

# *Integrated Systems Coordinating Committee*

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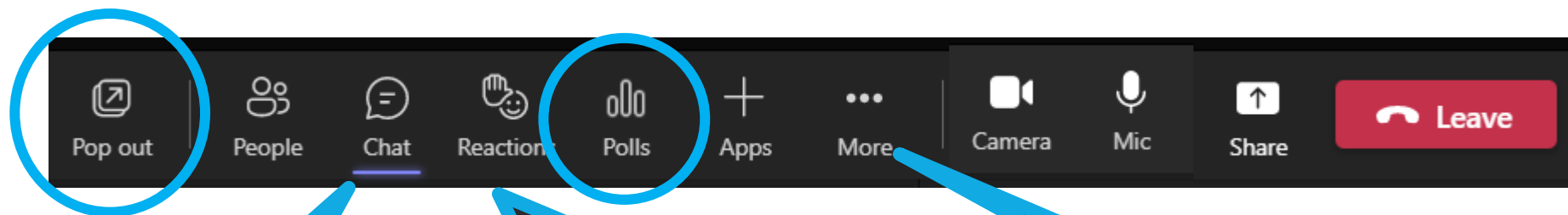
## *Q2 2023 Meeting*

*Monday, May 15, 2022  
12:30 – 4:30 pm Pacific Time*





# Tools for Today: Engaging on Teams

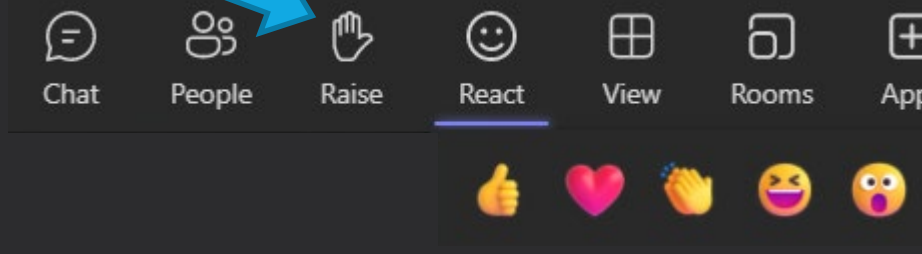


The chat is not captured in the recording.

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



# Agenda

*(All times Pacific)*



12:30-12:55 pm	Welcome, Introductions, Packet Review
12:55-1:15 pm	Housekeeping
1:15-2:50 pm	<u>Regional Priority Topic:</u> Luminaire Level Lighting Controls (LLLC) Education
2:50-3:05 pm	BREAK
3:05-4:20 pm	Regional Roundtable Share-Outs
4:20-4:30 pm	Recap, Next Steps, Adjourn





# *Packet Review, pg. 2*



## Tier 1 Memos

- Regional Priority Topic:  
Luminaire Level Lighting Controls Education, p. 5

## Tier 2 Memos:

- Commercial HVAC Topics & Timeline for 2023 ISCC Meetings, p. 8
- Variable Speed Heat Pumps (VSHP) Residential HVAC Update, p.9

## Semi-Annual Activity Reports

- Luminaire Level Lighting Controls, p. 11
- High-Performance HVAC, p.16
- Variable Speed Heat Pumps, p. 20
- Better Bricks, p.24
- High-Performance Windows, p. 28

## Tier 3 Additional Resources:

- Links to past ISCC & other committee materials
- Links NEEA functional Newsletters







# ***Welcome New ISCC Members***

➤ **Jay Olson, Pacific Power (residential)**





# *Introductions*

- Name
- Organization
- *And...*

**XX**





# ***Announcements & Housekeeping***





## Housekeeping & Looking Ahead

- Announcements
  - NEEA Staff Update
  - Upcoming NEEA committee meetings
  - EFX Recap
  - NEEA Business Planning Update
  - Federal Funding RPAC Work Group Update
- ISCC Annual Workplan Updates
  - Review workplan
  - Priority 2 topics for Q3 and Q4
- Co-Chair position





## *Upcoming NEEA Meetings*

AC = Advisory Committee  
CC = Coordinating Committee

May

- May 18 → Q2 Regional Portfolio AC (Hybrid, Portland)

