



Commercial & Industrial Coordinating Committee

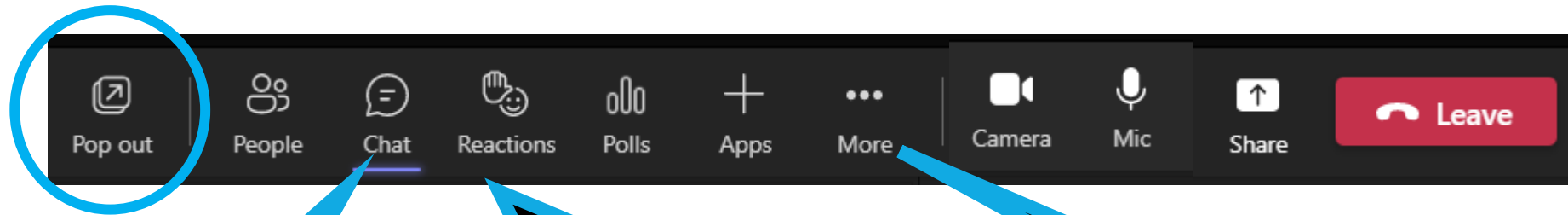
Q4 2025 Meeting – Day 1

Tuesday, November 4th

12:30 pm, Pacific Time



Tools for Today: Engaging on Teams

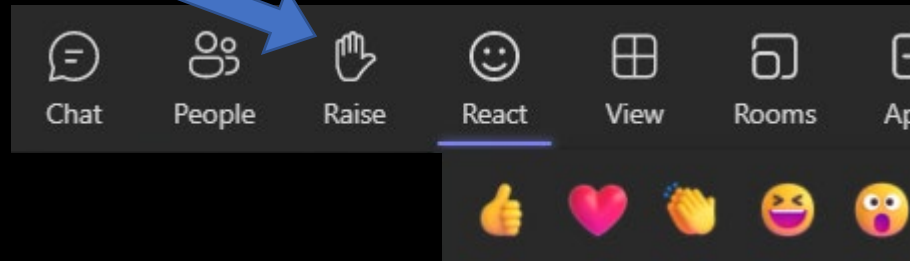
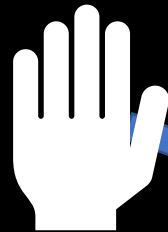


The chat is not captured in the recording.

Do you have any accessibility challenges with this technology today?

Comments/Questions?

Please raise your virtual hand or chime in
Chat & reactions also welcome



“...” More includes:

- ✓ Settings: mic & video
- ✓ Background effects

Heads up:

“Spotlighting” Speakers





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**

AGENDA

(All times Pacific)

12:30 -12:45	Welcome, Agenda & Packet Review
12:45- 2:05	Introductions & Regional Roundtable
2:05 - 2:15	<i>BREAK</i>
2:15 – 3:15	Regional Priority Topic • Efficient Fans – Understanding Purchasing Decisions
3:15 – 3:25	<i>BREAK</i>
3:25 – 3:55	NEEA Shareout • Luminaire Level Lighting Controls (LLLC) Market Research Findings
3:55 – 4:05	Housekeeping • Announcements & Upcoming Meetings/Events
4:05 – 4:10	Recap, Next Steps, Adjourn

Packet Review & Informational Updates

- **Tier 1: Agenda Items**

- Regional Priority Topic Efficient Fans Memo (pgs. 5-6)
- LLLC Market Research Findings Memo (pg. 7)
- Annual Planning Memo (pg. 8)

- **Activity Reports**

- Luminaire Level Lighting Control (pgs. 12-14)
- High Performance HVAC (pgs. 15-16)
- Extended Motor Products Pumps (pgs. 17-18)
- Efficient Fans (pgs. 19-20)
- BetterBricks (pgs. 21-22)

- **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)



AGENDA

(All times Pacific)

12:30 -12:45	Welcome, Agenda & Packet Review
12:45- 2:05	Introductions & Regional Roundtable
2:05 - 2:15	<i>BREAK</i>
2:15 – 3:15	Regional Priority Topic • Efficient Fans – Understanding Purchasing Decisions
3:15 – 3:25	<i>BREAK</i>
3:25 – 3:55	NEEA Shareout • Luminaire Level Lighting Controls (LLLC) Market Research Findings
3:55 – 4:05	Housekeeping • Announcements & Upcoming Meetings/Events
4:05 – 4:10	Recap, Next Steps, Adjourn



Introductions + Committee Roundtable



Introduction Prompt (All)

- Name
- Organization
- *And...*



Roundtable Focus (NEEA PMs & CICC members)

- Highlights since Q2 of 2025
 - Programmatic updates
 - What's new? What are you hearing?
 - Organizational updates

***Do you know any interesting facts about
your ancestors?***



Let's take a BREAK!



