

**DOCKETED**

<b>Docket Number:</b>	22-AAER-04
<b>Project Title:</b>	2022 Amendments to the Appliance Efficiency Regulations
<b>TN #:</b>	253826
<b>Document Title:</b>	California Investor Owned Utilities Comments - 2022 Amendments to the Appliance Efficiency Regulations
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	California Investor Owned Utilities
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	1/8/2024 1:11:18 PM
<b>Docketed Date:</b>	1/8/2024

*Comment Received From: California Investor Owned Utilities  
Submitted On: 1/8/2024  
Docket Number: 22-AAER-04*

**California Investor Owned Utilities Comments - 2022 Amendments  
to the Appliance Efficiency Regulations**

*Additional submitted attachment is included below.*



January 8, 2024

California Energy Commission  
Docket Unit  
Docket No. 22-AAER-04  
715 P Street, MS-4  
Sacramento, CA 95814

Topic: 2022 Amendments to the Appliance Efficiency Regulations

Dear Corrine Fishman:

This letter comprises the comments of the Pacific Gas and Electric Company (PG&E), San Diego Gas and Electric (SDG&E), and Southern California Edison (SCE), collectively referred to herein as the California Investor-Owned Utilities (CA IOUs), in response to the California Energy Commission (CEC) Notice of Proposed Action regarding 2022 Amendments to the Appliance Efficiency Regulations.

The CA IOUs comprise some of the largest utility companies in the nation, serving over 32 million customers in the state. We are committed to helping customers reduce energy costs and consumption while striving to meet their evolving needs and expectations. Therefore, we advocate for standards that accurately reflect the climate and conditions of our respective service areas.

We respectfully submit the following comments to the CEC:

**1. The CA IOUs support CEC's timely efforts to update Title 20 with changes made in federal regulations.**

The CEC's proposed updates to Title 20 Appliance Efficiency Regulations are essential to ensure consistency with federal text where federal regulations preempt the CEC from setting standards. These updates clarify intentional variations between state and federal standards where preemption is not an issue. The proposed administrative changes will improve clarity and compliance with these regulations.

The U.S. Department of Energy (DOE) is engaged in proposing changes affecting many of the products and equipment in this update, including electric motors, air compressors, fans, commercial and central air conditioners and heat pumps, refrigeration equipment, and white goods. To ensure these federal standards remain in effect as state standards, and data collection and enforcement efforts persist for federally regulated products, we encourage the CEC to update Title 20 by the end of 2024 when DOE will finalize many of those rules.

**2. The CA IOUs recommend adding federal test procedures and standards for air cleaners to Title 20 regulations.**

Air cleaners are newly regulated products that improve indoor air quality by removing, destroying, or deactivating particulates, pollutants, and microorganisms.<sup>1</sup> DOE finalized a test procedure for air cleaners on March 6, 2023,<sup>2</sup> and published a direct final rule establishing new energy conservation standards on April 11, 2023. DOE confirmed these standards on August 30, 2023,<sup>3</sup> with the compliance date of December 31, 2023.<sup>4</sup> DOE is creating a rulemaking to establish certification requirements for air cleaners.<sup>5</sup>

The proposed Title 20 updates do not include these newly regulated products. The CA IOUs recommend the CEC add air cleaners to the Title 20 regulations update. This inclusion will permit California to collect data through the Modernized Appliance Efficiency Database System (MAEDbS) and lock in energy savings for these products should the federal standard be repealed or become inoperable, inapplicable, or otherwise invalid as federal law.<sup>6</sup>

### 3. The CA IOUs recommend the CEC maintain its minimum spray force requirement for commercial pre-rinse spray valves.

DOE last updated its efficiency standards for commercial pre-rinse spray valves in 2016. In 2022, DOE issued a final determination that an amendment to the current standards is unnecessary because the risk of increased energy and water usage outweighs any potential benefits.<sup>7</sup> CEC last updated its commercial pre-rinse spray valve regulations in 2018, incorporating the recently amended DOE standards for these products. At the time of that rulemaking, CEC updated the requirement for minimum spray force to align with the changes in the test procedure, which incorporated ASTM Standard F2324 and otherwise conformed to the federal rule.

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<sup>1</sup> Definition of “air cleaner,” Electronic Code of Federal Regulations (eCFR), “10 CFR 430.2 - Definitions.,” Code of Federal Regulations, December 21, 2023, <https://www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-430/subpart-A/section-430.2>.

