

DOCKETED	
Docket Number:	25-BSTD-03
Project Title:	2028 Energy Code Pre-Rulemaking.
TN #:	271001
Document Title:	Presentations - June 25, 2026 (Day 3) - 2028 Energy Code Staff Pre-Rulemaking Workshop
Description:	Presentations from the June 25, 2026, 2028 Energy Code staff pre-rulemaking workshop.
Filer:	Michael Shewmaker
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	6/25/2026 1:26:16 PM
Docketed Date:	6/25/2026



2028 Energy Code, Pre-Rulemaking

Presenter: Payam Bozorgchami P.E., Building Standards Branch

Date: June 25, 2026



Housekeeping Rules

Public Comments

Zoom App/Online

- Click “raise hand”

Telephone

- Press *9 to raise hand
- Press *6 to Mute/Unmute

When called upon

- CEC will open your line
- Unmute on your end
- Spell name and state affiliation, if any
- 2 minutes or less per speaker, 1 speaker per entity

Agenda for Today's Workshop



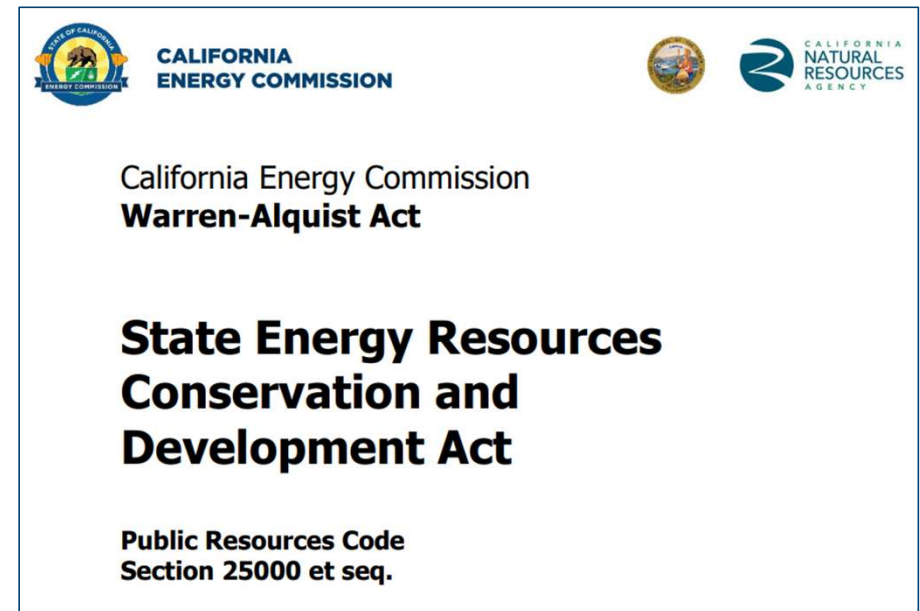
	Topics	Presenter
	Introduction & 2028 Overview	Payam Bozorgchami
	Overview of Compliance Forums	Joe Loyer
	Compliance Forum Proposals	Joe Loyer
	Updates to ATTCP Requirements	Bhaskar Ale
	Commissioning with Acceptance Test Technician (ATT)	Joe Loyer
	Adjourn	- - -

California Energy Commission's Authority & Process



Public Resources Code (PRC 25402): Reduction of wasteful, uneconomic, inefficient, or unnecessary consumption of energy

- Warren Alquist Act Signed into law in 1974
- Mandates updates to Building Efficiency Standards and requires the building departments to enforce them through the permit process



Assembly Bill 130 (2025)



Limits updates to building standards affecting residential units before 2031 code cycle (effective date no sooner than Jan 1, 2032)

- All 2028 Energy Code updates will exclude buildings of Group R Occupancy including its common or public use areas
 - Residential Group R is defined Part 2 of Title 24
- Residential energy metrics will remain unchanged until 2031 Energy Code, including compliance metrics and weather files
- September 2025, CA Building Standards Commission Information Bulletin 25-03:
 - <https://www.dgs.ca.gov/BSC/News/Page-Content/Building-Standards-Commission-News-List-Folder/IB-25-03-AB-130>

Proposed Definition for Group R Occupancies

Will provided exceptions through the Energy Code



- **GROUP R OCCUPANCIES** residential Group R and common and public use areas as defined in Chapter 2 of the CBC, serving residential units, and structures accessory to residential units designated and constructed in accordance with the CRC, are also subject to Assembly Bill 130-2025.

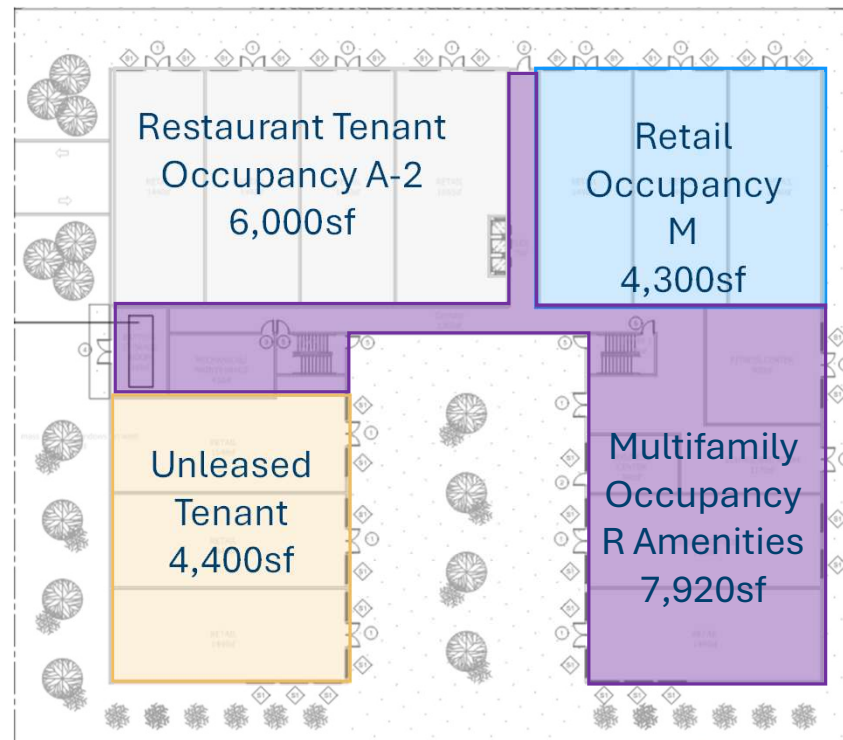
Proposed Definition for Group R Occupancies