AGENDA

(All times Pacific)

12:30 -12:45	Welcome, Agenda & Packet Review
12:45- 2:05	Introductions & Regional Roundtable
2:05 - 2:15	<i>BREAK</i>
2:15 – 3:15	Regional Priority Topic • Efficient Fans – Understanding Purchasing Decisions
3:15 – 3:25	<i>BREAK</i>
3:25 – 3:55	NEEA Shareout • Luminaire Level Lighting Controls (LLLC) Market Research Findings
3:55 – 4:05	Housekeeping • Announcements & Upcoming Meetings/Events
4:05 – 4:10	Recap, Next Steps, Adjourn



Efficient Fans: Understanding Purchasing Decisions

Alexis Muench and Chris Cardiel

11.4.2025



Agenda

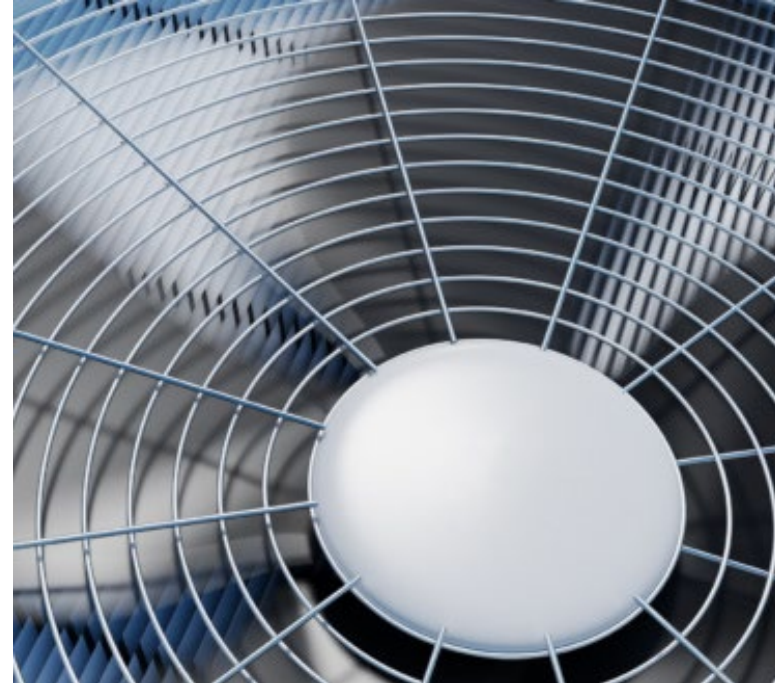
1. Fans Overview
2. Fan Energy Index
3. Research Overview (Objective, Market Landscape)
4. Key Study Findings
5. Takeaways/Recommendations
6. Questions

Fans Overview



Efficient Fans Product Description

- AMCA (Air Movement and Controls Association) - certified fans with a **Fan Energy Index (FEI) >1**
 - **Horsepower ≥ 1**
 - Sold and installed as **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 Efficiency (AFUE), Seasonal Energy Efficiency Rating, (SEER), etc.



What is the Fan Energy Index (FEI)?



Why FEI Matters

FEI - Efficiency metric

FEI = 1.0 reference fan
>1.0 = more efficient
(delivers same airflow
using less energy)
<1.0 = less efficient
(uses more energy)



Drives energy savings



System-level metric



Encourages optimized system design



-
- Code Efficiency Category**
- ≥90.1-2019
 - 90.1-2016
 - 90.1-2013
 - 90.1-2010
 - 90.1-2007
 - <90.1-2007
 - No Statewide Code



Research Overview

Objectives

4 Key Objectives

- Develop a list of specifiers and reps active within the NEEA region
- Understand communication and relationship dynamics
 - Key market actors (reps and specifiers)
- Identify pain points in the specification and sale process
- Test clarity of programmatic language for in-scope fans
 - Standalone fans



Research Scope

Reps: Strongest in Oregon (100%), lower in Montana (16%).

Specifiers: Highest presence in Washington (86%) and Montana (71%)

Majority of work in new construction ($\approx 65\text{--}70\%$) and major renovations ($\approx 20\text{--}25\%$), minimal replacement activity

20 interviews conducted:
14 specifiers, 6 reps.

Average Years of Experience:
Reps: 17
Specifiers: 14

Major Sectors:
Industrial, Commercial, Education, Healthcare, Data Centers.