<sup>2</sup> “Energy Conservation Program: Test Procedure for Air Cleaners,” Federal Register, March 6, 2023, 88 Fed. Reg. 14014, <https://www.federalregister.gov/documents/2023/03/06>. The test procedures are codified at 10 C.F.R. § 430.23(hh) (Appendix FF to Subpart B of Part 430). Office of the Federal Register, “10 CFR 430.23 -- Test Procedures for the Measurement of Energy and Water Consumption.,” Code of Federal Regulations, December 21, 2023, <https://www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-430/subpart-B/section-430.23>.

<sup>3</sup> U.S. Department of Energy, “Energy Conservation Program: Energy Conservation Standards for Air Cleaners,” Federal Register, August 31, 2023, 60105, <https://www.federalregister.gov/documents/2023/08/31/2023-18860/energy-conservation-program-energy-conservation-standards-for-air-cleaners>.

<sup>4</sup> Office of the Federal Register (OFR), “PART 430—ENERGY Conservation Program for Consumer Products,” Code of Federal Regulations, December 21, 2023, 10 C.F.R. § 430.32(ee). [https://www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-430#p-430.2\(Air%20cleaner\)](https://www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-430#p-430.2(Air%20cleaner)).

<sup>5</sup> “Energy Conservation Program for Appliance Standards: Certification Requirements, Labeling Requirements, and Enforcement Provisions for Certain Consumer Products and Commercial Equipment,” Federal Register, September 29, 2023, 67458 <https://www.federalregister.gov/documents/2023/09/29/2023-19146/energy-conservation-program-for-appliance-standards-certification-requirements-labeling-requirements>.

<sup>6</sup> “§ 1605. Energy Performance, Energy Design, Water Performance, and Water Design Standards: In General,” *California Code of Regulations*, title 20 § 1605(a)(2), (2023), [https://govt.westlaw.com/calregs/Document/ID40C31735CCE11EC9220000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)&bhcp=1](https://govt.westlaw.com/calregs/Document/ID40C31735CCE11EC9220000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default)&bhcp=1).

<sup>7</sup> “Energy Conservation Program: Energy Conservation Standards for Commercial Prerinse Spray Valves,” Federal Register, June 6, 2022, 34067 <https://www.federalregister.gov/documents/2022/06/06/2022-12107/energy-conservation-program-energy-conservation-standards-for-commercial-prerinse-spray-valves>.

CEC's requirement that commercial pre-rinse spray valves have a minimum spray force of 4.0 ounces-force<sup>8</sup> ensures proper performance for pre-rinse spray valves that fall into Product Class 1 category. Without this requirement, manufacturers of commercial pre-rinse spray valves could comply with the maximum flow rate by reducing spray force, thereby reducing the utility of the product and damaging the consumer experience with efficiency standards. DOE does not have any minimum design requirements for these products.

In this rulemaking, the CEC proposes eliminating the requirement for minimum spray force, stating that federal standards preempt these requirements. The CA IOUs recommend keeping the minimum spray force requirement, as the provision is not preemptive. Under the Energy Policy & Conservation Act (EPCA) (42 U.S.C. § 6297(c)(7)), California is exempt from preemption for "a regulation concerning standards for commercial pre-rinse spray valves adopted by the California Energy Commission before January 1, 2005," and an amendment to that regulation "that was developed to align California regulations with changes in American Society for Testing and Materials Standard F2324." In the 2018 rulemaking updates, the CEC design requirements for pre-rinse spray valves changed from a cleanability test to a minimum spray force requirement because:

. . . the state 'cleanability' requirement is not a parameter in the current federal test procedure (10 C.F.R. section 431.264) for commercial pre-rinse spray valves. Instead, the federal test procedure calculates a spray force value, which is now reflected in the proposed changes to section 1605.3(h)(4)(A).<sup>9</sup>

California regulations adopted the amendment to the commercial pre-rinse spray valves with a provision for minimum spray force values before January 1, 2005,<sup>10</sup> to align with changes in the applicable test procedure; therefore, CEC may maintain this requirement as an exception to preemption, as it did during its 2018 updates rulemaking.

