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Comment Received From: The Greenheck Group

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On Commercial and Industrial Fans & Blowers

Additional submitted attachment is included below.

The Greenheck Group

Greenheck · Airolite · Accurex · GlobeAire · Unison · Innovent · Valent · Precision Coils

September 18, 2017

California Energy Commission Docket Unit, MS-4 1516 Ninth Street Sacramento, CA 95814-5512

RE: DOCKET: 17-AAER-06, Commercial and Industrial Fans & Blowers, Title 20 Phase II Pre-Rulemaking

The attached proposal is being submitted in response to the California Energy Commission (CEC) Phase II Pre-Rulemaking notice issued July 18, 2017 and the meeting held on August 1, 2017 inviting proposals related to the Subject Docket.

Proposal

See attached template.

Commenter Credentials:

I have over 31 years of experience with the Greenheck Group, a leading manufacturer of HVAC equipment and have held positions in engineering, sales, marketing, software development and general management. As such, I have a solid foundation for understanding the impact regulations can have on a business and a market. I am active in the development of test standards and codes with industry trade associations including ASHRAE, AMCA, AHRI, UL, NFPA, ICC and others. I participated on the U.S. Department of Energy's Working Group responsible for developing recommendations on Commercial and Industrial Fan Energy Regulation and am a member of the U.S. Department of Energy's Appliance Standards and Rulemaking Federal Advisory Committee (ASRAC).

The Greenheck Group is comprised of a number of brands including Greenheck, Unison Comfort Technologies, Innovent, Valent, Precision Coils, Accurex, and Airolite. Headquartered in Schofield, WI, Greenheck has offices and manufacturing facilities in California, Wisconsin, Kentucky, Tennessee, North Carolina, Mexico, and India. In the coming year we will be expanding our manufacturing footprint to include Oklahoma. Greenheck employs nearly 4,000 people worldwide, including over 3,500 in the United States. With over 70 years of family ownership, Greenheck is a worldwide leader in the manufacture of air-movement, conditioning and control equipment, systems and services. Greenheck's extensive product offering includes commercial fans and industrial blowers, laboratory exhaust systems, dedicated outdoor air systems, energy recovery ventilators, air handling equipment, make-up air equipment and kitchen ventilation systems. Related products include air-control dampers, fire and smoke control dampers, heating and cooling coils as well as architectural and mechanical louvers.















Greenheck equipment is used in all types of commercial, institutional, and industrial buildings and applications ranging from comfort ventilation to industrial processes.

Industry Associations

Greenheck engineers are actively involved with many government and industry organizations working to establish performance standards and application guidance related to HVAC systems and products. Examples include:

- United States Department of Energy (DOE)
- International Standards Organization (ISO)
- American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)
- Air Movement & Control Association (AMCA)
- Air-Conditioning, Heating, & Refrigeration Institute (AHRI)
- International Code Council (ICC)
- California Energy Commission (CEC)

Greenheck's involvement with the aforementioned groups is largely focused on development of standards, regulations and programs that result in energy efficient HVAC systems as well as practical selection and application of energy efficient products manufactured for these systems. Greenheck is continuously working with these organizations and other industry members to provide constructive, consistent and substantial insight regarding industry standards and regulations.

Greenheck appreciates the opportunity to support this regulatory effort and is prepared to provide additional details regarding historical data and the potential impact the regulation will have on the market. Examples include data related to historical product application, purchase costs, production costs, redesign costs, performance, fan selection, etc. I can also share analysis related to energy and cost estimates associated with DOE NODA efficiency levels, fan categories, etc. I have provided much of this data to the DOE through nondisclosure agreements with Navigant Consulting, LBNL and others. I can provide similar information more specific to California as requested. Please let me know if this is of interest.

Respectfully Submitted,

Mike

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