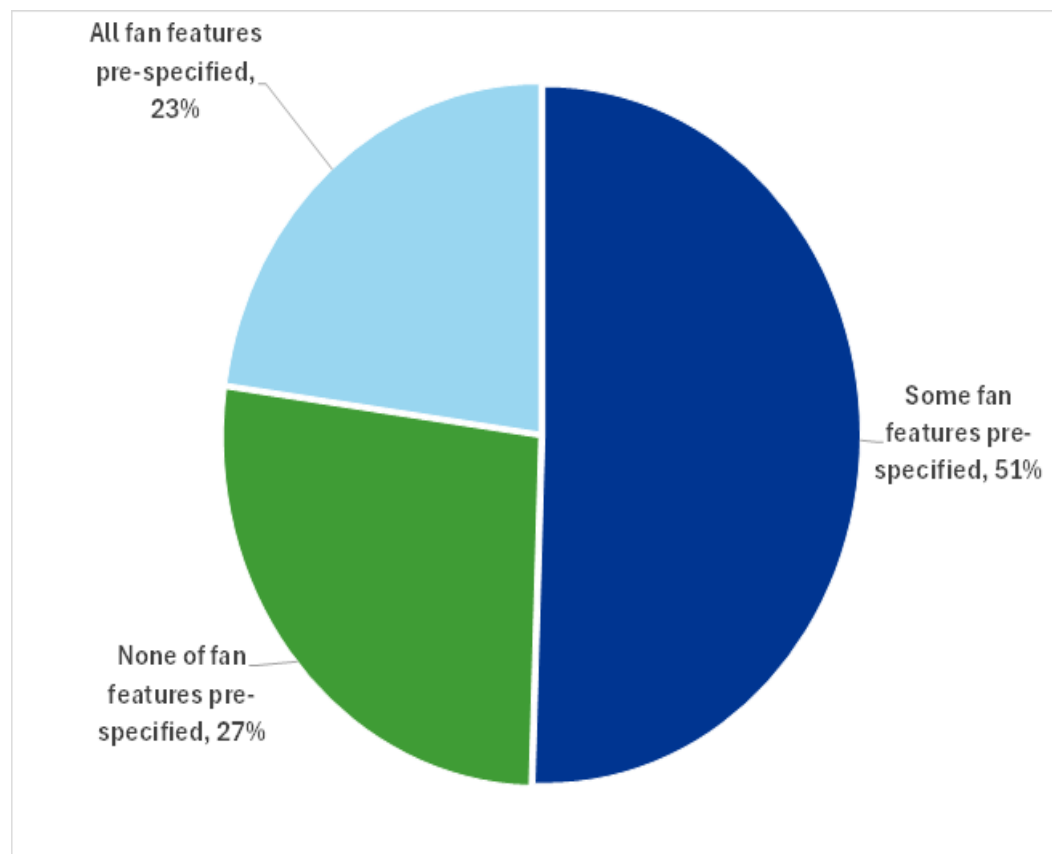


Key Study Findings



Flexibility in Fan Specifications Features – Reps POV

- Only 23% of bids fully specified – less flexible for fan recommendations
- Opportunity to influence early design





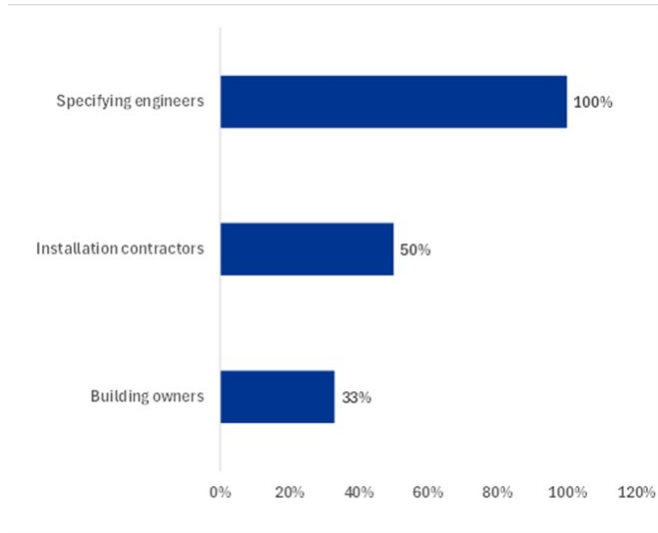
Flexibility in Fan Features – Specifiers POV