**4. The CA IOUs recommend the CEC maintain the reporting of uncorrected remaining moisture content and add the reporting of corrected remaining moisture content for commercial and consumer clothes washers.**

Title 20, Section 1606, Table X-P mandates manufacturers to report their consumer and commercial clothes washers' "remaining moisture content" (RMC). According to the MAEDbS product listing, manufacturers report this RMC as the uncorrected RMC derived from the test procedure. DOE requires manufacturers to provide the "corrected remaining moisture content"

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<sup>8</sup> "§ 1605.3. State Standards for Non-Federally Regulated Appliances," *California Code of Regulations*, title 20 1605.3(h)(4)(A), April 25, 2023, [https://govt.westlaw.com/calregs/Document/I02CB6DB0EB2F11ED8BFF9413895FDA56?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Document/I02CB6DB0EB2F11ED8BFF9413895FDA56?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default)).

<sup>9</sup> Final Statement of Reasons for the Amendments to Title 20 Appliance Efficiency Regulations Rulemaking, Docket California Energy Commission, "Final Statement of Reasons (FSOR)," *Amendments to Title 20 Appliance Efficiency Regulations Rulemaking*, August 13, 2018, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=224839&DocumentContentId=55421>.

<sup>10</sup> California Energy Commission, "Energy Resources Conservation and Development Commission," *Wayback Machine*, December 15, 2004, <https://web.archive.org/web/20170131125233/http://docketpublic.energy.ca.gov/PublicDocuments/Migration-12-22-2015/Non-Regulatory/2000-2011%20Proceedings/04-AAER-1/TN%2032991%20Order%20Adopting%20Regulations.pdf>. (Adopting the [15-day language](#) on December 15, 2004, including standards for prerinse spray valves).

on the product certification report.<sup>11</sup> DOE and CEC’s databases do not require reporting of the test cloth lot, the information necessary to translate the uncorrected RMC to the corrected RMC. If the CEC proceeds with its proposed changes to require the corrected RMC instead of the uncorrected RMC, stakeholders will lose the sole source of determining the uncorrected RMC. DOE relied on this data to evaluate energy savings as part of the 2011 and 2022 clothes dryer energy-conservation standards analyses;<sup>12</sup> therefore, the CA IOUs recommend that CEC continue to collect uncorrected RMC. As an alternative, we ask that CEC require reporting of the test cloth lot number (also part of the DOE test procedure) in addition to the corrected RMC so that stakeholders may calculate the uncorrected RMC.

The proposed language appears to impact only the commercial clothes-washer data submittal requirements. The CA IOUs recommend the CEC treat consumer and commercial clothes washers equally with this reporting requirement.

**5. The CA IOUs recommend changes to CEC’s proposed Televisions and Signage Displays regulations to collect key data and maintain efficiency regulations for these products.**

**a. The CA IOUs recommend maintaining the Auto Power Down (APD) standard in 1605.3(v)(3)(A).**

The CA IOUs understand the preemptive effect of the amended federal test procedure under 42 U.S.C. § 6297(a) is a driving factor behind the CEC’s proposed changes to its television regulations. The CEC’s regulatory advisory also states that manufacturers are not able to certify compliance for televisions sold in California due to modifications to the federal test procedure. However, CEC’s current standards, which require televisions sold in California to automatically enter standby mode after 15 minutes of inactivity, could still be enforced, as no testing is needed and the test procedure uses consistent terminology with this requirement. The “standby mode” may refer to all three standby modes identified in the test procedure: “Standby with Smart Wake Enabled,” “Standby with Internet Connection,” and “Standby without Internet Connection,” as defined in CTA-2037D. A reporting requirement inserted into Table X could enforce this requirement without requiring any testing.

This modification would preserve the portion of the CEC’s television standard that requires televisions to reduce power consumption when not in use. It would also encourage television manufacturers to continue improving the efficiency of their products with minimal economic impact.

The CA IOUs recommend preserving this requirement. Our proposed changes to section 1605.3(v)(3) are (using underline and strike out for CEC’s proposed text, and blue double-underline and red strike-out for our proposed changes):

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<sup>11</sup> U.S. Department of Energy, “10 CFR 429.20 -- Residential Clothes Washers,” Code of Federal Regulations, May 7, 2011, 429.20(b)(2) <https://www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-429/subpart-B/section-429.20>.

<sup>12</sup> “2011-04 Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment. Residential Clothes Dryers and Room Air Conditioners,” Regulations.gov, April 25, 2011, chapter 7, <https://www.regulations.gov/document/EERE-2007-BT-STD-0010-0053>.

“2022-08 Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment: Consumer Clothes Dryers,” Regulations.gov, August 16, 2022, <https://www.regulations.gov/document/EERE-2014-BT-STD-0058-0034>.

