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**International Energy Conservation Code**

**E4C-HVACR Subcommittee**

**Meeting Minutes (Draft)**

April 28, 2022

11:00 AM EDT to 2:00 PM EDT

[Webex](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ficcsafe.webex.com%2Ficcsafe%2Fj.php%3FMTID%3Dm807829c5a07e405b4d48f6e2c4866a8b&data=04%7C01%7Cjohnbade%402050partners.com%7C7294a08f174b4de922f708d9ece2013d%7C22b1750a3e784e6ab5765f144276bd19%7C1%7C0%7C637801278086123376%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=FdwSRiRotgddrYkojD%2FI2rDoAznMaxaGNkBn3Eb0iWE%3D&reserved=0) Link

**Committee Chair:** John Bade, representing the California Investor Owned Utilities

**Committee Vice Chair:** Blake Shelide, Oregon Department of Energy

Summary of proposal action votes at this meeting:

* CEPI-114, Energy Recovery, Exception 8 (Glory O’Brien), disapproved 17-0-0
* CEPI-123, Bathroom Intermittent Exhaust Control (Glory O’Brien), approved as modified 17-2-0
* CEPI-121 Small Fan Efficacy (Mike Moore), approved as modified 14-2-2
* CEPI-122 Low-Capacity Fans (Emily Toto), disapproved 14-3-2
* CEPI-118, Elevator Shaft Dampers (Emily Toto), approved 19-0-1
* CEPI-111 A/M, Parking Garage Ventilation (Emily Toto) (returned from E4C, tabled from 2/24 to fix definition), approved 18-0-1
* CEPI-072, Air curtain clarification (Amanda Hickman), approved as modified 18-0-1
* CEPI-124, Ceiling Fan Energy Index (Amanda Hickman), approved 18-0-1
* CEPI-077, High-Capacity Gas Boiler Systems (Emily Toto), approved 19-0-0
* CEPI-128, High-Capacity Water Heating Systems (Emily Toto), approved 18-0-0
* CEPI-085, Service Water Pressure-Boosting Pumps (Nick O’Neil), approved 18-0-0

1. **Call to order**-Chair or vice-chair

* Called to order by John Bade

2**. Meeting Conduct**. Staff

a. Identification of Representation/Conflict of Interest

b. ICC [Council Policy 7](https://www.iccsafe.org/wp-content/uploads/CP07-04.pdf) Committees: Section 5.1.10 Representation of Interests

c. ICC [Code of Ethics](https://www.iccsafe.org/wp-content/uploads/CodeOfEthics.pdf): ICC advocates commitment to a standard of professional behavior that exemplifies the highest ideals and principles of ethical conduct which include integrity, honesty, and fairness. As part of this commitment, it is expected that participants shall act with courtesy, competence and respect for others.

1. **Roll Call** – Establish Quorum- John Bade

Quorum was established with 14 voting member present at the start of the meeting.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **First Name** | **Last Name** | **Category** | **Company** |
|  | Christopher | Arnold | Consumer | Grand forks Public Schools |
|  | John | Bade | Utility | 2050 Partners |
|  | Ellen | Eggerton | Gov. Regulator | City of Alexandria |
|  | Drake | Erbe | Standards Promulgator | ASHRAE |
|  | Henry | Ernst | Manufacturer | Daiken |
|  | Mark | Heizer | Gov. Regulator | Oregon Bldg Codes Div |
|  | Adrian | Jones | Gov. Regulator | City of Lawrence |
|  | Gary | Klein | User | Self |
|  | Jeff | Kleiss | Manufacturer | Lochinvar (AO Smith) |
|  | Benjamin | Levie | Consumer | UCSF |
|  | Dick | Lord | Manufacturer | Carrier |
|  | Frank | Morrison | Manufacturer | Baltimore Aircoil |
|  | Christopher | Perry | Gov. Regulator | US DOE |
|  | Daniel | Nall | Gov. Regulator | Dan Nall Consultant/ AIA |
|  | Laura | Petrillo-Groh | Manufacturer | AHRI |
|  | Kevin | Rose | Public Segment | NEEA |
|  | Thomas | Schultz | Utility | Spire and American Gas Assoc. |
|  | **Blake** | **Shelide** | Gov. Regulator | **Oregon Dept of Energy** |
|  | Amin | Tohmaz | Gov. Regulator | City of San Antonio |
|  | Doug | Tucker | Manufacturer | Mitsubishi |
|  | Jeremy | Williams | Gov. Regulator | US DOE |
|  | James | Yeoman | Gov. Regulator | City of Orem |

1. **Approval of Minutes** Approval of April 14, 2022 Minutes.

* Moved as modified by Drake Erbe, seconded by Frank Morison.
* Minutes approved 16-0-0.

The chair shared his concern. Three meetings are left, and 31 proposals need to be covered. Members are encouraged to utilize the meeting time effectively.

5. **Approval of Agenda**

* John Bade proposed to discuss CEPI-131 after CEPI-85.
* CEPI-131 Gary Klein, John Bade and ASHRAE are proponents for CEPI-131. The intent of CEPI-131 was to exact match with ASHRAE. John Bade proposed to review the proposal with the committee.
* Steve Rosenstock proposed to combine CEPI-126 and CEPI-127, as the same table was used in both documents. The committee agreed to the proposal.
* **Motion to approve agenda as modified by Gary Klein. Seconded by Ellen Eggerton.**
* **Motion to approve as modified passes 16-0-0.**

6. **Old Business**

a. Items forwarded to other committees for review or completion.