- **Energy efficiency (although not always FEI) was the fan feature most commonly pre-specified (5 mentions) due to either LEED building requirements, organizational sustainability policies, or building codes**
 - “For the past two years [energy efficiency] has been coming up more as [a topic]. Margins are tight with energy use accounting for 3-5% [of operating costs] in some facilities. There is a major use of power by saw systems.”
 - “Hitting energy goals [is discussed]. But customers don't mention FEI, instead the [energy goals] are driven by LEED or code.”
 - “In Washington there are [EE] code requirements.”
- **Other pre-specified fan features that multiple specifiers mentioned included noise (3 mentions), cost (2 mentions), and VFD/controls (2 mentions)**

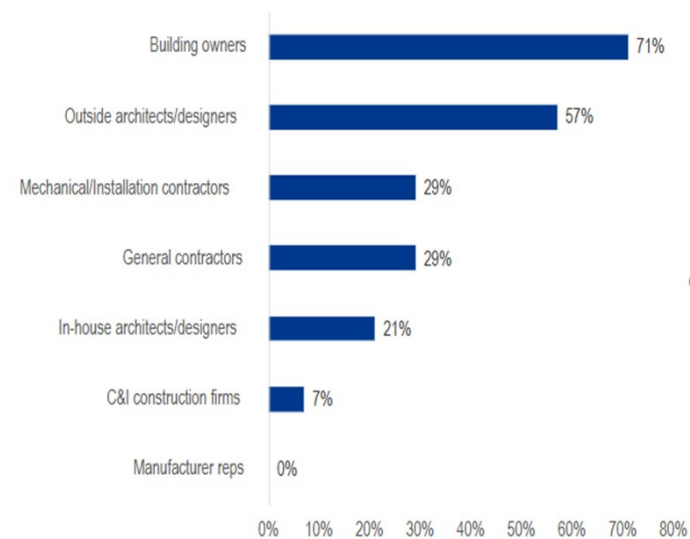


Who Engages with Whom?

Rep Conversations



Specifier Requests

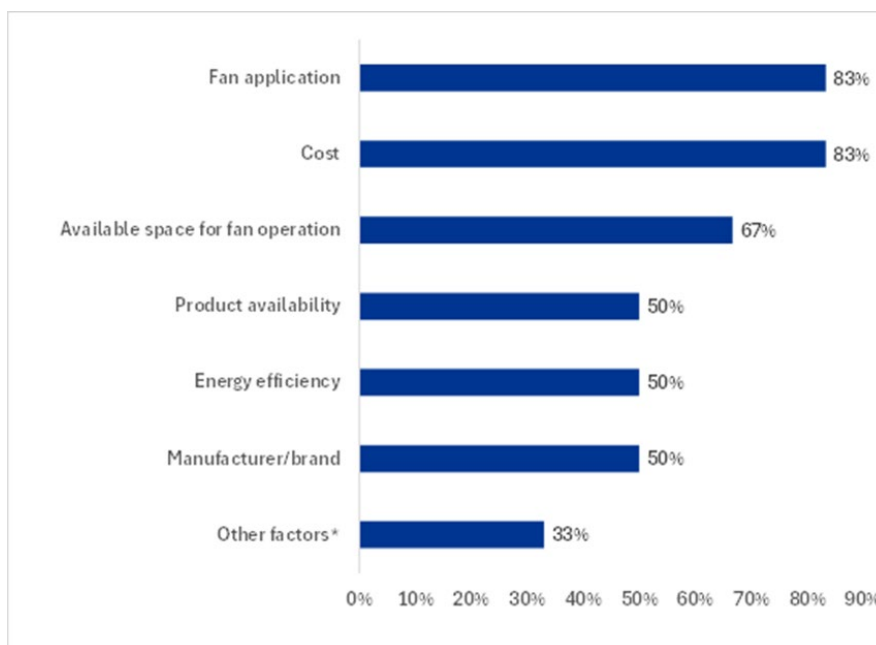


- Reps engage specifiers (100%), less often contractors (~50%) or owners (~30%)
- Specifiers' work is most often initiated by owners (71%) and architects/designers (57%)
- Specifiers guided by owners and architects



Factors for Reps

Fan application and cost were the most-cited considerations when recommending fans