(3) Televisions and Signage Displays Manufactured On or After January 1, 2011. In addition, televisions and signage displays manufactured on or after January 1, 2011 shall meet the requirements shown in sections 1605.3(v)(3)(A), 1605.3(v)(3)(B), and 1605.3(v)(3)(C) of this Article.

(A) A television or signage display shall be capable of automatically entering TV standby-~~passive mode or standby-active~~ mode after a maximum of 15 minutes without video or audio input on the selected input mode.

(B) A television or signage display shall enter TV standby-passive mode when turned off by remote or integrated button/switch.

(C) The peak luminance of the product in “home” mode, or in the default mode as shipped, shall not be less than 65% of the peak luminance of the “retail” mode, or the brightest selectable preset mode, of the product.

...

EXCEPTION 2 to Sections 1605.3(v)(2), 1605.3(v)(3)(B), and 1605.3(v)(3)(C) of this Article: The standards found in sections 1605.3(v)(2), 1605.3(v)(3)(B), and 1605.3(v)(3)(C) of this Article do not apply to televisions within the scope of 10 C.F.R. section 430 and manufactured on or after September 11, 2023.

Our proposed changes to section 1606(a), Table X-V, are to add the following:

<b><i>Appliance</i></b>	<b><i>Required Information</i></b>	<b><i>Permissible Possible Answers</i></b>
<u>Televisions (manufactured on or after September 11, 2023, and within the scope of 10 C.F.R. section 430)</u>	<u>Capable of automatically entering standby mode after 15 minutes or less without video or audio input on the selected input mode.</u>	<u>True, False</u>

**b. The CA IOUs recommend additional improvements to the data reporting for televisions, which will help the CEC better analyze and develop efficiency standards for these products.**

As indicated in its regulatory advisory, the CEC intends to analyze amended efficiency standards for televisions. The CA IOUs recommend modifying Section 1606(a), Table X-V to include the following information for televisions manufactured on or after September 11, 2023, and within the scope of 10 C.F.R. section 430) to better position the CEC to conduct a thorough analysis:

- **Screen Resolution:** We recommend using the “pixels (horizontal) x pixels (vertical)” format for possible answers, e.g., a 4K display can have a resolution of 3840 x 2160 or 4096 x 2160. This recommended format ensures precise technical specifications of television differences that could affect their efficiency and avoids reporting ambiguity.

- **High Dynamic Range (HDR) capable:** In HDR display technology, three main formats exist: HDR10, HDR10+ and HLG. A television might support a single or multiple HDR formats. As HDR10 is the chosen format for test clips used in CTA-2037, an HDR-capable television that does not support HDR10 will be unable to playback the HDR10 test clips. Therefore, we recommend using the term “HDR10 capable” for clarification.
- **On-Mode power and Dynamic Luminance (when Automatic Brightness Control (ABC) is enabled by default):** We recommend including measurements under all ambient light conditions (140 lux, 50 lux, 17 lux, 4 lux) instead of focusing solely on the 50-lux light condition. Extending the analysis beyond the common lighting condition of 50 lux would make the data more representative of real-world use cases, enabling a more complete understanding of potential efficiency metrics. As all lighting conditions are measured and recorded under the amended federal test procedure, requesting this additional data would not have any economic impact on manufacturers or increase their test or reporting burden.
- **Power Consumption in Standby mode:** Under the amended federal test procedure, power consumed in standby mode power is measured based on the status of the internet and smart wake features. Consequently, consumption data is recorded in one mode only, which is associated with one of the three labels: “Standby with Smart Wake Enabled,” “Standby with Internet Connection,” and “Standby without Internet Connection.” We advocate for a single data entry to represent power consumption in standby mode. The additional proposed data entries, namely “Smart Wake Capable” and “Internet Connection Capable,” would furnish information to identify the condition of the standby mode.

**c. The CA IOUs recommend the CEC provide a detailed schedule for revising energy-efficiency standards for Televisions and Signage Displays.**

Should the CEC adopt Exception 2 to Section 1605.3(v)(2) and 1605.3(v)(3)—an addition made in response to DOE’s test procedure federally preempting the established CEC test procedure standard—it would lead to a lack of efficiency requirements for new televisions. In practical terms, this means televisions exhibiting high power consumption in On and Standby Modes and devoid of power-saving features would be permitted entry into the California market.

