Feb. 12, 2024

AMCA Webinar for Senior Executives: DOE-Regulation Overview and Advocacy Strategy

Mark Bublitz, E.V.P. NY Blower, AMCA Chairman of the Board
Kevin Faltin, executive director, AMCA International
Michael Ivanovich, senior director, global affairs, AMCA International

Participation Guidelines

- Audience members will be muted during the webinar.
- Questions can be submitted via the GoTo Webinar platform at any time and will be answered following the presentation.
- Reminder: This webinar is being recorded. The recording will be posted to the members-only section of the AMCA website within 48 hours.
- A link to a post-webinar survey will be e-mailed within a day. Please take a moment to complete.
- PDH credits are not available for today's webinar.

Q&A

To submit questions:

- On the attendee panel, select “Questions.”
- Type your question in the box, indicating the speaker your question is for.
- Click “Send.”

Questions will be answered at the end of the program.

Mark Bublitz

Executive VP – Industry Affairs, NY Blower
Chairman of AMCA Board of Directors

- 35 years in the industry
- 20 years AMCA involvement
- Involved in the US regulation effort since 2013
- Chair of AMCARC Energy Efficiency Subcommittee
- B.S., M.S, Mechanical Engineering
- MBA
- Contact: mbublitz@nyb.com

Michael Ivanovich

Senior Director, Global Affairs
AMCA International

- Joined AMCA in 2011
- Coordinates global AMCA advocacy
- Primary staff person for fan regulations
- Past chief editor of *HPAC Engineering* and *Consulting-Specifying Engineer*
- B.Sc. Computer Science & Mathematics
- M.Sc. Building Systems Engineering
- Contact: mivanovich@amca.org

Kevin Faltin

Executive Director
AMCA International

- Joined AMCA in 2022
- 22+ years in the building and life-safety industry
- Extensive global experience in product compliance
- B.S. Marketing
- Contact: kfaltin@amca.org

Outline

- Timeline – 2011 – 2024
- Status
- Major Issues
- AMCA Response: Phase 1
- AMCA Response: Future Phases/Tiered Approach
- Calls to Action
- Q/A

Timeline – DOE and California

- 2010-2011: Energy Code focus (ASHRAE) with FEG
- 2010-2015: Early DOE; Era ends with FEI replacing FEG (FEI ≥1.00)
- 2017-2020: Trump Admin. Shelves DOE; California starts
- 2021-2023: DOE restarts & then finishes test procedure
- 2022: California finishes all of Title 20. FEG (FEI ≥1.00)
- 2024: DOE publishes draft energy standard - the focus of today's webinar

Status of Fan Regulations

- California Title 20
  - Completed Nov. 22, 2022
  - Original effective date of Nov. 22, 2023
  - Now updating language to adopt DOE test procedure
  - New effective date of April 29, 2024
  - Staff will communicate other changes when CEC finalizes language
  - Manufacturers can voluntarily file in compliance database
  - AMCA has a filing service for members
    - Contact Charlie Meyers – cmeyers@amca.org

Status of Fan Regulations

- DOE Test Procedure
  - Published May 1, 2023
  - Corrected August 20, 2023
  - Took effect October 30, 2023
  - 34 manufacturers have extension to April 29, 2024
  - No filing requirements
  - Test method and published ratings must conform to procedure

Status of Fan Regulations

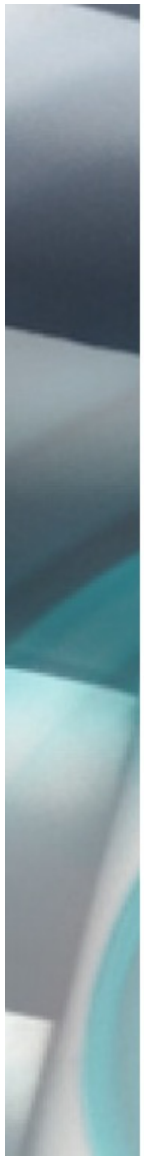
- DOE Energy Standard “Notice of Proposed Rule” (NOPR)
  - *Federal Register* publication Jan. 19
  - Live/remote hearing on Feb. 21
  - Deadline for comments on March 19
  - Expected to be completed (Final Rule) in 2024
  - Expected to take effect in 2029
  - Scope:
    - General Fans and Blowers (commercial/industrial fans)
    - Air Circulating Fans (that are not ceiling fans)

AMCA Response to Energy Standard NOPR

- Engaged committees:
  - N.A. Air Movement and Code Action Review Committee (AMCARC)
    - Energy Efficiency Subcommittee
  - Fan Engineering Committee
  - Marketing Committee

- Consultants
  - Tom Catania, Esq. – regulatory affairs
  - Nate Baker, Cadeo – Project planning; Fan Shipment Database Analyses
  - Tim Mathson, Retired – Fan engineering and FEI nuances