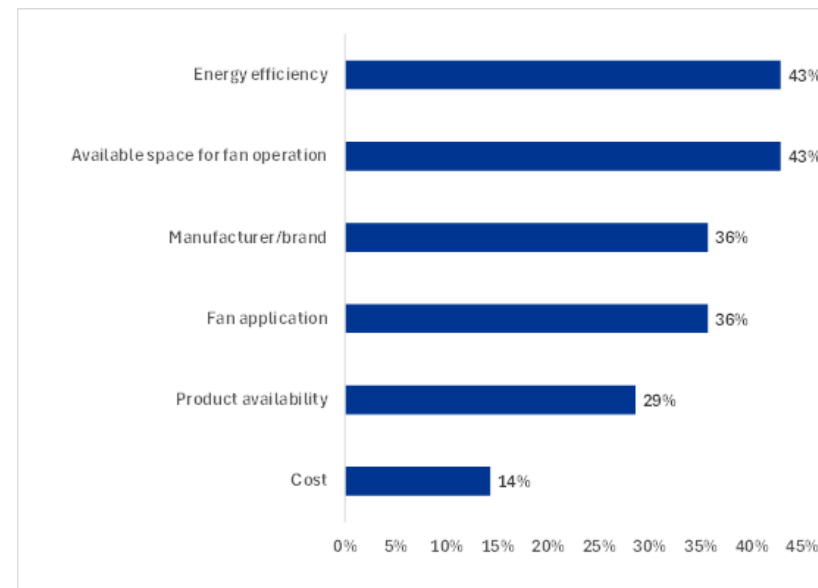


Factor	Average prioritization (1=highest)
Fan application	1.2
Cost	2.2
Available space for fan operation	2.5
Energy efficiency	2.6
Manufacturer/brand	3.5
Product availability	4.3



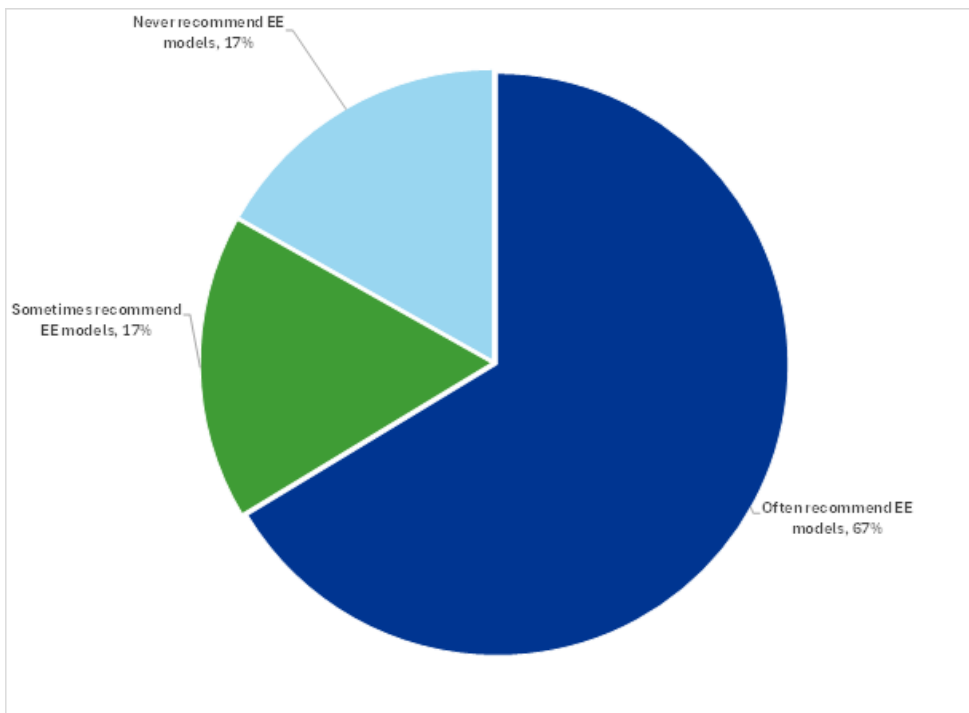
Key Selection/Recommendation Factors

- Efficiency and available space were most-cited considerations among specifiers when recommending fans
- Among reps, fan application and cost were most common factors





Reps and Recommending Energy Efficiency



Why they don't:

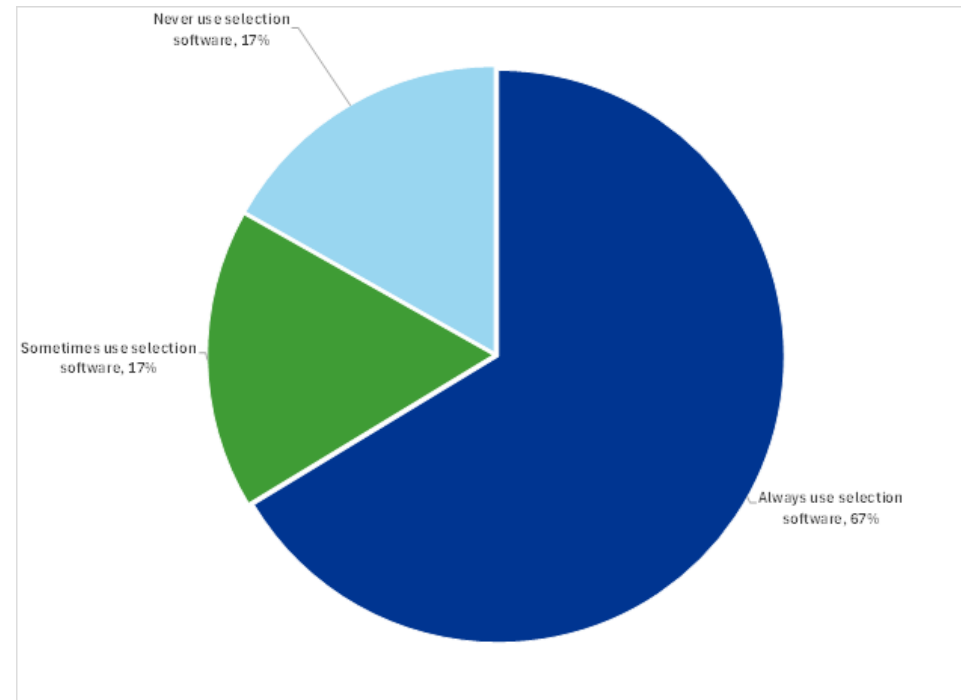
- Cost considerations
- Product availability
- Lower power costs for the Northwest region

What would motivate them?

- 2/3 mentioned incentives
- Also mentioned market education (e.g., lunch and learns)

Fan Selection Software

- 2/3 of reps and 86% of specifiers used fan selection software
- Question to Reps: *Does the fan spec software allow energy efficiency to be shown easily to clients?*
 - Results: even distribution of 'yes,' 'no,' and 'depends' answers



Communication & Influence Pathways

1. Interaction Flow (Specifying Engineer → Manufacturer Rep → Contractor / Owner)

2. Specifiers send project criteria (fan applications, specs)

3. Reps clarify requirements (iterations, potential site visits)

4. Use **Fan selection software** (e.g., Cook Select, eCAPS) to present fan options

5. Back-and-forth adjustments on upgrades, FEI, noise, fit, etc.

6. Reps mostly discuss options with specifiers; rarely with architects or general contractors

7. Specifiers receive project requests primarily from building owners and outside architects

Market Pain Points

- Reps rely on accurate, thorough information to provide appropriate equipment
 - End users sometimes unclear on details of application
 - Specifiers sometimes fail to provide necessary info and/or request decisions from reps beyond their areas of expertise
- Specific applications are particularly challenging
 - Examples given include laboratory settings and fan walls in air handlers
- Project dynamics can present typical but pernicious challenges
 - Long project lead times
 - Increases in cost due to project delays

Terminology

“Standalone” is not common industry language. Fans are categorized by application (e.g., exhaust, supply, fan coil)

- However, 5/6 reps and 9/14 specifiers found NEEA’s standalone fan definition clear

Key Takeaways / Recommendations



Market Insights and Opportunities

- **Manufacturer Reps and Specifying Engineers** are the **core influencers** in fan specification
- ~50% of Reps and ~40% of Specifiers regularly discuss efficiency, often under LEED/code or sustainability goals
- Selection tools don't clearly display FEI.
- Pre-specification of fan features is **rare (only ~25%)**, leaving room for influence during design



Recommendations: Program Implications



Focus outreach on reps and specifiers



Develop FEI training and visuals



Highlight FEI more prominently in tools



Coordinate with Industry orgs (like AMCA) for codes



The Ask: Committee Support

- Amplify FEI messaging, awareness
- Support data collection
- Align outreach and share results regionally

Questions and Discussion

Thank You!

Alexis Muench

Program Manager, Efficient Fans

amuench@neea.org

Chris Cardiel

Sr. Market Research & Evaluation Scientist

ccardiel@neea.org





Let's take a **BREAK**



AGENDA

(All times Pacific)

12:30 -12:45	Welcome, Agenda & Packet Review
12:45- 2:05	Introductions & Regional Roundtable
2:05 - 2:15	<i>BREAK</i>
2:15 – 3:15	Regional Priority Topic • Efficient Fans – Understanding Purchasing Decisions
3:15 – 3:25	<i>BREAK</i>
3:25 – 3:55	NEEA Shareout • Luminaire Level Lighting Controls (LLLC) Market Research Findings
3:55 – 4:05	Housekeeping • Announcements & Upcoming Meetings/Events
4:05 – 4:10	Recap, Next Steps, Adjourn

Luminaire Level Lighting Controls (LLLC) Market Research Findings

Zdanna King

Sr MRE Scientist, NEEA





Who did we hear from?