June

- June 6-7 → Q2 Products CC (Hybrid, Portland)
- June 13-14 → Q2 NEEA Board (Hybrid, Montana)

August

- August 14 → Q3 Integrated Systems CC (Virtual)
- August 17 → Q3 Products CC (Virtual)
- August 29 → Q3 Regional Portfolio AC (Virtual)



# Efficiency Exchange Conference



**Save the Date: May 14-15, 2024**

**Coeur d'Alene, Idaho**

**[neea.org/EFX](https://neea.org/EFX)**





# ***Business Plan Milestones - 2023***

Date	Business Plan Milestone
March	Draft Business Plan Outline Review
May	First Draft Strategic + Business Plan Review
June	Second Strategic + Business Plan Review
July/August	<b>Regional Outreach:</b> <ul style="list-style-type: none"><li>• 1-2 Regional Webinars;</li><li>• Targeted presentations/ outreach to NWEAC, NWPCC, PNUCC, State Energy Offices, Commissions</li><li>• Email outreach through NEEA channels/nea.org</li></ul>
September	Summary of regional outreach, implications for plan, any final edits
November	Final Draft Strategic + Business Plan Review
December	Final Business Plan Approval



# *(Northwest) Federal Funding Coordination Work Group*

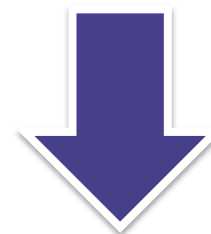
## Kickoff Meeting (5/4)

Share-out of  
activities, priorities,  
questions



Near-term Priorities:

- Workforce
- Marketing/Communication
- Tribal Engagement



## Next Steps

Q3 Meeting aligned with  
(planned) Home Rebates  
Guidance



Interim deep-dives on  
near-term priorities





## *ISCC 2023 Annual Workplan*

- Updated Workplan: p.4 in packet
- Q2 HVAC topics postponed to Q4

- HP HVAC / VHE DOAS (memo p.8)

- Topic D: NEEA's QPL

- Variable Speed Heat Pumps (memo p.9)

- Topic A or D: Federal Funding Coordination OR  
Regional Share-out on approaches

- Priority 2 Topics



# ISCC Q3 + Q4 Topic Snapshot

Q3

Aug 14

High Perf  
Windows

High Perf  
HVAC

Regional  
Priority 1  
Topics

Q4

Nov 6

LLLC

High Perf  
HVAC

Nov 7

VSHP

Roundtable



## Q3 "Priority 2" Topic Suggested

- **High Perf Windows (topic E): Cost Effectiveness Barriers**
- *Prioritized by:* Avista, BPA, NorthWestern, Seattle, PSE, Clark, Clallam (Tacoma, Idaho, Energy Trust?)

Expect direct outreach by mid-July

## Q4 "Priority 2" Topics Suggested

- LLLC (topic D): Share Utility Project Data
- VSHP (topic E): Supply Chain Constraints & Labor Barriers
- High Perf HVAC (topic E): Capacity Issues & Quantifying Benefits for Cost Effectiveness

Assess in Q3

## Priority 2 Topics:

- 15-30 min max
- Stakeholder led





## ***Reminder: ISCC Co-Chair Opportunity***

- Co-Chair Role & Time Investment:
  - ✓ Meet in advance to review quarterly agenda
  - ✓ Contribute to topic prep, if have expertise
  - ✓ Promote committee engagement during meetings
  - ✓ Support Annual Planning Sessions
  - ✓ Time Investment: 4-6hrs/quarter

Please contact Alisyn Maggiora: [Amaggiora@neea.org](mailto:Amaggiora@neea.org)

*Thank you, Michael  
Lane for your support!  
Q1 2020 - Q1 2023*





***Any other events or  
announcements?***

# Agenda

*(All times Pacific)*



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## ***Ask of You:***



***LISTEN FOR, OR SHARE, ANY  
COORDINATING OR  
LEVERAGING OPPORTUNITIES***



# » LLC Education

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Anne Curran , NEEA

Eric Mullendore, BPA

John Petosa, Snohomish PUD







## ***Building on Previous Discussions and Collaboration***

- Q2 2022 Bolstering Demand workshop
  - Informed 2023 program plans
- 2023 planning prioritized education