Our understanding of Multifamily Occupancy in a Mixed Occupancy Building.



R-Occupancy (2025 Energy Code Stringency)

- 1st floor Amenities (A-2 lobby, R-2 corridors and stairs to multifamily occupancy, B leasing office). 2-5 floors supporting dwelling units and circulation to those dwelling units



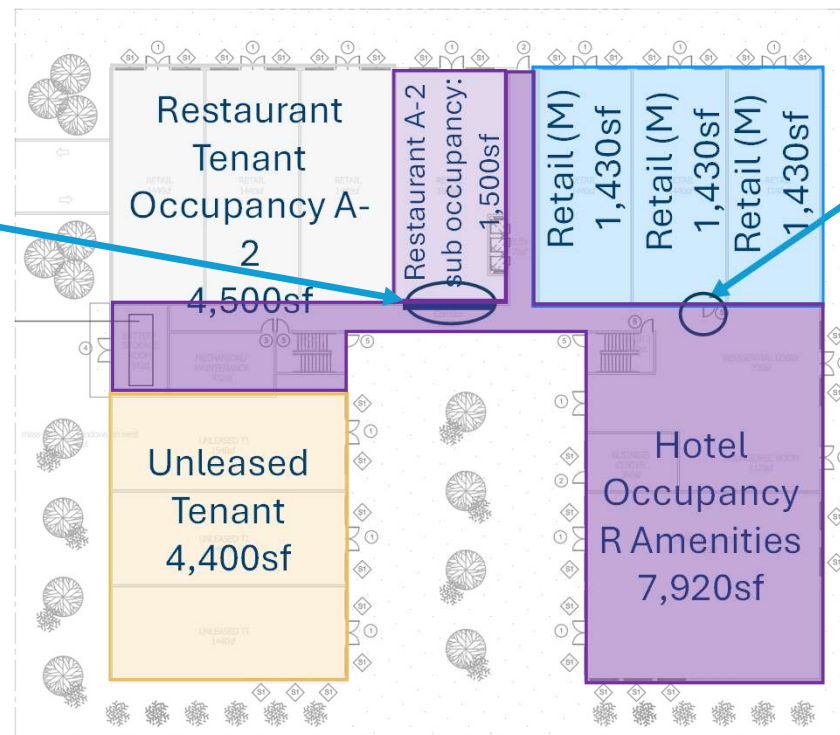
All of the non-R Occupancies that are not a sub occupancy nor share common areas with the R Occupancy and will be subject to 2028 stringency.

Proposed Definition for Group R Occupancies

Our understanding of Hotel/Motel in a Mixed Occupancy Building.



There is access to the restaurant from the hotel as sub-occupancy



One of the non-R Occupancies that is not a sub occupancy to the R Occupancy has access to common area of the R occupancy via a fire rated door and will be subject to 2028 stringency.

2028 Energy Code Drivers and Themes



State Goals

- Contribute to the state's GHG reduction goals
- Increase building energy efficiency cost-effectively

2028 Energy Code Areas of Interest – Nonresidential Buildings

- Continue to encourage efficient building decarbonization where possible
- Promote demand flexibility
- Covered process loads
- Existing buildings
- Compliance improvements



2025 Restructured Standards

To Be The New Structure for the 2028 Energy Code



HOME

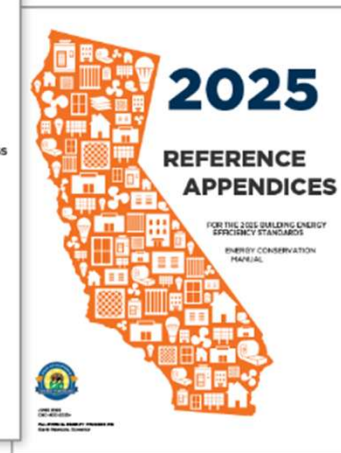
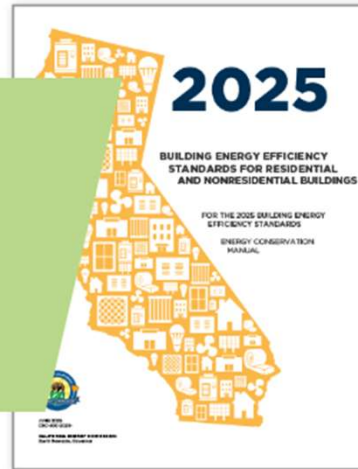
PROCEEDINGS ▾

RULES AND REGULATIONS ▾

PROGRAMS AND TOPICS ▾

2025 Energy Code for
Residential and
Nonresidential Buildings

2025 ENERGY CODE >



Restructured 2025 Energy Code – California Code of Regulations – Title 24, Part 6 (For Information Only)

FIND IT: <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2025-building-energy-efficiency>

