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Joint Comments on C&I Fans and Blowers 15-Day Language

Additional submitted attachment is included below.

July 26, 2022

Alejandro Galdamez
Efficiency Division
California Energy Commission
715 P Street
Sacramento, CA 95814

Docket Number: 22-AAER-01
TN Number: 241470

Dear Mr. Galdamez:

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) in response to the California Energy Commission (Energy Commission) new regulatory language regarding commercial and industrial fans and blowers.

The signatories of this letter, collectively referred to herein as the California Investor-Owned Utilities (CA IOUs), represent some of the largest utility companies in the Western U.S., serving over 32 million customers. As energy companies, we understand the potential of appliance efficiency standards to cut costs and reduce consumption while maintaining or increasing consumer utility of products. We have a responsibility to our customers to advocate for standards that accurately reflect the climate and conditions of our respective service areas.

The CA IOUs are generally supportive of California Energy Comission's (CEC's) new proposed regulatory language. We appreciate CEC's work to address our and other stakeholder comments in this rulemaking. We ask CEC to consider the following recommendations, which provide additional flexibility for manufacturers and to increase ease of enforcement:

1. **The CA IOUs recommend CEC not to remove power ventilators for smoke control systems from the list of excluded safety fans.**

   In the Notice of Proposed Action,[1] CEC included 'a fan bearing an Underwriter Laboratories or Electric Testing Laboratories listing for "Power Ventilators for Smoke Control Systems";' as a type of safety fan but struck it from the list in the 15-day language. We do not believe CEC intends to regulate this type of fan, and we recommend that CEC not strike this type of fan from the safety fan definition, because it is not covered by the other fan types included in the safety fan definition.

[1] https://efiling.energy.ca.gov/GetDocument.aspx?tn=241949&DocumentContentId=75626

2. **We recommend that CEC make the following changes to the reporting requirements in Table X of the New Regulatory Language for manufacturer flexibility and ease of enforcement.**

We recommend that if fans have a regulated polyphase motor under 10 CFR §431.25 *Energy conservation standards and effective dates for electric motors*[2], CEC requires manufacturers to report the voltage and rated nameplate horsepower rather than the motor model number. We recommend this because manufacturers often source a given regulated polyphase motor with the same characteristics from distributors who may not always have availability from the same manufacturer. Therefore, requiring manufacturers to report the model numbers of all possible motors would add an unnecessary burden that does not promote energy efficiency.

For the same reason, we also recommend that manufacturers be able to report multiple controller model numbers for a fan, because they may have a single fan with multiple variable frequency drive options.

Finally, to add clarity for enforcement officials, we recommend CEC add a reporting requirement for whether the fan was rated using static pressure or total pressure. See our proposed changes highlighted in red in the table below:

Table 1 below is a marked up excerpt from Table X of the New Regulatory Language posted by CEC on July 11th, 2022. Strike through and double strike through deletions (~~example~~, ~~example~~) and underlined and double-underlined additions (example, example) in black text are original. Our recommended changes are indicated in red (~~example~~, example).

Table 1: Excerpt from Table X Showing Proposed Changes in Red

Appliance	Required Information	Permissible Answers
Commercial and Industrial Fans and Blowers manufactured after August 10, 2023	Fan type	Centrifugal housed, centrifugal inline, centrifugal unhoused, centrifugal PRV supply, centrifugal PRV exhaust, axial inline, axial PRV, inline mixed-flow, power roof/wall ventilators, axial panel, radial housed
	Fan impeller diameter (in.)	

[2] https://www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-431/subpart-B/subject-group-ECFR03b7039d87b7cc6/section-431.25

	Motor model number or regulated polyphase voltage and nameplate horsepower (if fan is sold with a motor)~~certified with a motor)~~	Polyphase motors regulated under 10 CFR 431.25 shall be listed by the voltage and the rated nameplate horsepower.
	Transmission type (if fan is sold with a transmission)	Direct, V-belt, synchronous- belt, flexible coupling, none
	Controller model number (if fan is sold with a controller)~~(if fan is certified with a controller)~~	Multiple model numbers can be entered
	Pressure Type	"S" for fans rated using static pressure or "T" for fans rated using total pressure.
	Maximum fan speed (RPM)~~at FEI=1.0~~	

3. We recommend the following editorial changes to the regulatory language (shown in red).

3.1. High temperature fans are often sold for industrial processes, and are not necessarily safety fans. We recommend they be removed from the definition of safety fans and added to the list of excluded products. The change is shown in Section 3.2 below.

3.2. Within the same list, we recommend changing 'air curtains unit' to 'air curtain units.'

(1) Commercial and industrial fans and blowers do not include:
(A) safety fans as defined in Section 1602(d) of this Article;
(B) ceiling fans as defined in 10 CFR 430.2;
(C) circulating fans;
(D) induced flow fans;
(E) jet fans;
(F) cross-flow fans;
(G) embedded fans as defined in ANSI/AMCA 214-21;
(H) fans mounted in or on motor vehicles or other mobile equipment;
(I) fans that create a vacuum of 30 in. water gauge or greater;
(J) air curtain~~s~~ units as defined in Section 1602(d) of this Article.
(K) a fan that is designed and marketed to operate only at or above 482 degrees Fahrenheit (250 degrees Celsius);

3.3. Make the following changes to the "Safety fan" definition, as justified in Comment 1 and Comment 3.1. and add 'an' to (2).

"Safety fan" means:

~~(1). a fan that is designed and marketed to operate only at or above 482 degrees Fahrenheit (250 degrees Celsius); a fan bearing a Underwriter Laboratories or Electric Testing Laboratories listing for "Power Ventilators for Smoke Control Systems";~~

(~~2~~1)a reversible axial fan in cylindrical housing that is designed and marketed for use in ducted tunnel ventilation that will reverse operations under an emergency ventilation condition~~-conditions~~;

(~~3~~2) a fan for use in explosive atmospheres tested and marked according to EN ISO Standards 80079-36:2016, Explosive atmospheres – Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirements; or

(~~4~~3)a Positive Pressure Ventilator.

3.4. Remove the "Dual-use fan" definition because it is not used in the new regulatory language.

~~"Dual-use fan" means a fan having two operating modes to serve long-term ventilation purposes as well as short-time emergency duty at higher speeds for fire or smoke extraction.~~

3.5. Add 'total or static' to the "Maximum pressure" definition for clarity:

"Maximum pressure" means the maximum reported value for total or static fan pressure in inches water gauge at standard air density that meets or exceeds the minimum FEI ≥ 1.00 for at least one duty point. The maximum pressure is represented as Point 2 in figures H.1 through H.4 in Annex H of the test procedure in 1604(d)(2).

3.6. Correct spelling errors for the following standards titles:

ANSI C78.1- 1991 (R1996) through ~~SOCIETY OF MOTION PICTURE AND TELEVISION ENGINEERS (SMPTE)~~ INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)]

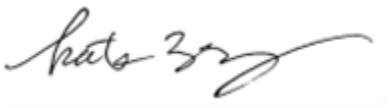
INTERNATIONAL ORGANI~~S~~ZATION FOR STANDARDIZATION~~THE EUROPEAN COMMITTEE FOR STANDARIZATION~~

In conclusion, we would like to reiterate our support of CEC's new regulatory language for Commercial and Industrial Fans and Blowers. We thank CEC for the opportunity to be involved in this process.

Sincerely,

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

Karen Klepack
Senior Manager, Building Electrification and Codes & Standards
Southern California Edison



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