

Integrated Systems Coordinating Committee

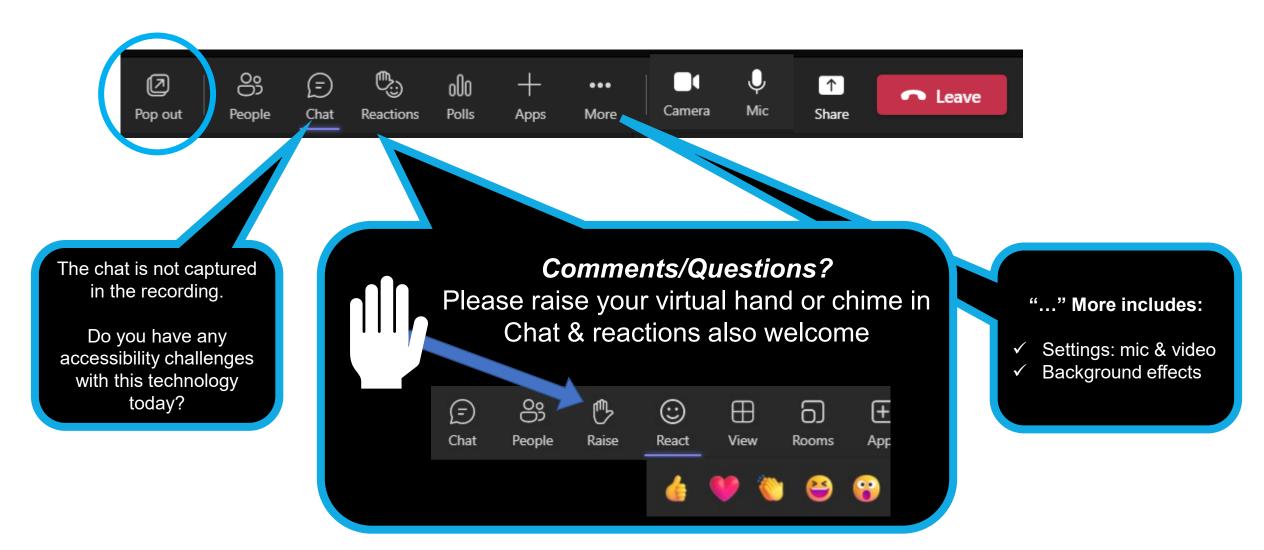
Q4 2024 Meeting – Day 1

Wednesday, November 6, 2024 12:30 pm, Pacific Time





Tools for Today: Engaging on Teams







Collective Role - Working Together

- Share your organization's activities
- Come prepared to actively participate
- Be transparent
- Identify any potential conflicts/challenges
- Flag any potential opportunities to leverage
- Be present in the conversation and stay flexible



(All Times Pacific)

AGENDA

12:30 -12:45	Welcome, Agenda & Packet Review	
12:45- 2:05	Introductions & Regional Roundtable	
2:05 - 2:15	BREAK	
2:15 – 2:45	Regional Priority Topic • Efficient Fans Program Updates	
2:45 – 3:00	Housekeeping Announcements & Upcoming Meetings/Events	
3:00 – 3:10	BREAK	
3:10 – 3:40	 Committee Ad hoc Discussion "Managing fluorescent baselines and related LLLC incentives" 	
3:40 – 3:45	Recap, Next Steps, Adjourn	neea

Packet Review & Informational Updates

• Tier 1: Agenda Items

- Regional Priority Topic: Efficient Fans Program Update Memo (pg. 5-6)
- Annual Planning Memo (pg. 7)

Program Activity Reports

- High-Performance HVAC (pg. 10-12)
- Luminaire Level Lighting Control (pg. 13-16)
- Extended Motor Products Pumps & Circulators (pg. 17-20)
- Efficient Fans (pg. 21-23)
- Better Bricks (pg. 24-26)

• Tier 3: Additional Resources (links on pg. 3)

Committee materials (charters & recent meeting resources, functional newsletters (Market Research & Eval, Emerg Tech, Codes + Standards + New Construction)





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WELCOME

New Committee Members & NEEA Staff

- Joe Hull from Eugene Water & Electric Board
- Alexis Muench, Efficient Fan's NEEA Program Manager
- Dave Hammond, High Performance HVAC NEEA Program Manager





Introductions + Committee Roundtable



Introduction Prompt (AII)

- Name
- Organization
- And...



Roundtable Focus

(NEEA PMs & ISCC members)

- Highlights since Q2 of 2024
 - Programmatic updates
 - Organizational updates

Please aim for 3-5 min max, thanks!