Organized by Building System



Chapter	Section	Subject.	Title
1	100.0-100.2	(a)(b)(c) 1.2.3. A.B.C. i.ii.iii a.b.c.	General Provisions All building types
2	110.0-110.12		Mandatory All building types
3	120.0-120.10		Mandatory Nonresidential, Covered Process
4	130.0-130.5		Mandatory Lighting & Electrical Nonresidential, Covered Process
5	140.0-140.10		Prescriptive and Performance Nonresidential, Covered Process
6	141.0-141.1		Additions, Alterations and Repairs Nonresidential, Covered Process
7	150.0		Mandatory Single-family
8	150.1		Prescriptive and Performance Single-family
9	150.2		Additions, Alterations and Repairs Single-family
10	160.0-160.9		Mandatory Multifamily
11	170.0-170.2		Prescriptive and Performance Multifamily
12	180.0-180.4		Additions, Alterations and Repairs Multifamily

CURRENT 2025 STRUCTURE

Chapter	Section	Subject.	Title
1	100-102	1.2.3... 1.2.3... 1.2.3... 1.2.3... 1.2.3...	General Provisions All building types
2	200		Definitions All building types
3	300-303		Envelope All building types, Nonresidential, Single-family, Multifamily
4	400-403		HVAC and Ventilation All building types, Nonresidential, Single-family, Multifamily
5	500-503		Plumbing All building types, Nonresidential, Single-family, Multifamily
6	600-603		Electrical and Lighting All building types, Nonresidential, Single-family, Multifamily
7	700-703		Renewables and Storage All building types, Nonresidential, Single-family, Multifamily
8	800-803		Pool and Spa All building types, Nonresidential, Single-family, Multifamily
9	900-911		Process Systems and Equipment Covered Process
10	1000-10001		Design Review and Commissioning Nonresidential

NEW 2028 STRUCTURE



Restructured Energy Code

- In response to industry feedback, we published the 2025 Restructured Code
 - Better aligns the Energy Code with other Parts of Title 24
 - Improves usability and navigation
 - Will be used as the basis for the 2028 Energy Code

Current Code Format

(a) **Roof deck, ceiling and rafter roof insulation.** The opaque portions of roof decks separating attic spaces from ambient air, and ceilings or rafter roofs separating conditioned spaces from unconditioned spaces or ambient air, shall meet the requirements of Items 1 through 4 below:

1. In Climate Zones 4 and 8 through 16, roof decks in newly constructed attics that are above conditioned space shall be insulated to achieve an area-weighted average U-factor not exceeding U-0.184.

Exception 1 to Section 150.0(a)1:

- i. The space-conditioning system air handler and ducts are located entirely in conditioned space below the ceiling separating the occupiable space from the attic; or
- ii. The space-conditioning system air handler is located in unconditioned space and has 12 linear feet or less of supply duct, including the length of the air handler and the plenum, located in unconditioned space, with all other portions of the supply ducts located in conditioned space below the ceiling separating the occupiable space from the attic; or
- iii. The space-conditioning system is a ductless system.

Exception 2 to Section 150.0(a)1: Space-conditioning duct systems buried within insulation in an attic that complies using Section 150.1(b) and is verified according to RA 3.1.4.1.



Restructured Code Format

302.2 [Section 150.0] Mandatory requirements (Newly Constructed, Additions, Alterations).

302.2.1 [Section 150.0(a)] Roof deck, ceiling and rafter roof insulation.

The opaque portions of roof decks separating attic spaces from ambient air, and ceilings or rafter roofs separating conditioned spaces from unconditioned spaces or ambient air, shall meet the requirements below:

302.2.1.1 [Section 150.0(a)1] Attics above conditioned space.

In Climate Zones 4 and 8 through 16, roof decks in newly constructed attics that are above conditioned space shall be insulated to achieve an area-weighted average U-factor not exceeding U-0.184.

Exception 1 to Section 302.2.1.1: The space-conditioning system air handler and ducts are located entirely in conditioned space below the ceiling separating the occupiable space from the attic; or

The space-conditioning system air handler is located in unconditioned space and has 12 linear feet or less of supply duct, including the length of the air handler and the plenum, located in unconditioned space, with all other portions of the supply ducts located in conditioned space below the ceiling separating the occupiable space from the attic; or

The space-conditioning system is a ductless system.

Exception 2 to Section 302.2.1.1: Space-conditioning duct systems buried within insulation in an attic that complies using [Sections 102.5.2](#) and [102.5.5 \[Section 150.1\(b\)\]](#) and is verified according to RA 3.1.4.1.

IOU CASE team and Consultants

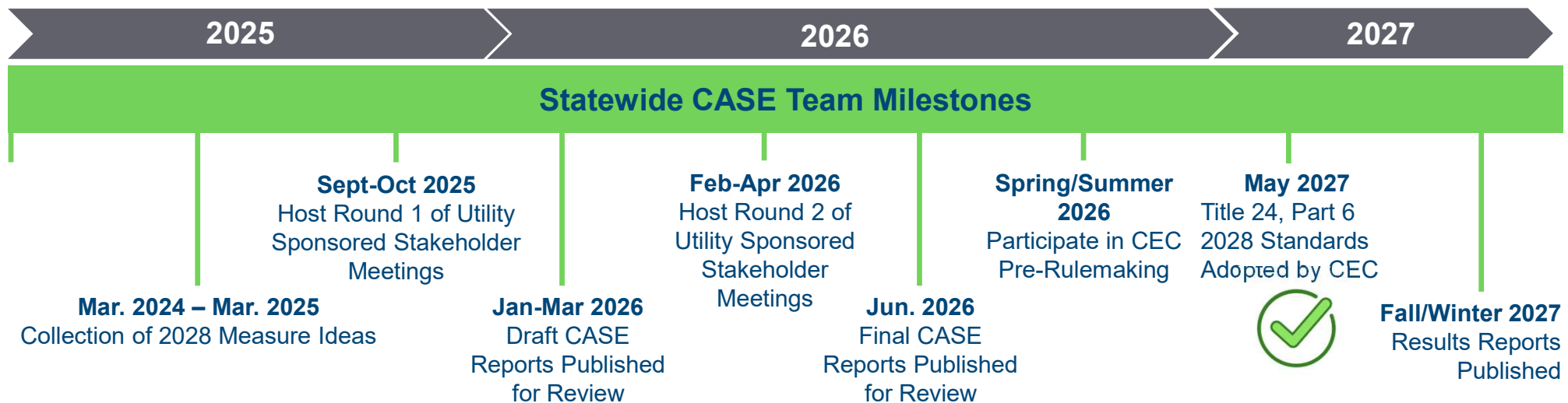
Thank You!!