# Agenda

- **Where are we at?**
  - Recap & Discussion: Progress and challenges? (Eric – 10 min.)
- **What have we learned?**
  - Recap & Discussion: Reaching critical audiences (John – 15 min.)
  - Recap & Discussion: Key education topics and messaging (Eric – 15 min.)
- **What's next?**
  - Recap: Existing regional resources (Anne & Eric – 5 min.)
  - Roundtable: What do we each do individually and together as a region? (Anne – 30 min.)
- **Wrap up**



*Where Are We At?*





## *Recap: Our Progress and Challenges*

### Good news:

- Some adoption
- Some TAs on journey from skeptic to making it a differentiator

### Challenges:

- LLLC still not getting on radar for most customers
- Most TAs not yet embracing LLLC
- Skilled labor a challenge for many trade allies
- Legacy of bad experience with previous controls
- TAs more comfortable with shorter payback opportunities vs NEBs
- Pandemic derailed in person training



## ***Discussion: Our Progress and Challenges***

- *Any other context to add to the recap?*
- Initial thoughts on which challenges can best be tackled via education?







# *What Have We Learned?*



## ***Recap: Reaching critical audiences***

- **Who:**

- Decision makers (owners and facility managers)
- Installers, Designers & Specifiers
- Distributors & Sales Reps

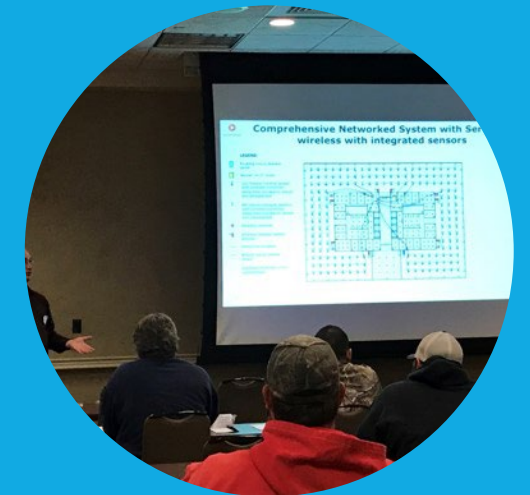
- **How**

- Outreach and engagement
- In person training
- Webinar
- On demand training modules
- Newsletter features
- Professional organizations
- Resources on website
  - Case studies
  - Educational handouts
  - Highlight trade allies



## ***Discussion: Reaching critical audiences***

- *Any other context to add to the recap?*
- What are highest priority audiences?
- What education channels and formats work best to reach them?
- What have we already tried that seems promising?
- Additional ideas?







# *5 Minute Stretch Break!*





## *Recap: Key Education Topics & Messaging*

- Fundamentals
- Applications
- Understanding value proposition including NEBs
- How to Sell
- Technical skills to deliver (design, specify, install, program, commission)
- Utility Incentives
- Mythbusters
- Code Compliance
- Integration with Other Systems



## ***Discussion: Key Education Topics & Messaging***

- *Any other context to add to the recap?*
- What are the key messages to get out there?
- Where do we still have critical gaps in understanding?
- What topics do we need to continue to reinforce?
- Where do we need new curriculum?





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*What's Next?*

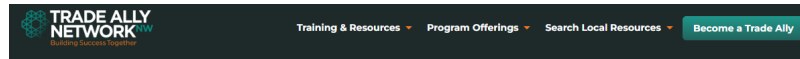


## ***Recap: Existing Regional Resources***

- NXT Level
- Trade Ally Network Northwest and other utility TANs
- Regional LLC program



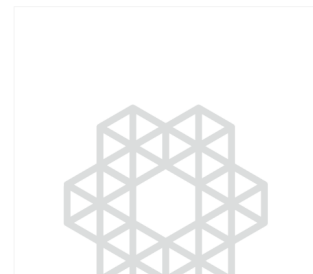
# Trade Ally Network NW Resources



Home > Training & Resources > Networked Lighting Controls w/Luminaire Level Integration Webinar

