DOCKETED	
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Project Title:	Commercial and Industrial Fans & Blowers
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Document Title:	Commercial and Industrial Fans and Blowers Data and Information Request
Description:	Guide document intended to clarify the type of information and data to be submitted by stakeholders.
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Commercial and Industrial Fans and Blowers

Data and Information Request

August 22, 2018

This document clarifies the data requested for the commercial and industrial fans and blowers rulemaking (Docket #17-AAER-06). This clarification is intended to support the submission of comments in response to staff's *Analysis of Efficiency Standards and Test Procedures for Commercial and Industrial Fans and Blowers* (June 2018). Comments are due by 5:00 p.m. (PDT) on September 28, 2018.

Guidelines

- Data provided to the Energy Commission needs to be substantiated with citations, references, and/or explanations.
- Data should be accompanied by a supporting document that explains the equations, details of calculations, results, and reasoning.

Data

Energy Commission staff is seeking analysis and data for:

- Pressure and volumetric losses for unitary units, air handlers, and air chillers, also known as cabinet losses.
- Alternative energy saving calculations and analysis to better capture energy savings and incremental costs from units that have embedded fans.
    - Incremental costs may include total unit cost due to markup, cost of unit with and without a compliant fan, and cost of unit redesign.
- Explanation or list of specific examples of issues with the Energy Commission's cost-effectiveness calculations and explanations of suggested changes.
- Substantiated data and analysis that supports any requested exclusions from the proposed standards. Exclusions should be limited to fans where the standards are not cost effective to the end user or are not technologically feasible to achieve.
- Modeled or calculated Fan Energy Index (FEI) of the following embedded fans:
    - Return and exhaust fans at the design revolutions per minute (RPM) and airflow in 7.5-, 15-, and 30-ton unitary units
    - Supply, condenser, return, and exhaust fans at the design RPM and airflow in 100-ton unitary units
    - Supply, return, and exhaust fans at the design RPM and airflow for air handlers
    - Condenser fans for 50-, 100-, and 300-ton air-cooled chillers at full load
- Provide information how a higher FEI for an fan that is embedded impacts the efficiency of the unit itself.

Information

Energy Commission staff is seeking information on:

- How to use fan laws, or other methods, reduce a manufacturer test burden.
- Suggestions or improvements for definitions of embedded fans, including additional unique definitions for fans that are only sold to be embedded in a larger piece of equipment and for fans that can be sold both as a stand-alone fan or as a fan embedded in a larger piece of equipment.
- Example of a simple definitive method to identify and label stand-alone fans and embedded fans
    - What should be on the label?
    - Where should it be affixed?
    - What are the pros and cons of a label on fans (embedded and/or stand-alone)?