Overview Schedule for the 2028 California Energy Code

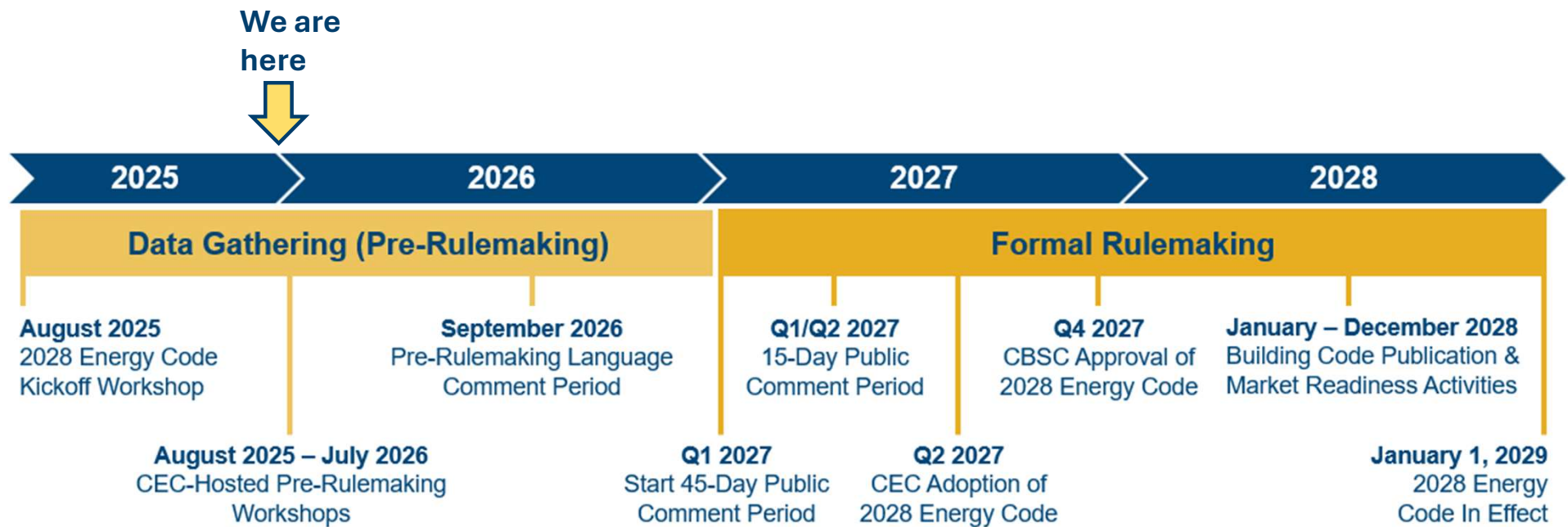


IOU CASE Team Schedule



Overview Schedule for the 2028 California Energy Code

2028 Energy Code



Comments for Today's workshop

Due Date: July 17, 2026, by 5:00 PM



Comments to be submitted to:

**[https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?
docketnumber=25-BSTD-03](https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=25-BSTD-03)**

Thank you for participating!

QUESTIONS?



Compliance Forums – 2028 Energy Code

Joe Loyer (California Energy Commission)

June 25, 2026



Compliance Forums

Objective: Actionable proposals - 2028 Energy Code.

- **Three Forums:** November, December, and February.
- **Participants:** Field experts that had previously expressed interest.
- **Staff Support:** Assistance but not authorship.
- **Submissions:** Final proposals docketed by each participant.



A New Outreach Effort

Background

- 2025 Energy Code – “Title 20 Home Energy Rating System (HERS) Program” to “Title 24 Energy Code Compliance (ECC) Program”
- More and New Participants
- New ideas to improve code compliance
- California Energy Commission (CEC) proposed a special outreach effort for the 2028 Energy Code
- Focus on code compliance



Forum Participants

- Acceptance Test Technician Certification Providers (ATTCPs)
- Energy Code Compliance (ECC) Providers
- ECC Raters
- Acceptance Test Technicians (ATTs)



2028 Compliance Forum Proposals

- Clarification of Automated Demand Response
<https://efiling.energy.ca.gov/GetDocument.aspx?tn=269381&DocumentContentId=106472>
- Alternative to Verification Weigh-in
<https://efiling.energy.ca.gov/GetDocument.aspx?tn=269330&DocumentContentId=106412>
- Rater Photo Verification
<https://efiling.energy.ca.gov/GetDocument.aspx?tn=269331&DocumentContentId=106413>
- Revisions to ATTCP Quality Assurance
<https://efiling.energy.ca.gov/GetDocument.aspx?tn=270027&DocumentContentId=107223>
- Sampling and Installation Certificate Updates
<https://efiling.energy.ca.gov/GetDocument.aspx?tn=269821&DocumentContentId=106971>



Questions and Contact Information

CONTACT INFORMATION

Comments can be submitted to pre-rulemaking docket 25-BSTD-03:
<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=25-BSTD-03>

Comments on today's workshop are **due July 17, 2026**

Contact information: Joe.Loyer@energy.ca.gov



Demand Response Lighting Controls

Collin J. Weiner (CalEnergy)

Joe Loyer (California Energy Commission)

June 25, 2026



Existing Code Requirements

- Lighting controls are required to reduce lighting power by 15%.
- The code does not include directions when lighting power is below 15%.
- This has led to inconsistent field performance and test results.