To avoid a sudden influx of highly inefficient televisions in California, the CA IOUs suggest that the CEC promptly initiate an Order Instituting Rulemaking or an Order Instituting Informational Proceeding to provide stakeholders and the public with a detailed schedule for revised energy-efficiency standards. A well-defined timeline would emphasize the importance of energy efficiency in televisions, motivating manufacturers to uphold energy efficiency features even without standards. Simultaneously, it would demonstrate the CEC’s dedication and prioritization toward this product, otherwise known for high-energy consumption. The CA IOUs acknowledge that this recommendation for an additional rulemaking proceeding might exceed the boundaries of this rulemaking. Nonetheless, we hope that CEC appreciates the value of taking this unusual step to ensure that its efforts to improve television efficiency continue to yield benefits for the state.

**6. The CA IOUs recommend changes to the proposed regulations for commercial and industrial fans and blowers to improve implementation of the new federal test procedure and future-proof the CEC’s labeling requirement.**



**a. The CA IOUs propose clarifying Table X for Commercial and Industrial Fans and Blowers using Alternative Efficiency Determination Methods (AEDM).**

The proposed regulatory language for section 1604(d)(1), in Table D-3, provides for the use of an AEDM for purposes of testing commercial and industrial fans and blowers:

<sup>3</sup> Including but not limited to provisions on alternative efficiency determination method (AEDM) and additional testing requirements concerning selection of models to be tested if an AEDM is to be applied, in 10 C.F.R. sections 429.69 and 429.70

However, in Section 1606(a), Table X-D, the “Possible Answers” for “Method used to determine FEP<sub>act</sub> [Fan Electrical Power] of test method in Section 1604” for commercial and industrial fans and blowers does not include the ability to certify using an AEDM. Additionally, the proposed change to the text in the “possible answer to this provision” removes the explicit references to Sections 6.1, 6.2, 6.3, and 6.4 in AMCA 214-21, Test Procedure for Calculating Fan Energy Index (FEI) for Commercial and Industrial Fans and Blowers (AMCA 214). Instead, the text refers the user to Table 1 of Appendix A to Subpart J of 10 CFR 431, which permits using those same sections of AMCA 214. The CA IOUs suggest listing the AMCA 214 sections in Table X, making this clearer for Title 20 readers.

Finally, the CA IOUs propose that if the CEC requires manufacturers to include the name of the AEDM, it provides a separate text field specifically for that name. We note that DOE does not require reporting the name of the AEDM.

Our proposed changes based on the above recommendations are:

<i>Appliance</i>	<i>Required Information</i>	<i>Permissible Possible Answers</i>
Commercial and Industrial Fans and Blowers manufactured on or after <del>November 16, 2023</del> <u>April 29, 2024</u>	Method used to determine FEP <sub>act</sub> of test method in section 1604(d)(2), (AMCA 214-21) <u>of this Article</u>	<del>Section 6.1, 6.2, 6.3, 6.4, or 6.5 of the test method in section 1604(d)(2), (AMCA 214-21)</del> <u>Applicable section(s) Section 6.1, 6.2, 6.3, or 6.4 of AMCA 214-21 per Table 1 of 10 C.F.R. section 431.174 (Appendix A to Subpart J of Part 431) or AEDM</u>
	<u>Name of the AEDM</u>	

**b. The CA IOUs recommend modifying the Marking of Appliance for Commercial and Industrial Fans and Blowers, Section 1607(d)(16), to allow manufacturers to display a minimum FEI other than 1.00 if DOE sets a higher minimum FEI.**

DOE is currently undertaking a rulemaking to establish energy conservation standards for commercial and industrial fans and blowers. In DOE’s pre-publication notice of proposed

rulemaking (NOPR), DOE proposes to set the minimum Fan Energy Index (FEI) at higher than 1.00 for most fan classes.<sup>13</sup>

Under EPCA, manufacturers ordinarily cannot make representations of test results that are inconsistent with DOE's test procedures. In the May 2023 Final Rule establishing test procedures for commercial and industrial fans and blowers, DOE clarified that upon the effective date of energy conservation standards, "Manufacturers would not be allowed to publish performance data at non-compliant operating points."<sup>14</sup> However, in the December 2023 pre-publication NOPR, DOE proposes to allow representations at non-compliant duty points, provided that the representation includes a disclaimer that sale at those duty points violates EPCA and grays out at those duty points in tables or graphs.<sup>15</sup>

Title 20, Section 1607(d)(16), requires manufacturers to provide a label showing the maximum airflow, maximum pressure, and maximum speed at which the Fan Energy Index is greater than or equal to 1.00. Although DOE would allow for these representations even where the federal standard is set higher than an FEI of 1.00, the representations would need to include the additional disclaimers required by DOE, adding complexity to the label and potentially leading to customer confusion.

