

## DOCKETED

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*Comment Received From: Statewide Utility Codes and Standards Team*

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## **Links to Updated Utility-Sponsored CASE Reports**

*Additional submitted attachment is included below.*

# Links to Updated Utility-Sponsored CASE Reports

## California Statewide Utility Codes and Standards Team

March 4, 2018

The California Statewide Utility Codes and Standards Enhancement Team (Statewide CASE Team) is submitting this letter to provide the most recent versions of utility-sponsored CASE Reports. The versions of the CASE Reports that the California Energy Commission (Energy Commission) posted to the rulemaking dockets (dockets number [17-BSTD-02](#) and [17-BSTD-03](#)) were working drafts. The final version of each CASE Report is available on [title24stakeholders.com](http://title24stakeholders.com). See Table 1 for links to the final reports and a summary of differences between the versions the Energy Commission posted in the docket log and the final versions.

The Statewide CASE Team actively supports the Energy Commission in developing revisions to Title 24, Part 6 by developing code change proposals that will result in feasible, enforceable, and cost-effective enhancements to the building energy efficiency standards. In developing these proposals, the Statewide CASE Team conducts research, holds stakeholder meetings, and evaluates the energy savings and cost-effectiveness of considered measures. The CASE Reports present pertinent information that supports the code change proposals. The four California Investor Owned Utilities – Pacific Gas and Electric Company, San Diego Gas and Electric, Southern California Edison and SoCalGas® – and several Publicly Owned Utilities – Los Angeles Department of Water and Power, Sacramento Municipal Utility District, and Southern California Public Power Authority – sponsored this effort.

**Table 1: Links to Updated CASE Reports and Summary of Differences Between Final Reports and Reports Posted in Docket**

Measure Name	Last Updated	Summary of Differences Between Version the Energy Commission Posted in Docket and Most Recent Version	Link to Most Recent Version of CASE Report
<b>Residential Measures</b>			
Residential Quality HVAC	December 2017	This CASE Report has not been posed in the Energy Commission’s docket	<a href="http://title24stakeholders.com/wp-content/uploads/2017/12/2019-T24-CASE-Report_Res-Quality-HVAC_Final_December-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/12/2019-T24-CASE-Report_Res-Quality-HVAC_Final_December-2017.pdf</a>
Residential Indoor Air Quality	February 2018	Added Appendix E added, which discusses pressure drop in relation to filter efficiency and filter depth.	<a href="http://title24stakeholders.com/wp-content/uploads/2018/02/2019-T24-CASE-Report_Res-IAQ_Final_February-2018.pdf">http://title24stakeholders.com/wp-content/uploads/2018/02/2019-T24-CASE-Report_Res-IAQ_Final_February-2018.pdf</a>
High Performance Walls	September 2017	Incremental costs have been updated	<a href="http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_HPW_Final_September-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_HPW_Final_September-2017.pdf</a>
High Performance Windows and Doors	September 2017	Statewide savings have been updated	<a href="http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_Res-Windows-and-Doors_Final_September-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_Res-Windows-and-Doors_Final_September-2017.pdf</a>
High Performance Attics	September 2017	No substantive changes, but made small editorial revisions	<a href="http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_HPA_Final_September-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_HPA_Final_September-2017.pdf</a>
Quality Insulation Installation (QII)	September 2017	No substantive changes, but made small editorial revisions	<a href="http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_ResQII_Final_September-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_ResQII_Final_September-2017.pdf</a>
Compact Hot Water Distribution	September 2017	No substantive changes, but made small editorial revisions	<a href="http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_Cmpct-HW-Distbtn_Final_September-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_Cmpct-HW-Distbtn_Final_September-2017.pdf</a>
Drain Water Heat Recovery	September 2017	No substantive changes, but made small editorial revisions	<a href="http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_DWHR_Final_September-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_DWHR_Final_September-2017.pdf</a>
<b>Nonresidential and Cross-cutting Measures</b>			
Nonresidential Outdoor Lighting Power Allowances (LPAs)	December 2017	Includes updated recommendations for when Backlight, Uplight, and Glare (BUG) requirements apply to outdoor luminaires.	<a href="http://title24stakeholders.com/wp-content/uploads/2018/01/2019-T24-CASE-Report_NR-Outdoor-Light-Sources_With-Addendum_December-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2018/01/2019-T24-CASE-Report_NR-Outdoor-Light-Sources_With-Addendum_December-2017.pdf</a>
Indoor Lighting Power Densities	December 2017	Latest version includes updated information on models and analyses, and use-it-or-lose-it adders.	<a href="http://title24stakeholders.com/wp-content/uploads/2018/01/2019-T24-CASE-Report_NR-Indoor-Light-Sources_Final_December-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2018/01/2019-T24-CASE-Report_NR-Indoor-Light-Sources_Final_December-2017.pdf</a>
Nonresidential Outdoor Lighting Controls	September 2017	Added information on technical feasibility, proposed measures, analyses, and updated lifecycle costs and energy savings.	<a href="http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_Outdoor-Ltg-Controls_Final_September-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_Outdoor-Ltg-Controls_Final_September-2017.pdf</a>
Nonresidential Indoor Controls (Alignment with ASHRAE 90.1)	September 2017	Added information about requirements for acceptance testing for the Manual ON Time-switch measure as well as additional recommendations for improving compliance and enforcement.	<a href="http://title24stakeholders.com/wp-content/uploads/2017/10/2019-T24-CASE-Report_NR-Indoor-Controls_Final-September-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/10/2019-T24-CASE-Report_NR-Indoor-Controls_Final-September-2017.pdf</a>
Nonresidential Advanced Daylighting Design	September 2017	Latest version includes minor clarifications to measures by updating code language to use the terms “clerestory windows” and “clerestory fenestration.” Also included are clarifications about adjustable slats and vertical slats.	<a href="http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_Advanced-Daylighting-Design_Final_September-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_Advanced-Daylighting-Design_Final_September-2017.pdf</a>

