

DOCKETED

Docket Number:	22-AAER-01
Project Title:	Commercial and Industrial Fans and Blowers
TN #:	248446
Document Title:	Final Statement of Reasons
Description:	Final statement of reasons for the adopted regulations for Commercial and Industrial Fans and Blowers
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Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	1/19/2023 1:31:29 PM
Docketed Date:	1/19/2023

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CEC-057 (Revised 1/21)



FINAL STATEMENT OF REASONS
Commercial and Industrial Fans and Blowers
OAL Z2022-0215-01

UPDATE OF THE INITIAL STATEMENT OF REASONS

In the Initial Statement of Reasons (ISOR) the CEC mistakenly referenced the wrong version of the document relied upon staff report. The ISOR incorrectly listed the “Docket Number 17-AAER-06” version in the ISOR when it was the 22-AAER-01 version that was relied upon and made available to the public during this rulemaking.

In response to comments received during the 45-day public comment period, the following changes were made to the proposed regulatory language and provided for 15-day public comment July 11, 2022, through July 26, 2022:

Section 1601:

- Removed referenced to AMCA and ANSI/AMCA 214-21 Test Procedure for Calculating Fan Energy Index (FEI) for Commercial and Industrial Fans and Blowers because it is unnecessary for this section. This change is necessary since the language in section 1601 does not make reference to this test procedure.

Section 1602:

- The following definitions were edited or deleted:
 - Air curtain unit was edited to clarify and assimilate to the definition used by industry.
 - Commercial and Industrial Fan or Blower was edited to include the definition adopted by the U.S. Department of Energy under their final rule determination of August 19, 2021.
 - Power roof ventilator was edited to address typographical error.
 - Safety Fan, edits to, addition, and deletion of listed terms was necessary to prevent unintended loopholes, introduce correct references, and remove words that caused ambiguity.
- The following definitions were added to the proposed regulatory language:
 - Maximum airflow
 - Maximum fan speed
 - Maximum pressure
 - Positive pressure ventilator

- The added definitions for maximum airflow, maximum fan speed, and maximum pressure were necessary to clearly identify the efficiency boundaries of the proposed regulation and address the different comments received. The definition for “positive pressure ventilator” was added to the regulatory language to prevent future ambiguity as a result of edits to ANSI/AMCA standard 240-15.
- Corrections were made to the documents incorporated by reference to section 1602. The corrections were necessary to list only the necessary referenced industry standards.
- References to ANSI/AMCA 99-16 Standards Handbook, ANSI/AMCA Standard 240-15 Laboratory Methods of Testing Positive Pressure Ventilators for Aerodynamic Performance Rating, and EN 13463-1:2001 non-electrical Equipment for Potentially Explosive Atmospheres were removed from the documents incorporated by reference to section 1602. The deletion was necessary since the referenced standards are no longer being referenced in the new proposed language and are not necessary to appear as referenced material.
- Added reference to International Organization for Standardization and ISO 80079-26:2016 Explosive atmospheres – Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirements to the documents incorporated by reference to section 1602. The added reference was in response to stakeholder comments and is necessary to reference the correct industry standard for fans used in explosive atmospheres.

Section 1606:

- Table X was edited to remove unnecessary data or terms and to incorporate new terms and requirements needed for certification per the comments received. The changes to Table X were necessary to address all of the comments received by stakeholders which expressed a lack of clarity of the previously proposed terms. The new terms and data clearly indicate the necessary information required for certification for commercial and industrial fan or blower.

Section 1607:

- Section 1607(d)(16) was amended to reflect the definition for “commercial and industrial fan or blower” rather than “commercial and industrial fan and blower.” The change was necessary to correctly reference the definition for the appliance and not the proposed category.
- In response to stakeholder feedback, section 1607(d)(16)(A) was edited to remove the previously suggested data and include the maximum airflow, maximum fan speed, and maximum pressure as defined in section 1602, which includes the $FEI \geq 1.00$ efficiency boundaries and clearly communicate to any consumer the efficient boundaries at which the commercial and industrial fan or blower will operate efficiently. The changes were necessary to clearly

communicate the efficient operational boundaries of the fan or blower noting that operation out of the boundaries will result in an energy inefficient operation.

- The information disclosure requirement in section 1607(d)(16)(B) was deleted. The deletion was necessary to remove ambiguity and address the concerns communicated by stakeholders.

In response to comments received during the 15-day public comment period, the following changes were made to the proposed regulatory language and provided for a second 15-day public comment September 7 through September 27, 2022:

Section 1602:

- Added “including embedded fans sold for replacement of another embedded fan” to excluded item (G) from the definition for Commercial and Industrial Fans and Blowers. The change was implemented to clarify that all embedded fans, including those sold for the sole purpose to replace an existing embedded fan, are excluded from the definition for Commercial and Industrial Fans and Blowers (CIFB) and will not need to comply with the proposed regulation. However, if the same fan model is sold as a CIFB, the fan model number is subject to the proposed regulations.
- Included new exclusion item (K) to the definition for CIFB. The exclusion reads “a fan that is designed and marketed to operate at or above 482 degrees Fahrenheit (250 degrees Celsius).” The exclusion was listed under the safety fans definition, but after further review it was appropriate to remove the exclusion since it was not a characteristic of a safety fan. The 482 degrees Fahrenheit parameter has always been in place but was moved from safety fans definition and placed here for a better fit per comments received. The 482 degree Fahrenheit is the threshold temperature used by industry for fans that operate in high temperature atmospheres.
- Removed the definition for “Dual use fan” since the term is no longer being used under the proposed regulation.
- Added the “total and static” language to the “Maximum pressure” definition. The change was implemented to clearly communicate that the maximum pressure can be of the total or static nature as both can be used and are dependent to the fan it was tested, and the type of pressure used during the test.
- Deleted the first item from the safety fan definition. The change was necessary since the fans that operate at or above 482 degrees Fahrenheit (250 degrees Celsius) are now listed as an exclusion to the proposed definition for CIFB.