Therefore, to align CEC's labeling requirements with potential future federal standards, the CA IOUs recommend the CEC amend the marking requirements to allow manufacturers to substitute the federal FEI minimum once federal energy conservation standards take effect. This would still allow manufacturers to make other representations consistent with DOE's proposal provided that the manufacturer includes the additional disclaimers that DOE would require, but would maintain simplicity in CEC's label by aligning with the federal FEI standards to achieve the CEC's goal of providing important efficiency information to customers. Our proposed changes are:

**(16) Commercial and Industrial Fans and Blowers.** Each commercial and industrial fan or blower, manufactured ~~on or after November 16, 2023~~ April 29, 2024, shall be marked, permanently and legibly on an accessible and conspicuous place on the unit, ~~in characters no less than ¼ inch in tabular form~~ (as shown below):

- (A) For Commercial and Industrial fans and blowers the label shall include the following information:
- Fan Energy Index  $\geq$  1.00 Efficiency boundaries;
  - a. maximum air flow (CFM);
  - b. maximum fan speed (RPM);
  - c. maximum pressure (inches water gauge); and
  - d. type of pressure ("static" or "total").

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<sup>13</sup> U.S. Department of Energy "Energy Conservation Program: Energy Conservation Standards for Fans and Blowers" pre-publication Notice of Proposed Rulemaking (Dec. 2023) , p. 460, [https://www.energy.gov/sites/default/files/2023-12/fans\\_blowers\\_nopr.pdf](https://www.energy.gov/sites/default/files/2023-12/fans_blowers_nopr.pdf).

<sup>14</sup> U.S. Department of Energy, "2023-05-01 Energy Conservation Program: Test Procedure for Fans and Blowers; Final Rule," Regulations.gov, April 30, 2023, <https://www.regulations.gov/document/EERE-2021-BT-TP-0021-0046>.

<sup>15</sup> U.S. Department of Energy "Energy Conservation Program: Energy Conservation Standards for Fans and Blowers" pre-publication Notice of Proposed Rulemaking (Dec. 2023) , pp. 414-415, [https://www.energy.gov/sites/default/files/2023-12/fans\\_blowers\\_nopr.pdf](https://www.energy.gov/sites/default/files/2023-12/fans_blowers_nopr.pdf).

NOTE: Operation outside of these boundaries will result in an energy inefficient operation.

(B) If the fan or blower is subject to a federal energy conservation standard, and the minimum Fan Energy Index is greater than 1.00, manufacturers shall be permitted to substitute that value.

**7. The CA IOUs recommend including the updated efficiency standards for residential-duty commercial water heaters.**

Section 1605.1(f)(3)(B) and Table F-5 contain the federal standards for residential-duty commercial water heaters. Although the CEC proposes to update the references to the commercial water heater standards in this rulemaking, the CEC omits to include the updated standards for gas-fired residential-duty commercial water heaters, which apply to equipment manufactured on or after October 6, 2026.

The CA IOUs recommend that CEC update Table F-5 of Section 1605.1(f) to be consistent with DOE's final standards, as follows:

<i>Product Class</i>	<i>Specifications<sup>a</sup></i>	<i>Draw Pattern</i>	<i>Minimum Uniform Energy Factor<sup>b</sup></i>	
			<u><i>Equipment manufactured before October 6, 2026</i></u>	<u><i>Equipment manufactured on or after October 6, 2026</i></u>
Gas-fired Storage	> 75 kBtu/h and ≤ 105 kBtu/hr and ≤ 120 gallons	Very small	0.2674 – (0.0009 x V <sub>r</sub> )	<u>0.5374 – (0.0009 x V<sub>r</sub>)</u>
		Low	0.5362 – (0.0012 x V <sub>r</sub> )	<u>0.8062 – (0.0012 x V<sub>r</sub>)</u>
		Medium	0.6002 – (0.0011 x V <sub>r</sub> )	<u>0.8702 – (0.0011 x V<sub>r</sub>)</u>
		High	0.6597 – (0.0009 x V <sub>r</sub> )	<u>0.9297 – (0.0009 x V<sub>r</sub>)</u>

Oil-fired storage and electric instantaneous residential-duty commercial water heaters have the same efficiency standards, so no further changes are needed to the table or the footnotes.