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Efficient Fans Program Updates

Efficient Fans Team

Alexis Muench, Program Manager
Tamara Anderson, Manager, Program Operations
Nick Michel, Market Transformation Manager, Motor-Driven Systems
November 6, 2024









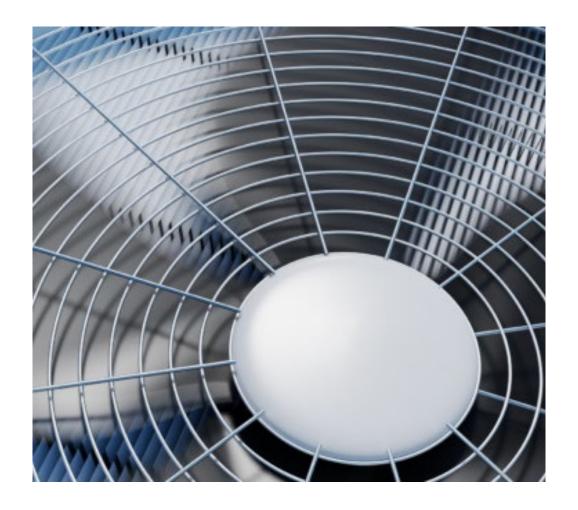


Efficient Fans Product Description

- AMCA certified fans with a Fan Energy Index (FEI) >1
- → Horsepower ≥ 1
- Fans sold and installed as a standalone fans that are not included in another piece of equipment...

OR

Fans sold and installed in another piece of packaged equipment and that packaged equipment is **not rated** by any efficiency metrics - such as Annual Fuel Utilization Efficency, Heating Seasonal Performance Factor (HSPF), Seasonal Energy Efficiency Rating, SEER, etc.







Common Applications

Commercial

- Building exhaust and supply
- Garage ventilation

Industrial

- Process exhaust
- Product drying
- Dust collection
- General manufacturing

Most commonly applied to:

- New construction
- Planned replacement

Examples

- Roof mounted
- Inline tube axial
- Wall mounted
- Mixed flow





Market Transformation Story

- Large program savings opportunity
- Low awareness of the fan energy index (FEI) metric
 - Partner with leading manufacturers to optimize fan selection software to highlight FEI and develop a compelling value proposition for efficient fans.
 - Engage with manufacturer reps to increase FEI awareness and prioritize efficient fan sales
 - Educate specifiers and installers on the benefits of efficient fans.
- Raise the minimum FEI available in the market
- Increase in fan efficiency by 2041 that is 25% better than the baseline.



Pending Federal Standard for Fans

Test procedure for fans included FEI in May 2023

Technical Support Document and Notice of Proposed Rulemaking posted Dec 2023

NEEA submitted comments March 2024

- Included proposed FEI minimums for 18 different fan types / combinations with or without a motor controller
- Final Rule has not been issued



Fans Coalition Launch

NEEA will be launching an Efficient Fans coalition in 2025

Goals of the Efficient Fans coalition:

- More participation from the Air Movement and Control Association (AMCA) members in the existing voluntary certified ratings program
- Explore the creation of Fan Energy Index (FEI) levels beyond current federal minimums

Market Characterization Highlights



The Regional Non-Embedded Fan Market is Estimated at ~27,000 Annual Unit Sales*

*Based on the product definition in place at the time of Market Characterization data collection (Q2–Q3 2023) This estimate is conservative—if variation exists, it is likely to result in a larger rather than smaller market

A small number of manufacturers (< 5) likely account for a substantial share of regional unit sales

Commercial represents the largest sales sector, followed by industrial, with most non-embedded sales being to new construction

Most fans sales appear to be low-HP (≤ 3hp), but regional sales do include large equipment of greater than 500hp



Awareness of FEI is Low

Overall awareness as reported by respondents was 48%

Usage of FEI in manufacturers' selection software is inconsistent and unstandardized

Efficiency may be incorporated more broadly into fan selection, particularly in less urgent scenarios (not emergency replacements)

Washington state building energy code stipulates that fans satisfy FEI requirements



Opportunities Exist for Targeted Market Intervention

Develop value proposition

- Highlight non-energy benefits of efficient fans
- Articulate ROI, including calculators or other tools
- Address concerns regarding reliability relative to legacy equipment

Build FEI Awareness

- Integration into manufacturers' fan selection software
- Test market education & training messaging regarding fan efficiency and FEI
- State-level and national energy code involvement

Pivot to include Manufacturer Reps





Concept Advancement: Preliminary Target Market

Early program activities focused on manufacturers who:

- Sell AMCA certified FEI products
- Include FEI in their selection software
- Represented in the Northwest





Opportunity with Manufacturers



Optimize fan selection software to prioritize FEI



FEI awareness and value proposition development



Address technical barriers to optimize fan performance



Fans coalition



Sales data



Opportunity with Manufacturer Representatives



Increase FEI awareness amongst specifiers, contractors, and engineers



Promote nonenergy benefits of efficient fan systems



Leverage influence at point-of-sale



Sales data









Manufacturer Engagement

- Engaged with two leading national manufacturers
- Fan selection software optimization, Total Cost of Ownership tool development, and sales data collection
- Testing and exploring ways to support FEI awareness building
- Leveraging relationships into manufacturer rep engagement





Manufacturer Representative Engagement

- Engaged three manufacturer reps
- Build FEI awareness, test program design, hone value proposition, and gather sales data
- Training, education, and "holding the spec" have been priorities
- "Pulling" another national manufacturer to the table
- 2025 timing









2025 Program Development Activities



Gather data and insights from market actors to inform program messaging and education activities Data and/or message testing results from 2-3 new partners (Q4 2025)



Conduct research to understand fan purchasing and decision-making process between supply chain and market actors (Q3 2025)



Conduct research to identify potential technical barriers to refine market transformation interventions and determine efficient fan product availability (Q3 2025)



Assess data quality, create, and 3rd party review Efficient Fans Baseline (Q4 2025)





Product Council on Dec 3rd - Save the Date!