Proposal Description

Establish criteria for lighting control systems set below 15%.

This will:

- Improve demand event reliability.
- Eliminate false “failures” during acceptance testing.
- Automated Demand Response performance consistent with Commission and utility demand response program intent.



Code Sections Affected – New within Section 600.4.2 [Section 110.12(c)4]

- **Proposed New Language:**

- During a Demand Response (DR) reduction by 15–50%.
- If lighting is already below the DR target reduction level, the system does not change the lighting level.
- Exception for lighting control systems serving group R-occupancies



Code Sections Affected – New Section NA7.6.3.2.1 Method 1

Proposed New Language: Illuminance Measurement.

- **Minimum output test:** each space the DR-illuminance level must be the same as the minimum output setting.
- **Exceptions for:**
 - Daylit spaces, or
 - Occupant manual controls



Code Sections Affected – New Section NA7.6.3.2.2 Method 2:

Proposed New Language: Current measurement.

- **Minimum output test:** each space the DR-current level must be the same as the minimum output setting.
- **Exception for:**
 - Daylit spaces, or
 - Occupants using manual controls.



Code Sections Affected – New Section NA7.6.3.2.3 Method 3:

Proposed New Language: Full facility current measurement.

- **Minimum output test:** post-event current must be the same as the pre-event current.
- **Exception for:**
 - Daylit spaces, or
 - Occupants using manual controls.



Energy Savings, Costs, and Cost Effectiveness

- **Estimated Energy Savings:** Ensures genuine demand reductions and prevents counterproductive increases in electrical demand during grid stress periods.
- **Estimated Costs:** No expected increase in compliance cost.
- **Economic Impact:** Expected to produce a net decrease in energy consumption.
- **Cost Effectiveness:** Staff expects the benefits to far out weight the costs.



Questions and Contact Information

CONTACT INFORMATION

Comments can be submitted to pre-rulemaking docket 25-BSTD-03:
<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=25-BSTD-03>

Comments on today's workshop are **due July 17, 2026**

Contact information: Joe.Loyer@energy.ca.gov



Alternative Verification of HVAC Charge Weigh-in

David Choo, CHEERS

Joe Loyer, California Energy Commission

June 25, 2026



Existing Code Requirements - General

Reference Residential Appendix, Sections RA3.2.3.1 and RA3.2.3.2

- Heat, Ventilation and Air Conditioning (HVAC) installations require verification of refrigerant charge.
- One compliance pathway is to “weigh-in” the amount of refrigerant added to the HVAC unit.
- The weigh-in must be verified by the Energy Code Compliance (ECC) Rater to ensure proper charge.



Existing Code Requirements - Specific

Reference Residential Appendix, Sections RA3.2.3.1 and RA3.2.3.2

Existing Responsibilities:

- The installer:
 - Refrigerant charging activities
 - Associated documentation
- The Rater:
 - On-site visit
 - Review installation requirements



Proposal Description – The Installer

Reference Residential Appendix, Sections RA3.2.3.1 and RA3.2.3.2

This alternative compliance path is optional.

Alternative Responsibilities:

- The installer
 - Refrigerant charging activities
 - Associated documentation
 - Captures relevant photographic documentation.



Proposal Description – The ECC Rater

Reference Residential Appendix, Sections RA3.2.3.1 and RA3.2.3.2

This alternative compliance path is optional.

Alternative Responsibilities:

- The Rater:
 - No on-site visit
 - Review installation requirements
 - Reviews photographic documentation
 - Can revert to normal verification if necessary



Energy Savings, Costs, and Cost Effectiveness

- **Estimated Energy Savings:** Supports the energy savings originally intended by the refrigerant charge verification requirements.
- **Estimated Costs:** Imposes no new material or procedural costs and may reduce the cost of compliance.
- **Economic Impact:** Administratively efficient and cost-neutral.
- **Cost Effectiveness:** Feasible using existing technology and procedural frameworks.



Questions and Contact Information

CONTACT INFORMATION

Comments can be submitted to pre-rulemaking docket 25-BSTD-03:
<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=25-BSTD-03>

Comments on today's workshop are **due July 17, 2026**

Contact information: Joe.Loyer@energy.ca.gov



Rater Selfie Photograph Verification

David Choo, CHEERS

Joe Loyer, California Energy Commission

June 25, 2023



Existing Code Requirements - General

Title 24, Part 1, Section 10-103.3(b)1Aviii

- **Rater of Record (ROR):** Energy Code Compliance (ECC) Rater registers a failed testing on a specific project.
- Only the ROR may retest and pass the project.
- The ECC Provider must 'lock' the project to the ROR via address, permit number or other reasonable means.