## NETWORKED LIGHTING CONTROLS W/LUMINAIRE LEVEL INTEGRATION WEBINAR

Online Training | May 11, 2020



### Lighting

#### Intelligent Lighting Controls

**B**uildings and building intelligence are stuck in the past. According to the Department of Energy (2016), almost 70% of all existing commercial buildings have no automated controls installed. That includes building automation systems as well. Where buildings do have controls, only 1% have daylighting or connected lighting fixtures. So, there is massive potential both for installing networked lighting controls and adding automated building controls for HVAC systems. Intelligent lighting is more than a lighting control system. It is also the nervous system of the intelligent building. That is due in part to the unique location of lighting. It is elevated above occupants and spread throughout the building. What other building system, other than light fixtures, is evenly distributed every 80-100 square feet? It also has one other important element – power access at each fixture.

##### LLIC BRINGS GRANULAR VALUE

With luminaire level lighting controls (LLIC), each fixture has integrated occupancy and daylight harvesting sensors and acts as its own sensor platform, which means the wireless network can be programmed and will respond to their own area inputs for maximum lighting control. LLICs inside architecture eliminates the need to design, wire and commission a separate control system with multiple components.

Additionally, LLIC systems require considerably fewer components and can easily be programmed with a personal device such as a tablet.

Each LLIC enabled LED fixture will have these functionalities (to name a few):

- Occupancy sensing
- Daylight harvesting
- Continuous dimming
- High-end tri/task tuning
- Controls persistence
- Individual addressability
- Networkability
- HVAC/BACnet integration (if required)

These capabilities create flexible, innovative spaces for owners where the value far exceeds the cost and desired energy savings. For example, occupant comfort is maximized with the combination of occupancy sensors and daylight harvesting that provides the appropriate light levels in the space. In addition, high-end tri/task tuning reduces the maximum output of luminaires and thereby lowers energy consumption, which in turn, reduces electrical stress (heat) and can help extend LED source life. All of this means maintenance demands are diminished, saving money and labor.

Find more information here:

<https://betterbricks.com/solutions/lighting/luminaire-level-lighting-controls>

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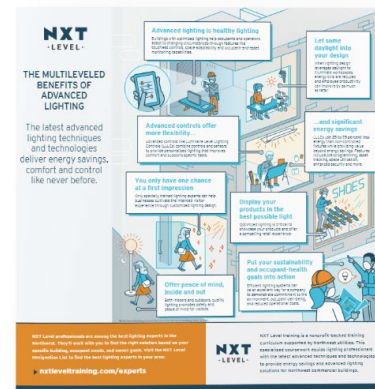


### Lighting

#### Benefits of Advanced Lighting

Every day, commercial lighting gets more complex—and much more beneficial.

The advent of LED technology brought an unprecedented year-over-year proliferation of commercial lighting options and applications. And while this fast-paced evolution has made commercial lighting more complex than ever, it also offers building operators and managers a wide variety of nuanced solutions to provide long-lasting energy and cost savings for building owners and everyday benefits to occupants.



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## ***LLC Program Resources***

- See appendix to memo in packet
  - Demo boards
  - Curriculum
  - Handouts
  - Short & Lengthy Videos
  - Case studies – more on the way!
- REQUEST: If want to collaborate on any training (ready to go or custom topic) in 2023, let's align in May/June





## ***Roundtable: Takeaways and Next Steps***

- Reflecting on our discussion so far:
  - What are you already doing that you might **continue** or ramp up?
  - What else might you **add** in?
  - Where are there opportunities to **collaborate** as a region?





# *Wrap Up*



***Break***

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# ***Regional Roundtable***

*(2-3 min each, please)*

- ✓ ***Organizational changes***
- ✓ ***Program changes or updates***
- ✓ ***Regional activities***
- ✓ ***Coordination or leveraging opportunities***



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*Public Comment?*  
*Action Items?*  
*Closing Remarks?*



» Until we meet again...

➤ Q3 ISCC: Monday, August 14, 2023 (virtual)