**8. The CA IOUs suggest additional changes to enhance the clarity of the proposed regulatory text without altering its original meaning.**

The proposed regulatory text contains minor discrepancies and errors from translating between the federal regulations and Title 20. These include the following:

- a. Section 1602(c) contains a new definition for “Alternative efficiency determination method” or AEDM for central air conditioner or central heat pump. However, the metrics included under that AEDM (IEER, COP, SCOP) are not applicable to central air conditioners or central air conditioning heat pump AEDMs. In addition, there is no

definition in the text for a “central heat pump,” which instead is described as a “central air conditioning heat pump.” The CA IOUs recommend clarifying the language to either apply to a broader scope of consumer and commercial products or to remove the examples that are relevant to commercial, but not consumer, products.

- b. In section 1602(d), the term “High-speed small-diameter (HSSD) ceiling fan” should have a period at the end of the sentence.
- c. In section 1602(d), the term “Safety fan” references AMCA 240\_15 instead of AMCA 240-15.
- d. In section 1605.1(c)(1), the CA IOUs recommend the following changes to Table C-3:

<i>Product Class</i>	<i>Minimum Efficiency Effective January 1, 2015</i>			
	<i>Minimum SEER</i>	<i>Minimum HSPF</i>	<i>Minimum EER</i>	<i>Average Off-Mode Power Consumption P<sub>w,eff</sub> (watts)</i>
Split system air conditioners with rated cooling capacity < 45,000 Btu/hour <sup>1</sup>	<del>14.0</del> <del>13.0</del> <u>14.0</u>	--	12.2	30
Split system air conditioners with rated cooling capacity ≥ 45,000 Btu/hour <sup>1</sup>	<del>14.0</del> <del>13.0</del> <u>14.0</u>	--	11.7	30
Split system heat pumps <del>with rated cooling capacity &lt; 45,000 Btu/hour<sup>1</sup></del>	14.0	8.2	--	33
<del>Split system heat pumps with rated cooling capacity ≥ 45,000 Btu/hour<sup>1</sup></del>	<del>14.0</del>	<del>8.2</del>	<del>=</del>	<del>33</del>
Single package air conditioners <sup>1</sup>	14.0	--	11.0	30
Single package heat pumps	14.0	8.0	--	33
Space constrained air conditioners -- split system	12.0	--	--	30
Space constrained heat pumps	12.0	7.4	--	33
Small duct, high velocity air conditioner systems	12.0	--	--	30
Small duct, high velocity heat pump systems	12.0	7.2	--	30

<sup>1</sup> See 10 C.F.R. section 430.32(c) for less stringent federal standards applicable to these units that are manufactured on or after January 1, 2015, and installed in states other than Arizona, California, Nevada, or New Mexico.

The rationale for modifications to restore the SEER requirements to 14 is located in 10 C.F.R. § 430.32(c)(3), as emphasized:

In addition to meeting the applicable requirements in paragraph (c)(1) of this section, products in product classes (i) and (iii) of paragraph (c)(1) of this section (i.e., split systems—air conditioners and single-package units—air conditioners) that are installed on or after January 1, 2015, and before January 1, 2023, in the States of Arizona, California, Nevada, or New Mexico **must have a Seasonal Energy Efficiency Ratio (SEER) of 14 or higher** and have an Energy Efficiency

Ratio (EER) (at a standard rating of 95 °F dry bulb outdoor temperature) not less than the following: [Table omitted.]

The changes to consolidate split-system heat pumps are for clarity only to match the federal tables.

- e. In section 1606(a)(4)(j), the provision should refer to “central air conditioning heat pumps” instead of “central heat pumps” for consistency with defined terms.

The CA IOUs appreciate the opportunity to provide these comments on the Proposed Regulatory Language containing the 2022 Amendments to the Appliance Efficiency Regulations. We thank the CEC for its consideration. We look forward to the next steps in the process.

Sincerely,



Patrick Eilert  
Manager, Codes & Standards  
Pacific Gas and Electric Company



Christopher Malotte  
Sr. Manager, Codes and Standards  
Southern California Edison



Kate Zeng  
ETP/C&S/ZNE Manager  
Customer Programs  
San Diego Gas & Electric Company