#	Method	Sample Description
59	Installer Survey	Northwest commercial lighting and controls installers
37	Designer/Specifier Survey	Northwest commercial lighting and controls designer/specifiers
10	Market Actor Interviews	Northwest lighting and controls manufacturers and manufacturer representatives
10	Decision-Maker Interviews	Northwest building owners and managers who installed new lighting systems

Research Highlights

For lighting installation companies:

- Almost all were aware of LLLC
- Almost all could bid on LLLC projects
- Fewer were formally trained in LLLC – about half
- Those who were trained, are spread across all four states

Research Highlights

For lighting installation companies:

- Two-thirds had installed LLLC at least once. Of these:
 - Four out of five said LLLC would be their first choice for installations
 - Almost all thought LLLC systems were easier to install than other NLC
 - Averaged 9 LLLC projects in the last year

Research Highlights

For lighting designer/specifier companies:

- Four out of five were aware of LLLC
- Three out of four had recommended LLLC



Research Highlights

For lighting designer/specifier companies:

- Almost all had sufficient styles & types of fixtures with embedded controls
- Two out of three had written LLC into a project

Research Highlights

For manufacturers and representatives:

- All **manufacturers** had increased their number of product types with embedded controls.
- All **manufacturer representatives** had enough types and styles of fixtures with embedded controls to meet their customers' needs.

Research Highlights

For commercial building decision-makers:

- All had recently upgraded their lighting systems (recruitment strategy)
- Three of ten were aware of LLLC and had installed these systems
- When LLLC was described to them, six out of ten were willing to pay more for LLLC

Qs for You

- There are several areas of growth shown in the market research – does this align with what you're noticing in your territory? How or how not?
- Are you currently supporting any trainings that include LLC topics? Do you think there's a hunger for more nuance in LLC content, now that most people are aware of the product in general?
- Were you surprised by anything?

Thank You!



Zdanna King

Senior Market Research and Evaluation Scientist

zking@neea.org



AGENDA

(All times Pacific)

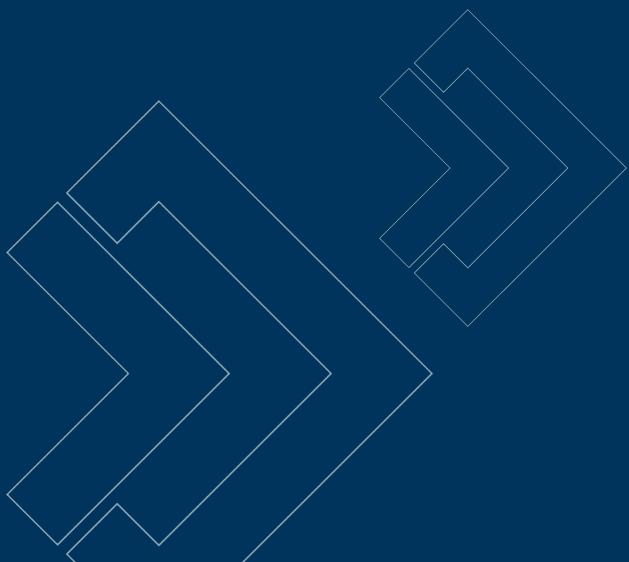
12:30 -12:45	Welcome, Agenda & Packet Review
12:45- 2:05	Introductions & Regional Roundtable
2:05 - 2:15	<i>BREAK</i>
2:15 – 3:15	Regional Priority Topic • Efficient Fans – Understanding Purchasing Decisions
3:15 – 3:25	<i>BREAK</i>
3:25 – 3:55	NEEA Shareout • Luminaire Level Lighting Controls (LLLC) Market Research Findings
3:55 – 4:05	Housekeeping • Announcements & Upcoming Meetings/Events
4:05 – 4:10	Recap, Next Steps, Adjourn



HOUSEKEEPING

Housekeeping

- Looking Ahead
 - Upcoming Meetings & Events
- Annual Planning





LEADERSHIP IN ENERGY EFFICIENCY 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 8.**