- Moved Item 2 to Item 1 in the safety fan definition and included the determiner “an” into the item. The changes were necessary since item 1 was removed from the proposed definition and the determiner “an” is necessary.
- Moved item 3 to item 2 in the safety fan definition and deleted the conjunction “or” at the end of the item. The changes were necessary since item 1 was deleted and because the conjunction was no longer needed.
- Moved item 4 to item 3 in the safety fan definition and added the conjunction “or” at end of the item. The changes were necessary since item 1 was deleted from the proposed definition and the conjunction was needed since it is the penultimate item.
- Added item 4 to the proposed definition for safety fans to include power ventilator for smoke control systems that comply with ANSI/UL 705 Power Ventilators (dated August 23, 2021).
- Added reference to ANSI/UL 705 to the list of referenced material at the end of the section. The added reference item is necessary since it is used under item 4 of the safety fans definition.

Section 1606:

- Effective date was updated in Table X to reflect the anticipated adoption date.
- Table X was edited to remove the motor model number and include instead the type of motor in the fan being sold. The permissible answer will be: None, Single-phase induction, Polyphase induction, Synchronous DC (including ECM), Permanent magnet AC, or Other. This change was necessary to address a comment received during the comment period, which indicated that the original proposal would generate large amounts of data due to the endless combinations of motor model numbers that different manufacturers use for the same type of motor. The change was made to capture the type of motor in the fan and avoid the unnecessary data that would be generated by pursuing the different model numbers that fans are sold with.
- Table X was edited to include the motor nameplate horsepower if fan is sold with an induction motor. The change was necessary to capture necessary data that will help future enforcement of the proposed regulation.
- The “pressure type” field was added to Table X. This field is necessary for future verification of the certification of the commercial or industrial fan or blower.
- Table X was edited to remove the controller model number if a fan is sold with a controller and instead require the type of controller with the following permissible answers: None, Variable, or Other. The changes were necessary to address the

problems identified by stakeholder regarding the “controller model number” previously required.

- Edited the type of units for the airflow data points needed for certification to reflect CFM rather than SCFM since AMCA’s test procedure does not correct for SCFM but rather it converts pressure to standard air density and reports the airflow in CFM.
- Added reference to AMCA 214-21 to the “Method used to determine the FE_{Pact} of test method in section 1604(d)(2)” field of table X. The change was needed to add clarity to the origin of the sections used to calculate the FE_{Pact} of the proposed test procedure.

Section 1607

- Effective date was added to subsection 1607(d)(16) to reflect the anticipated adoption date.
- Added the type of pressure, either static or total, to the labeling requirements provided in subsection 1607(d)(160(A)). The change was required to require that the label clearly communicates the type of pressure.

Additional Documents incorporated by reference during all comment periods:

- ANSI/UL 705 Power Ventilator (August 23, 2021)
- ISO 80079-26:2016, Explosive atmospheres – Part 36: Non-electrical equipment for explosive atmospheres- Basic method and requirements

LOCAL MANDATE DETERMINATION

The California Energy Commission has determined that this action will not result in a local mandate on local agencies or school districts.

CONSIDERATION OF ALTERNATIVE PROPOSALS

The Energy Commission determined pursuant to Government Code Section 11346.9(a)(4) that no alternative before it would be more effective in carrying out the purpose for which this action is proposed; no alternative would be as effective as and less burdensome to affected persons than the adopted regulation; and no alternative would be more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

The adopted regulations will not have a significant adverse economic impact on businesses, including small business and no alternatives were proposed that would lessen any adverse economic impact on businesses, including small business.

Except as discussed in the summary and response to comment, no alternatives were recommended.

INCORPORATION BY REFERENCE

The Energy Commission proposes to incorporate by reference the following documents:

ANSI/AMCA Standard 214-21 – Test Procedure for Calculating Fan Energy Index (FEI) for Commercial and Industrial Fans and Blowers.

ANSI/UL 705 Power Ventilator (August 23, 2021)

ISO 80079-26:2016, Explosive atmospheres – Part 36: Non-electrical equipment for explosive atmospheres- Basic method and requirements

The documents are incorporated by reference because it would be cumbersome, unduly expensive, and impractical to publish in the California Code of Regulations. The documents were made available upon request directly from the Energy Commission throughout the course of this rulemaking action.

SUMMARY OF RESPONSES TO PUBLIC COMMENTS RECEIVED

All responses to public comments, including acceptance of recommendations and justification when recommendations were not accepted, are hereby incorporated by reference to this Final Statement of Reasons, and included in the final record.