Proposal Description

Title 24, Part 1, Section 10-103.3

- **Rater Identity Verification:** ECC Provider to maintain Rater photographic identification.
- **On-site Rater Photo:** a ROR submits one photo while physically present at the project site.
- **Use in Quality Assurance (QA):** Referenced by QA staff during QA inspections.
- Supplements existing certification and QA processes
- Does not alter existing testing or verification requirements



Energy Savings, Costs, and Cost Effectiveness

- **Estimated Energy Savings:** Supports the energy savings originally intended by the Energy Code.
- **Estimated Costs:** Negligible additional costs.
- **Economic Impact:** Simplifies accountability by clearly identifying the certified Rater responsible for each verification .
- **Cost Effectiveness:** Feasible using existing technology and procedural frameworks.



Questions and Contact Information

CONTACT INFORMATION

Comments can be submitted to pre-rulemaking docket 25-BSTD-03:
<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=25-BSTD-03>

Comments on today's workshop are **due July 17, 2026**

Contact information: Joe.Loyer@energy.ca.gov



Acceptance Test Technician Equitable Audit Process

Eric Hall (NEMI)

Joe Loyer (California Energy Commission)

June 25, 2026



Existing Code Requirements – Desk Audits

Title 24, Part 1, Section 10-103.2(c)Fii

Desk Audit Requirements:

- Audit of recorded forms only.
- Acceptance Test Technician Certification Provider (ATTCP) reviews one percent (1%) of Acceptance Test Employer (ATE) completed compliance forms annually.



Existing Code Requirements – Shadow Audits

Title 24, Part 1, Section 10-103.2(c)Fiii

Shadow Audit Requirements:

- ATTCP observation of acceptance test technician (ATT) via either:
 - Site Audit or
 - Training Facility Audit.
- Site Audit: One percent (1%) of ATE's projects.
- Training Facility Audit: 1 ATT (from each ATE) once per code cycle.



Proposal Description – Change in Audit Rate

Title 24, Part 1, Section 10-103.2(c) Fii & iii

- **Desk Audit:** The ATTCP audits 1 percent (1%) of each ATE's overseen projects per code cycle (instead of annually).
- **Shadow Audit:**
 - **Site Audit:** The ATTCP audits 1 percent of each ATE's overseen projects per code cycle (instead of annually).
 - **Training Facility Audit:** The ATTCP audits 1 ATT from a minimum of 5 percent of all active ATEs (instead of each ATE) per code cycle.



Proposal Description – Other New Authorities

Title 24, Part 1, Section 10-103.2(c) Fii & iii

- **Desk Audits:** The ATTCP may engage in additional checks at its discretion.
- **Shadow Audits:**
 - The ATTCP may use either site or training facility audits for each ATT/ATE, or
 - May restrict the shadow audit to either site or training facility audit for all ATT/ATEs.



Energy Savings, Costs, and Cost Effectiveness

- **Estimated Energy Savings:** No expected energy saving other than from the audit procedures.
- **Estimated Costs:** No expected cost increase.
- **Economic Impact:** May reduce downtime for the ATTCP's and ATT/ATEs.
- **Cost Effectiveness:** Expected to be cost effective.



Questions and Contact Information

CONTACT INFORMATION

Comments can be submitted to pre-rulemaking docket 25-BSTD-03:
<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=25-BSTD-03>

Comments on today's workshop are **due July 17, 2026**

Contact information: Joe.Loyer@energy.ca.gov



Sampling and Install Certificate Updates

Cassandra Trester (ARCXIS)

Joe Loyer (California Energy Commission)

June 25, 2026



Existing Code Requirements

Residential Reference Appendices RA2.6

- Current sampling-based verification can introduce variability in compliance outcomes.
- Sample-Group Basics:
 - The first dwelling is tested by the Energy Code Compliance (ECC) Rater.
 - One of a closed (seven units) or open (five units) is tested by the ECC Rater.
 - Failed testing results in corrective actions with re-testing or full testing (testing all dwelling units in the group).



Proposal Description

- Phased transition toward reduced reliance on sampling in residential energy compliance, with a full transition target by 2032.
- It introduces two compliance pathways:
 - 100% testing or
 - Structured graduated sampling model



Proposal Description - 100% Testing Option

- ECC Rater performs full field verification on every home.
- Added ECC Rater verifications on Certificate of Installation.
- Trade liability acknowledgement per project required and uploaded to Registry.
- Installer certificates verified by ECC Rater.



Proposal Description – Graduated Sampling

- Limited to projects greater than 40 homes.
- First 10 homes must be 100% tested.
- The builder may graduate to sampling with consistent performance.
- Sample group ratio limited to 1:4 per plan type.
- Installer certificates verified by ECC Rater.
- Enhanced regulation, quality assurance, and oversight.



Additional Data Needs

The Energy Commission is seeking the following information in addition to suggestions regarding energy or monetary savings and costs.

- Measured performance differences between sampled and fully tested homes.
- Cost of rework and warranty claims regarding both alterations and newly constructed homes.
- Frequency of documentation errors regarding both alterations and newly constructed homes.
- Energy performance gap data.



Energy Savings, Costs, and Cost Effectiveness

- **Estimated Energy Savings:** Improves delivery of the efficiencies already required by the Energy Code.
- **Estimated Costs:** Increases upfront compliance costs due to expanded testing with reduced or eliminated sampling.
 - Sampling: \$200-\$400 per unit
 - 100% Testing: \$600 - \$1,000 per unit
- **Economic Impacts:** Expanded testing is expected to shift costs earlier in the construction process rather than introduce entirely new costs.
- **Cost Effectiveness:** Increased upfront costs can reduce downstream costs related to warranty claims, customer complaints, rework, and closing delays.