To RSVP* go to: **neea.org/leadershipawards**

**In-person attendees must RSVP by Nov. 21*



Efficiency Exchange 2026



Save the Date for EFX26

May 5-6

Boise, Idaho

neea.org/EFX

2026 CICC Meetings

HYBRID @
NEEA

Q1

- Wednesday, February 25
- Thursday, February 26

Q2

- Tuesday, May 27

Q4

- Wednesday, November 4
- Thursday, November 5





Upcoming NEEA Meetings

December

- 1st & 2nd Q4 Residential Coordinating Committee
- 4th Q4 Regional Emerging Technology Advisory Committee
- 8th 2025 Leadership in Energy Efficiency Awards
- 8th & 9th Q4 Board Meeting
- 10th Q4 Natural Gas Advisory Committee Interim Webinar

***Other regional /
industry events or
announcements?***





CICC Annual Topic Planning

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





Commercial & Industrial Coordinating Committee (CICC) 2025 Annual Workplan

Q1 Meeting Day 1 – 26 th February, Wednesday (HYBRID)	Q1 Meeting Day 2 – 27 th February, Thursday (HYBRID)	Q2 Meeting – 13 th May, Tuesday (VIRTUAL)	Q4 Meeting Day 1 – 4 th November, Tuesday (VIRTUAL)	Q4 Meeting Day 2 – 5 th November, Wednesday (VIRTUAL)
COMMERCIAL HVAC: <u>High Performance HVAC. Very High Efficiency DOAS (VHE DOAS)</u> <u>Topic:</u> NEEA Shareout: Inform on key activities identified in NEEA's market engagement plan (critical awareness & education opportunities in the region, and to which audiences) (60 minutes) <u>Desired Outcome:</u> TBD during topic buildout	MOTOR-DRIVEN PRODUCTS: Pumps & Circulators (XMP) <u>Topic:</u> Coordination Opportunity: Hear from the committee on Utility Custom Projects for pump energy efficiency (review recent results and success stories; talk about best practices and new opportunities) 60-90 minutes <u>Desired Outcome:</u> TBD during topic buildout	COMMERCIAL LIGHTING: <u>Luminaire Level Lighting Controls (LLLC)</u> <u>Topic:</u> NEEA Shareout: Inform on new ways of tracking champions for LLLC. (How NEEA identifies the new champions and ideas) – from a Marketing perspective 60 minutes <u>Desired Outcome:</u> TBD during topic buildout	MOTOR-DRIVEN PRODUCTS: <u>Efficient Fans</u> <u>Topic:</u> NEEA Shareout: NEEA research on Fan purchasing and decision-making process (Market actors role and Industrial research) 60 minutes <u>Desired Outcome:</u> TBD during topic buildout	2026 ANNUAL TOPIC PLANNING

A piece of brown paper with a string tied in a bow. The string is a light brown, twisted cord. It is tied in a bow that is centered horizontally and slightly above the vertical center. The bow has two loops on the left and two on the right. The string extends horizontally across the width of the paper and vertically down the center. The background is a solid, textured brown paper.

Let's wrap it up!

Action Items| Any Final Qs?

- Action Items
- Public Comment?
- Closing Remarks?





Public Comment?
Closing Remarks?

Thank You!



See you tomorrow!
@9:15 am





Commercial & Industrial Coordinating Committee

Q4 2025 Meeting – Day 2

Annual Planning Session

Wednesday, November 5th

This meeting will be transcribed



WELCOME & GOOD MORNING

*What's your favorite
season in the
Northwest?*



AGENDA

(All times Pacific)

9:15 – 9:25	Welcome & Agenda
9:25 – 9:55	Luminaire Level Lighting Control
9:55 – 10:25	High-Performance HVAC
<i>BREAK</i>	
10:35 – 11:05	Extended Motor Products Pumps
11:05 – 11:35	Efficient Fans
11:35 – 11:45	Recap, Next Steps, Adjourn

The left side of the slide features a large, stylized geometric design. It includes a green triangle at the top left, a light blue triangle at the top center, and a dark blue triangle at the bottom left. A photograph of a mountain landscape with snow patches and a small lake is positioned within the green triangle. Below the photograph, there are several overlapping, outlined diamond shapes in light blue and dark blue.

NEXT STEPS

- Q1 2026 meeting
 - 25th and 26th February
 - Hybrid at NEEA office
- Draft workplan shared with committee by January 2026
 - Confirm topics
 - Confirm relevance of Q1 regional priority topic based on workplan plotting

ANNUAL PLANNING



AGENDA

(All times Pacific)

9:15 – 9:25	Welcome & Agenda
9:25 – 9:55	Luminaire Level Lighting Control
9:55 – 10:25	High-Performance HVAC
<i>BREAK</i>	
10:35 – 11:05	Extended Motor Products Pumps
11:05 – 11:35	Efficient Fans
11:35 – 11:45	Recap, Next Steps, Adjourn

Thank You!