….It's a great team – many have been involved with DOE and California for a decade



General Fans and Blowers: Major Issues

- FEI levels set too high
- Complexity of the FEI calculation
- Representations for Non-Compliant Duty Points

- Not covered here:
  - Tolerances and surveillance testing
  - Calculating FEI if not tested with a drive

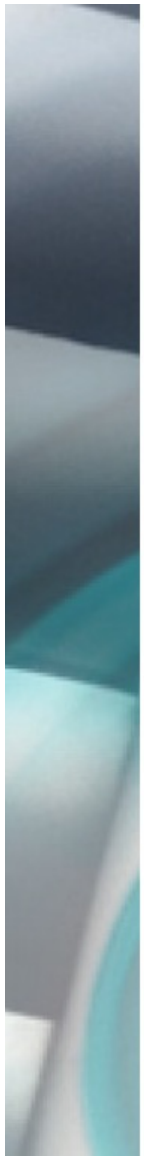
FEI Levels are High; Calculation is Complex

GFB Equipment Class	Fan Energy Index (FEI)
Axial Inline	1.18
Axial Panel	1.48
Axial Power Roof Ventilator	0.85
Centrifugal Housed	1.31
Centrifugal Unhoused	1.35
Centrifugal Inline	1.28
Radial Housed	1.17
Centrifugal Power Roof Ventilator - Exhaust	1.00
Centrifugal Power Roof Ventilator - Supply	1.19

*A if sold without a drive

*A*B if sold with a drive

A & B are adjustment parameters



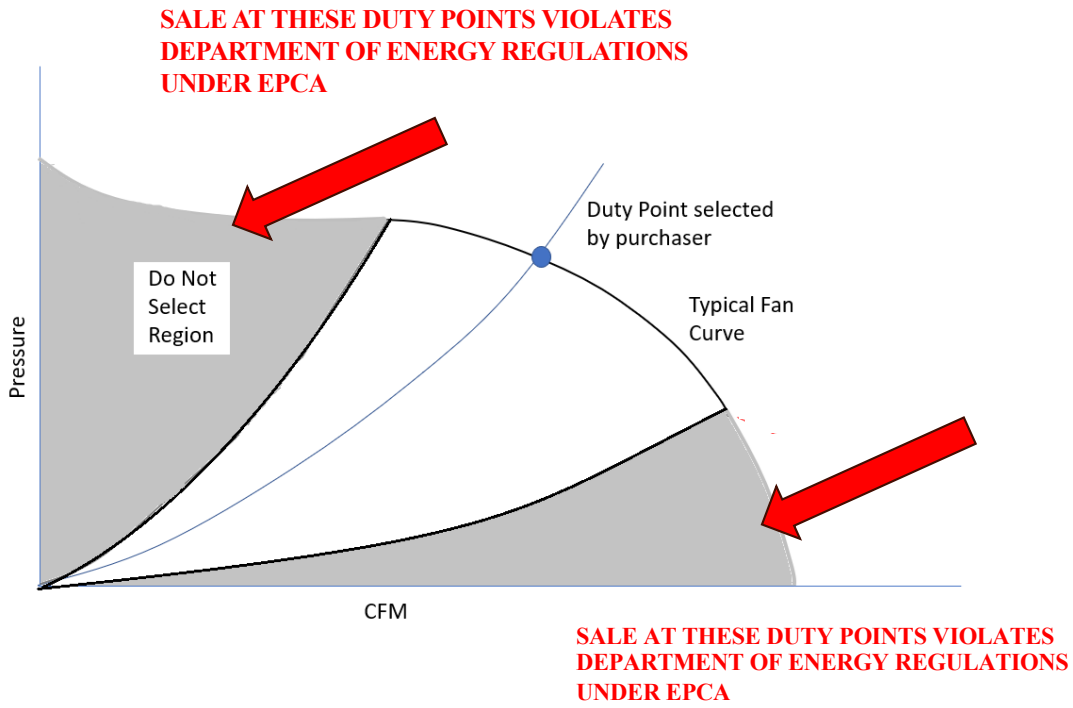
FEI Mathematics: FEI ≥ 1.00 Meant Something

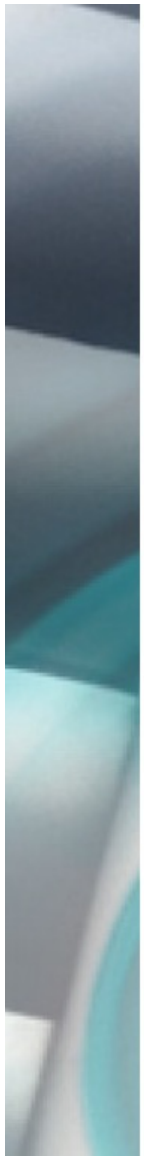
- FEI is a ratio of a baseline fan vs. fan being considered
- Baseline FEI ≥ 1.00 for ALL FANS since 2015
  - Energy codes, California regulation, etc.
- DOE FEI ranges 0.85 – 1.48, depending on fan type
- Fan with FEI 1.10 is 10% more efficient at same duty point
- Axial Panel Fan: 1.48 is almost 50% more efficient than California
- Centrifugal Unhoused: 1.35 is 35% more efficient than California

Representations

- (1) identified by the following disclaimer: “Sale at these duty points violates Department of Energy Regulations under EPCA” in all capital letters, red, and bold font; and
- (2) grayed out in any graphs or tables in which they are included."