Questions and Contact Information

CONTACT INFORMATION

Comments can be submitted to pre-rulemaking docket 25-BSTD-03:
<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=25-BSTD-03>

Comments on today's workshop are **due July 17, 2026**

Contact information: Joe.Loyer@energy.ca.gov



Proposed Updates to ATTCP Program Requirements

Bhaskar Ale, Standards Compliance Branch
June 25, 2026



Acronyms Used

Proposed Updates to ATTCP Program Requirements

Acronym	Definition
ATTCP	Acceptance Test Technician Certification Provider
ATT	Acceptance Test Technician
ATE	Acceptance Test Employer
ATSR	Acceptance Test Summary Report
AB 130	California Assembly Bill (AB) 130
API	Application Programming Interface
AHJ	Authority Having Jurisdiction
CEC	California Energy Commission
NRCA	Nonresidential Certificate of Acceptance



Presentation Overview

Proposed Updates to ATTCP Program Requirements

- ATTCP Program Background Overview
- Six Proposed Measures
 1. Update Mechanical ATT Training Requirements References
 2. Include service territory in ATTCP Listing
 3. Require ATTCPs to produce Acceptance Test Summary Report
 4. Update API to technology neutral language
 5. Clarify Annual Report requirements and add deadline for report
 6. Define substantive and nonsubstantive change
- Economic Impact, Energy Savings and Estimated Costs
- Questions



ATTCP Program Background Overview

Proposed Updates to ATTCP Program Requirements

- CEC approves ATTCPs to:
 - Train, certify, and oversee Acceptance Test Technicians and Employers (ATTs and ATEs)
 - Ensure projects are compliant with the Energy Code

- ATTs perform tests in nonresidential (NR) and multifamily (MF) buildings for:
 - Lighting controls (July 2014); and
 - Mechanical systems (Oct. 2021)

Measure 1: Update Mechanical ATT Training Requirements References





Existing Code Requirements

Measure 1: Update Mechanical ATT Training Requirements References

- Applies to retrofits and newly constructed Nonresidential and Multifamily buildings
 - **Excludes:** Healthcare facilities
 - **Includes:** Nonresidential spaces within hotel/motel and high-rise residential constructed buildings.

- Mechanical ATT Training curricula is incomplete.
 - Missing code updates from 2022 and 2025 Code cycle



Proposal Description

Measure 1: Update Mechanical ATT Training Requirements References

- Several code corrections to ATT mechanical training curriculum:
 - Cooling tower
 - Multifamily field verification and diagnostic testing
 - Add missed references to code sections for mechanical acceptance testing procedures
- Correction only; **NOT** a change to Energy Code
- Involves Mechanical ATTCPs
- Management of ATTCP program



Code Sections Affected

- Section 10-103.2(c)3Bi – Mechanical ATTCP Training Curricula
 - Cooling Tower (clarification)
 - Building Energy Efficiency Standards mechanical acceptance testing procedures (clarifications)

- Refer to the [docketed document](#) in 25-BSTD-03 for details on the proposed code language.

Measure 2: Include service territory in ATTCP Listing





Existing Code Requirements

Measure 2: Include service territory in ATTCP Listing

- Applies to ATTCP Listing of ATT/ATE
- No service territory listing currently required
- Remote AHJs have difficulty finding an ATT



Proposal Description

Measure 2: Include service territory in ATTCP Listing

- Requires ATTCP to include service territory of ATT/ATE on their website.
 - Undeclared service territory will be the ATT/ATE's registered address.
- Helps locate nearby certified ATT/ATE quickly.
- Improves coverage in underserved areas.
- Interested parties include ATTCPs, ATTs/ATEs, AHJs, building owners, contractors, designers, training and workforce development and the public.
- Management of ATTCP program.



Code Sections Affected

- Sections 10-103.1(c)3Gii and 10-103.2(c)3Gii – ATT and ATE Certification Status
 - Accurate public record to include service territory (new code language)

- Refer to the [docketed document](#) in 25-BSTD-03 for details on the proposed code language.

Measure 3: Require ATTCPs to produce Acceptance Test Summary Report (ATSR)







Existing Code Requirements

Measure 3: Require ATTCPs to produce Acceptance Test Summary Report

- Applies to ATTCP Database requirement
- No summary of the Nonresidential Certificate of Acceptance (NRCA) forms currently
- No access for AHJs to verify NRCA forms completed for the project currently
- No nonresidential registry in place currently



Proposal Description

Measure 3: Require ATTCPs to produce Acceptance Test Summary Report

- Requires ATTCP to generate an Acceptance Test Summary Report (ATSR) and provides AHJ access to view ATSR
- Provides status of all the Certificate of Acceptance (NRCAs) for the project
- Authenticates NRCA forms are from ATTCP database
- Reduces fraud and improves AHJ review time
- Interested parties include ATTCPs, AHJs, ATT/ATE and builders and building owners
- Management of ATTCP program



Code Sections Affected

- Sections: 10-103.1(c)3Hiii and 10-103.2(c)3Hiii – Electronic Database System
 - Added new ATSR requirement for the database (New code language)
- Refer to the [docketed document](#) in 25-BSTD-03 for details on the proposed code language.

Measure 4: Update API to technology neutral language







Existing Code Requirements

Measure 4: Update API to technology neutral language

- Applies to ATTCP Database requirement
- May require program specific Application Programming Interface (API) to be developed for data transfer



Proposal Description

Measure 4: Update API to technology neutral language

- Replaces 'Application Programming Interface' with technology-neutral language
- Provides timely and consistent electronic reporting of project data from ATTCP
- Involves Lighting controls and Mechanical ATTCPs
- Management of ATTCP program



Code Sections Affected

- Sections: 10-103.1(c)3Hv and 10-103.2(c)3Hv– Electronic Database System
 - Updated data transfer language (New code language)

- Refer to the [docketed document](#) in 25-BSTD-03 for details on the proposed code language.