- Enervex is a leading manufacturer of high efficiency fans and will be presenting on two types of products:
 - High efficiency (FEI) fan systems
 - Heat recovery systems
- Check back here for more information:
 - https://neea.org/get-involved/product-council



Twin City Fans Trainings – Save the Dates!

Dec. 4 – Boise

Dec. 5 - Spokane

Thank you to Avista, BPA and Idaho Power



Find helpful resources and information related to efficient fans such as fact sheets, articles, blogs and more!

betterbricks.com/solutions /efficient-fans

betterbricks/

Efficient Fans

New energy codes and regulations around fans is starting to take effect, including a shift in the way fan efficiency is measured. The new Fan Energy Index (FEI) addresses both the fan model's efficiency *and* how a specific fan will perform based on its application, which stands to deliver significant energy savings potential for commercial and industrial buildings.



Pumps, Motors & Fans +1 Tags

Guidance for Improved Fan Performance

Properly maintained fan systems in commercial buildings provide energy savings and a healthy, comfortable environment for building occupants. But knowing when to make improvements and necessary updates can be challenging for facility managers and maintenance staff.

Resources



Pumps, Motors & Fans +1 Tags

Video: Greenheck Provides a Deeper Dive into the Fan Energy Index

Watch and listen as Greg Allen from Greenheck provides more in-depth information on the Fan Energy Index (FEI).

Resources

GREATER **OPTIMIZATION**

of fan-system energy usage, FEI considers fans, motors, and drives

in part-load and full-load conditions

Pumps, Motors & Fans +1 Tags

Video: The Basics of the Fan Energy Index from AMCA

Check out this quick video from Air Movement and Control Association International to learn the critical issues commercial and industrial air systems face and the purpose of the Fan Energy Index (FEI)

learn more

Questions & Answers

We welcome feedback on your program or successes you have had incentivizing efficient fan adoption





Thank You!

Alexis Muench

Program Manager Amuench@neea.org































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Reminder! Name Change in 2025

ISCC → CICC

Integrated Systems Coordinating Committee

+ Commercial Industrial Coordinating Committee





Tomorrow! ISCC Annual Topic Planning

- Time: 9:15 ? (NLT Noon)
- Mural platform (visual guide only for discussion)
- Focus = topic development (review/discuss topic survey results)





LEADERSHIP IN **ENERGY EFFICIENCY** YEARS **AWARDS**

Join us for the hybrid ceremony!

NEEA's Board and staff will recognize individuals and teams for their exemplary dedication and performance in energy efficiency during the NEEA Board Annual Meeting on December 5.

To RSVP* go to: neea.org/leadershipawards *in-person attendees must RSVP by Nov. 20

10 YEARS



2025 ISCC Draft Meeting Dates



Q1 (Hybrid)

- Wednesday, 26 February
- Thursday, 27 February

Q2 (Virtual)

• Tuesday, 13 May

Q3

No MEETING

Q4 (Virtual)

- Tuesday, November 4
- Wednesday, November 5



UPCOMING MEETINGS for 2024

DECEMBER

- 3rd & 4th Products
 Coordinating Committee
 Meeting
- 5th Leadership in Energy Efficiency Awards
- 5th & 6th Board Meeting
- 9th Natural Gas Advisory Committee Webinar
- 12th Regional Emerging Technology Advisory Committee Meeting





Any Other
Upcoming Events?
Announcements?



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Committee Ad-hoc topic discussion

"Managing Fluorescent Baseline and related LLLC Incentives"



Ad hoc Discussion (30 min)

"Managing Fluorescent Baseline and related LLLC Incentives"

- Does your organization have plans for what's to come?
 - Challenges/Opportunities





Thank You!



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Action Items | Any Final Qs?





Public Comment?

Action Items?

Closing Remarks?



Thank You!

See you tomorrow!

@9:15 am PST

































Integrated Systems **Coordinating Committee**

Q4 2024 Meeting – Day 2

Thursday, November 7, 2024 9:15 am, Pacific Time



Welcome!



AGENDA

(All Times Pacific)

9:15 – 9:25	Welcome
9:25 – 10:00	Luminaire Level Lighting Controls
10:00 – 10:30	High-Performance HVAC (VHE DOAS)
10:30 — 10:40	Break
10:40 – 11:10	Extended Motor Products - Pumps & Circulators
11:10 – 11:40	Efficient Fans





NEXT STEPS

- Q1 2025 meeting
 - 26th and 27th February
 - Hybrid at NEEA office
- Draft workplan shared with committee by January
 - Confirm topics
 - Confirm relevance of Q1 regional priority topic



ANNUAL PLANNING







Thank You!

See you in 2025!































