary)
- Energy savings analysis (preliminary)

YOUR PARTICIPATION WILL INFORM THE CODE CHANGE PROPOSALS!

Invitation to Participate

We want to hear from you:

- Supporting and opposing viewpoints are welcome
- We may not be able to reach resolutions today
- There are no stupid questions
- Mute your phone, but do not place us on ‘hold’
- Clearly state your name and affiliation prior to speaking
- Speak loudly (without shouting)

NOTES & PRESENTATION MATERIALS: www.Title24Stakeholders.com

Invitation to Participate

Participate in today's discussion by:

- Answering polls
- Use chat function
- Speak up and ask questions

Continue the discussion:

- Email or call CASE Authors
- Email info@title24stakeholders.com
- Contact California Energy Commission staff

NOTES & PRESENTATION MATERIALS: www.Title24Stakeholders.com

Utility-Sponsored Stakeholder Meetings, March 2017

#	Date	Time	Meeting Group	Measures in Group
1	March 07, 2017	9:00 - 12:00	Laboratory Spaces	1. Induction Exhaust Fans 2. Fume Hood Sash Closures
2	March 14, 2017	9:00 - 12:00	Residential Envelope	1. Residential High Performance Walls 2. Residential High Performance Attics 3. Residential Improved Fenestration Products 4. Residential Quality Insulation Installation (QII)
3	March 15, 2017	9:00 - 12:00	Nonresidential HVAC 1	1. Proposal Based on ASHRAE 90.1-2016 a. (1 of 7) Water Side Economize 2. Cooling Tower Minimum Efficiency 3. Fault Detection Diagnostics (FDD) for Built-up Systems
4	March 16, 2017	9:00 - 12:00	• Residential IAQ • Nonresidential IAQ	1. Residential Quality HVAC 2. Residential Indoor Air Quality (IAQ) 3. Nonresidential Indoor Air Quality (IAQ)
5	March 21, 2017	9:00 - 12:00	Warehouses	1. Hybrid Condensers 2. Loading Dock Seals

MEETING SCHEDULE ALSO AVAILABLE AT: www.Title24Stakeholders.com

Stakeholder Meetings in March 2017 (continued)

#	Date	Time	Meeting Group	Measures in Group
6	March 22, 2017	9:00 - 12:00	Nonresidential Lighting 1	1. Nonresidential Indoor Lighting Sources 2. Nonresidential Indoor Light Controls 3. Nonresidential Lighting Alterations
7	March 23, 2017	9:00 - 12:00	Residential Water Heating	1. Residential Compact Hot Water Distribution Design 2. Residential Drain Water Heat Recovery
8	March 28, 2017	10:00 - 12:00	• Residential HVAC • Demand Response	1. Residential Quality HVAC 2. Demand Response Clean Up
9	March 29, 2017	9:00 - 12:00	Nonresidential HVAC 2	1. Proposal Based on ASHRAE 90.1-2016 a. (2 of 7) Fan System Power b. (3 of 7) Exhaust Air Energy Recovery c. (4 of 7) Equipment Efficiency d. (5 of 7) Transfer Air for Exhaust Air Makeup e. (6 of 7) Demand Control Ventilation for Classrooms f. (7 of 7) Occupant Sensor Ventilation
10	March 30, 2017	9:00 - 12:00	Nonresidential Lighting 2	1. Nonresidential Outdoor Lighting Sources 2. Nonresidential Outdoor Lighting Controls 3. Nonresidential Advanced Daylighting Design

Tentative Schedule for 2019 Code Development Cycle

Milestone	Date(s)
Utility-Sponsored Stakeholder Meetings	March 2017
Utility Team Submits Draft CASE Reports	April 2017
CEC Pre-rulemaking Workshops	May 2017 – June 2017
Utility Team Submits Final CASE Reports	June - July 2017
CEC Rulemaking	Nov 2017 – May 2018
2019 Standards Adopted	May 2018
2019 ACM Reference Manuals and Compliance Manuals Approved	Nov 2018
2019 Standards Effective	January 1, 2020

Let's move on to…

Residential High Performance Walls

- **Kelly Cunningham**
  KACV@pge.com