Measure 5: Clarify Annual Report requirements and add a deadline for the report





Existing Code Requirements

Measure 5: Clarify Annual Report requirements and add deadline for report

- Applies to ATTCP annual reporting requirements
- Reporting requirements are not specific, resulting in inconsistent reporting
- Annual Report Guidance Letter provided to support code language
- No deadline for submission currently



Proposal Description

Measure 5: Clarify Annual Report requirements and add deadline for report

- Clarifies Annual Report requirements section:
 - Certification Services
 - Disciplinary Actions
 - Quality Assurance and Accountability
 - Acceptance Testing Data
 - Certification Statement
 - Form and manner of submittal
 - Includes deadline of March 31 of calendar year
- CEC may provide template for acceptance test data
- Involves lighting controls and mechanical ATTCPs
- Management of ATTCP program



Code Sections Affected

- Sections: 10-103.1(d) and 10-103.2(d)– ATTCP Annual Report Requirements
 - Annual Report with a deadline (Clarifications)

- Refer to the [docketed document](#) in 25-BSTD-03 for details on the proposed code language.

Measure 6: Define substantive and non-substantive change







Existing Code Requirements

Measure 6: Define substantive and non-substantive change

- Applies to any ATTCP application amendment
- Examples of substantive and nonsubstantive change are not clearly defined
- Delay in application amendment submittal



Proposal Description

Measure 6: Define substantive and nonsubstantive change

- Defines substantive change as:
 - Any change that includes any changes to training, database provider, certification or oversight that would result in impact to consumers, ATTs, ATEs and ATTCPs.
- Defines non-substantive change as:
 - Any change that includes typographical errors, modifying contact information, renaming positions and programs and making changes that do not impact consumers, ATTs, ATEs and ATTCPs.
- Both amendments will require CEC to review the amendment change before outlining the path for approval.
- Involves Lighting controls and Mechanical ATTCPs
- Management of ATTCP program



Code Sections Affected

- Sections: 10-103.1(f)1A and 1B and 10-103.2(f)1A and 1B - ATTCP Amendment Scope
 - Substantive and nonsubstantive changes with examples (Clarifications)

- Refer to the [docketed document](#) in 25-BSTD-03 for details on the proposed code language.



Energy Savings, Costs, and Cost Effectiveness

➤ **Estimated Energy Savings:**

- Staff expects there to be no direct energy savings.

➤ **Estimated Costs:** These changes involve little to no cost for certain administrative tasks. Most ATTCPs have implemented these changes.

➤ **Economic Impact:** None expected.

➤ **Cost Effectiveness:** The benefits will far out weight the costs. The benefits will improve clarity, consistency, training quality, and overall functionality of the ATTCP program.

Questions?







Questions and Contact Information

CONTACT INFORMATION

Comments can be submitted to pre-rulemaking docket 25-BSTD-03:
<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=25-BSTD-03>

Comments on today's workshop are **due July 17, 2026**

Contact information: Bhaskar.Ale@energy.ca.gov



Acceptance Test Technician Commissioning

Joe Loyer, Senior Mechanical Engineer

California Energy Commission

June 25, 2026



Existing Code Requirements - General

- Applies to newly constructed Nonresidential buildings (Section 1001 [Section 120.8])
 - Full commissioning required: 10,000 square foot or more
 - Partial commissioning required: Under 10,000 square foot
 - **Excludes:** Healthcare facilities
 - **Includes:** Nonresidential spaces within hotel/motel and high-rise residential newly constructed buildings.



Existing Code Requirements - Specific

Summary of Commissioning Requirements

- Owners Project Requirements (full)
- Basis of Design (full)
- Design Review (full, partial)
- Measures on Plans (full, partial)
- Commissioning Plan (full)
- Functional Testing (full)
- Documentation and Training (full)
- Commissioning Report (full)



Proposal Description

The proposal includes:

- Clarifications to the 2025 Energy Code:
 - “Design Reviewer”
 - “Design Team” (apply to Group-R Occupancies)
- Include certified acceptance test technicians (ATTs) in the required commissioning process for newly constructed nonresidential buildings (Group-R Occupancies exempted).
- Purpose: to improve Energy Code compliance for lighting and mechanical equipment.



Code Sections Affected

- Section 201 Definitions [100.1(b)]
 - Design Reviewer (clarification)
 - Design Team (clarification)
- Section 1001 Nonresidential Building Commissioning [120.8]
 - Section 1001.2.3 [120.8(d)] – (clarification) Designer reviewer requirements
 - (New Section) Design Team Membership Requirements
 - Owner or representative (clarification)
 - Design reviewer (clarification)
 - Lighting controls and mechanical ATT (new, Group-R occupancies exempted)



Summary of Proposed ATT Requirements

- The ATT is limited to reviewing the designs related to the acceptance testing
- The ATT may also serve as the design reviewer, design engineer, installation contractor, and perform the required acceptance tests.
- ATTs are not required as design team members for Group-R occupancy projects.



Energy Savings, Costs, and Cost Effectiveness

- **Estimated Energy Savings:** Improved code compliance may increase operational energy savings and reduce wasteful, uneconomic, or unnecessary energy consumption.
- **Estimated Costs:** Cost may range from zero to the hourly wage of the ATT.
- **Economic Impact:** None expected. The existing ATTs are available for direct hire by the builder, like any engineer, architect, or contractor.
- **Cost Effectiveness:** Staff expects the benefits to far outweigh the costs.



Questions and Contact Information

CONTACT INFORMATION

Comments can be submitted to pre-rulemaking docket 25-BSTD-03:
<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=25-BSTD-03>

Comments on today's workshop are **due July 17, 2026, by 5:00PM**

Contact information: Joe.Loyer@energy.ca.gov