DOCKETED

Docket Number:	17-AAER-06
Project Title:	Commercial and Industrial Fans & Blowers
TN #:	219192
Document Title:	Morrison Comments to CEC on Commercial Industrial Fans Blowers - Docket No. 17-AAER-06
Description:	N/A
Filer:	System
Organization:	Morrison Products, Inc.
Submitter Role:	Public
Submission Date:	6/16/2017 2:20:53 PM
Docketed Date:	6/16/2017

Comment Received From: Gregory Wagner
Submitted On: 6/16/2017
Docket Number: 17-AAER-06

Morrison Comments to CEC on Commercial Industrial Fans Blowers - Docket No. 17-AAER-06

Additional submitted attachment is included below.

MORRISON PRODUCTS, INC.

Manufacturers of Fans and Blowers

16900 SOUTH WATERLOO ROAD
CLEVELAND, OHIO 44110

PHONE (216) 486-4000
FAX (216) 486-0631

California Energy Commission
Docket Unit, MS-4
Re: Docket No. 17-AAER-06
1516 Ninth Street
Sacramento, California 95814-5512

June 16, 2017

Re: AHRI Comments – Title 20 Phase II Pre-Rulemaking – Commercial and Industrial Fans & Blowers [Docket No. 17-AAER-06]

Dear CEC Staff,

Morrison Products, Inc. is a manufacturer of air moving products supplying blowers and fan products to manufacturers of air-conditioning and heating equipment. Morrison supplies fans to 200+ companies producing residential and commercial air conditioning equipment that is manufactured and sold in North America. We have three U.S. manufacturing facilities, regionally located with over 300 employees and one Mexican facility supplying Mexican, Central and South American customers with 50 employees.

These comments are submitted in response to the California Energy Commission (CEC) Phase II Pre-Rulemaking Invitation to Participate meeting held on May 11, 2017, regarding the proposal to establish minimum efficiency standards for commercial and industrial fans into California's Appliance Efficiency Standards in Title 20 of the California Code of Regulations, Sections 1601 through 1609.

Specific Comment on HVAC Industry

We are in basic agreement with the comments submitted by AHRI and Ingersoll Rand/Trane. They have summarized many of the issues that were seen with the Department of Energy (DOE) rulemaking efforts for Commercial and Industrial Fans and Blowers (CIFB). This is an enormous undertaking due to the many possible fan and blower applications along with the complexity associated with fan application in HVAC equipment as related to safety, sound, performance and efficiency.

General Comments

The definition for "Commercial and Industrial" as applies to fans is unclear. From the process discussion at the public meeting, concern was expressed over this definition. Our suggestion is that the scope should only include fans that are not regulated or otherwise have their energy accounted for in codes and standards including DOE, CEC, ASHRAE and other building codes. Besides the need to avoid double regulation of products, the CEC should recognize that many

fans are part of complex systems that involve not just the fan but HVAC equipment and associated products that comprise the entire installed system.

Focusing on components of the system, rather than the system itself, may result in optimal components but may lead to suboptimal systems. Components like fans are used to perform work internal to the equipment (heat transfer, filtration and air movement through the equipment) that can vary depending on the size, quality, performance, reliability and cost aspects of the rest of the system. Restricting options of components unnecessarily constrains designers of the systems and will stifle innovation in the long term, resulting in less energy saving breakthroughs. Efficiency standards for components do not always lead to Pareto optimal solutions for systems. Further on the economic side, cost decision for efficiency tradeoffs may lead designers of systems to expend costs in ways that are not maximizing energy efficiency system wide. For example, gains in compressor, heat exchanger, filter, or other components may reduce energy consumption at a greater rate than fans for a given cost level. Systems level efficiency standards are better at maximizing all resources for energy efficiency gains. For these reasons, we strongly suggest the CEC consider limiting the definition of covered products to one that only contains stand-alone fans and avoids those that are part of systems that are regulated or covered by codes and standards.

Given the ongoing regulatory activity of HVAC products in many areas (among them: package units, new refrigerants, air conditioning, furnace, furnace fans as well as ASHRAE standards and DOE activity on CIFB) there will be constrained engineering departments, test facilities, certification labs/personnel as well as limited time that will make it very difficult to layer on top of them potential fan redesigns. The fan and HVAC industries ability to respond to these timing difficulties will present a substantial hurdle and these layered costs will need to be accounted for in this analysis.

We are appreciative of the opportunity to participate in this rulemaking process. We want to help create sensible solutions that drive systems to better energy efficiency in a cost effective manner so that the best and pareto optimal solutions are adopted.

If you have any questions or wish to discuss this further, please do not hesitate to contact me.

Sincerely,

Gregory P. Wagner
Vice President Engineering
Morrison Products, Inc.
16900 S. Waterloo Road
Cleveland, OH 44110
P: 216-486-4000
F: 216-486-0631
gwagner@morrisonproducts.com