GFB Representations including compliant and non-compliant points





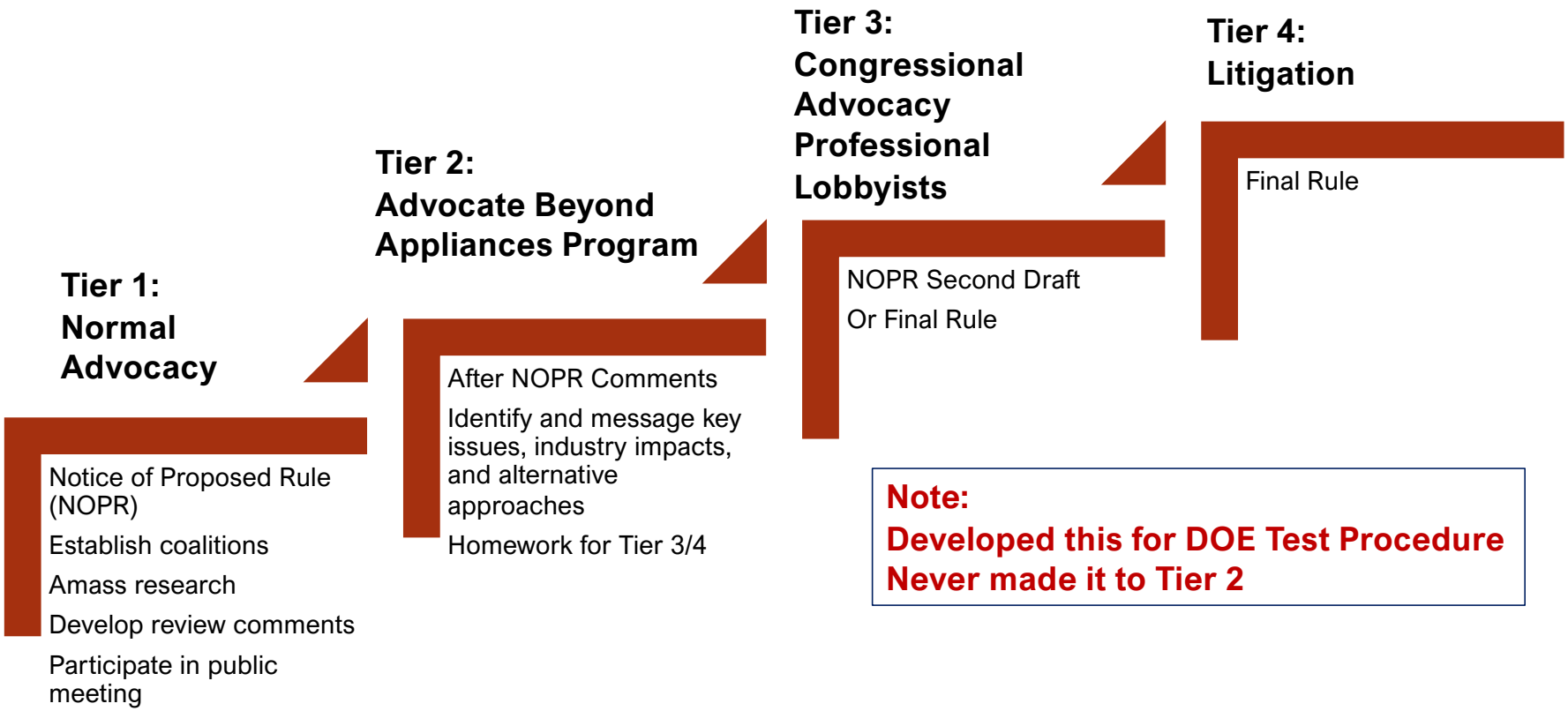
Circulating Fans: Major Concerns

- Lower-performing product likely to be taken out of the market (low engagement)
- Many products likely still representing data with outdated standards
- DOE has taken liberty with anticipated electro-mechanical performance expectations

Call to Action

- AMCA is “us” (members are experts in products, AMCA staff are experts in advocacy)
- Engagement
- Communication
- Tiered advocacy – Executive area

Tiered Advocacy Approach: Just in Case



Note:
Developed this for DOE Test Procedure
Never made it to Tier 2

Questions and Answers

Contact: Michael Ivanovich, mivanovich@amca.org