<b>Measure Name</b>	<b>Last Updated</b>	<b>Summary of Differences Between Version the Energy Commission Posted in Docket and Most Recent Version</b>	<b>Link to Most Recent Version of CASE Report</b>
Nonresidential Indoor Lighting Alterations	September 2017	Added information about compliance and enforcement	<a href="http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_NR-Indoor-Ltg-Alterations_Final_September-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_NR-Indoor-Ltg-Alterations_Final_September-2017.pdf</a>
Nonresidential Indoor Air Quality (Proposal Based on ASHRAE 62.1-2016)	December 2017	Statewide savings have been updated	<a href="http://title24stakeholders.com/wp-content/uploads/2018/01/2019-T24-CASE-Report_NR-IAQ_Final_December-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2018/01/2019-T24-CASE-Report_NR-IAQ_Final_December-2017.pdf</a>
Proposals Based on ASHRAE 90.1	February 2018	Added information about interactions with other parts of Title 24	<a href="http://title24stakeholders.com/wp-content/uploads/2018/03/2019-T24-CASE-Report-Proposals-Based-on-ASHRAE-90.1_Final_February-2018.pdf">http://title24stakeholders.com/wp-content/uploads/2018/03/2019-T24-CASE-Report-Proposals-Based-on-ASHRAE-90.1_Final_February-2018.pdf</a>
Variable Exhaust Flow Control	December 2017	Statewide savings have been updated	<a href="http://title24stakeholders.com/wp-content/uploads/2017/12/2019-T24-CASE-Report_VEFC_Final_December-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/12/2019-T24-CASE-Report_VEFC_Final_December-2017.pdf</a>
Dock Seals	November 2017	Latest version includes an addendum describing revisions to analyses and recommending this measure be included into CALGreen (Title 24, Part 11) instead of Title 24, Part 6	<a href="http://title24stakeholders.com/wp-content/uploads/2017/11/2019-T24-CASE-Report_Dock-Seals_With-Addendum_11.17.2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/11/2019-T24-CASE-Report_Dock-Seals_With-Addendum_11.17.2017.pdf</a>
High Efficiency Fume Hoods in Laboratory Spaces	September 2017	No substantive changes, but made small editorial revisions	<a href="http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_Fume-Hoods_Final_September-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_Fume-Hoods_Final_September-2017.pdf</a>
Prescriptive Efficiency Requirements for Cooling Towers	September 2017	No substantive changes, but made small editorial revisions	<a href="http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report-Cooling-Towers_Final_September-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report-Cooling-Towers_Final_September-2017.pdf</a>
Economizer Fault Detection and Diagnostics (FDD) for Built-Up Air Handlers	September 2017	No substantive changes, but made small editorial revisions	<a href="http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_Economizer-FDD-for-Built-up-Air-Handlers_Final_September-2017.pdf">http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_Economizer-FDD-for-Built-up-Air-Handlers_Final_September-2017.pdf</a>
Adiabatic Condensers	September 2017	No substantive changes, but made small editorial revisions	<a href="http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_Adiabatic-Condensers_Final_September-2017-1.pdf">http://title24stakeholders.com/wp-content/uploads/2017/09/2019-T24-CASE-Report_Adiabatic-Condensers_Final_September-2017-1.pdf</a>
Demand Response Cleanup	September 2017	No substantive changes, but made small editorial revisions	<a href="http://title24stakeholders.com/wp-content/uploads/2017/09/T24-2019-CASE-Report-Demand-Response-Cleanup_Final_September-2017.pdf">Link to latest version: http://title24stakeholders.com/wp-content/uploads/2017/09/T24-2019-CASE-Report-Demand-Response-Cleanup_Final_September-2017.pdf</a>