7. **Action Items**. (We will hear as many of these as possible. Any proposal not heard in this meeting will be moved to the next meeting’s agenda)

1. CEPI-114, Energy Recovery, Exception 8 (Glory O’Brien)

Proponent, Glory O'Brien (Western Mechanical Solutions), was not present.

* Ellen Eggerton (City of Alexandria)
  + - Decent proposal but it’s not in code language.
* John Bade (California Investor-Owned Utilities)
* The proposal is not acceptable as submitted. Could come back during public comment.
* Has been brought up with ASHRAE 90.1 mechanical subcommittee as well. But this has been an issue for some time and there is not an apparent solution that we can include in the quick timeframe that our SC has.
* Preferred to disapprove the proposal.
* Proposed to involve the proponent in the working group.
* **Greg Klein (National Multifamily Housing Council) moved to disapprove the proposal. Jim Yeoman (City of Orem) seconded.**
* **Motion to disapprove passes 17-0-0.**

Reason: The proposal is not written is appropriate code language. The proponent will be invited to ASHARE 90.1 working group to address the issue.

1. CEPI-123, Bathroom Intermittent Exhaust Control (Glory O’Brien)

Proponent, Glory O'Brien (Western Mechanical Solutions) was not present.

* Mike Moore (Stator LLC) spoke for the proposal.
  + - Worked with proponent to modify and provide more options for compliance, towards goal of limiting runtime of exhaust fans.
    - Option #3 is aligned with CALGreen. Options are meant to align with most common control methods available in the market.
    - Not strongly supporting but worked with proponent to come up with something that was more workable for the industry.
* Laura Petrillo-Groh (AHRI)
  + Per her notes, the residential committee disapproved the original proposal with concern for mold issues for bathrooms without windows. Also, pressure concerns for high-rise residential spaces.
  + She asked whether the residential committee has seen the revised language.
* Mike Moore (Stator LLC)
* Confirmed that language was developed in the response to residential committee’s concern.
* Timer control in bathroom and toilet rooms has set point no greater than 20 minutes.
* The proposal is aligned with EPA.
* Humidity control may be adjusted by the users depending on the climate they are in. It can be turned off, if needed.
* Ellen Eggerton (City of Alexandria)
* Raised questions and confusion for exception language regarding manual control.
* Mike Moore (Stator LLC)
* Provided suggested edit, to add “shall not be required to provide additional controls other than manual on capability”
* John Bade (California Investor-Owned Utilities)
* Shared his concern on bringing in outdoor air through the roof top.
* Raised questions around exactly what is meant by “component outdoor air ventilation system” – if an exhaust fan is part of the same building as outdoor air brought in through a separate air handler, then wouldn’t it still be part of an “outdoor air ventilation system”.
* Mike Moore (Stator LLC)
* It is used for lowering unit ventilation.
* This is really a proposal to address multifamily buildings.
* Added R-2, R-3, R-4 language to exception
* Laura Petrillo-Groh (AHRI)
  + - Raised the question around application.
* Mike Moore (Stator LLC)
* Clarified that the intend of the proposal with an exception to keep the proposal for dwelling units only, not for restaurants.
* Laura Petrillo-Groh (AHRI)
  + - Preferred to review by residential committee and provide feedback before voting.
* Frank Morrison (Baltimore Aircoil)
* Proposed to include the word “bathroom exhaust system” in exception language for clarification.
* Ellen Eggerton (City of Alexandria)
  + - inclined to vote on this, let other interested parties (residential committee) make a public comment
    - John Bade (California Investor-Owned Utilities)
      * Asked question on application to continuous ventilation.
      * IMC allows for intermittent (higher cfm) and continuous (lower cfm) options, how does this apply to both.
* Mike Moore (Stator LLC)
  + - * Clarified that this only applies to exhaust fans designed for intermittent operation.
      * John Bade (California Investor-Owned Utilities)
* COVID recommendation requires never to turn off exhaust system in bathroom and toilet rooms.
* Tom Schultz (SPIRE and American Gas Association)
* Asked question around how someone might know if a fan is on, if it uses option 1. For example, if the timer control is manually on for 20 minutes after the first user leaving the facilities, how the next user will know of the timer activities.
* Mike Moore (Stator LLC)
  + Shared a few options available for the next user to aware of the timer control/exhaust fan is actively operating:
    - * The next user will hear the fan running.
      * The countdown timer can have visible light
      * The remaining time may be on dial.
* Kevin Rose (NEEA)
  + - Proposed to add “Group” Infront of R-2, R-3 and R-4 in exception clause.
* **Ellen Eggerton (City of Alexandria) moved to approve the motion as modified, seconded by Dan Hall.**
* **Motion passes 17-2-0.**
  + - Laura Petrillo-Groh and Drake Erbe voted against the motion.
* **Reason**: It reduces energy consumption in buildings.

1. CEPI-121 (replaced) Small Fan Efficacy (Mike Moore)

Proponent Mike Moore (Stator LLC) presents the proposal.

* Mike Moore (Stator LLC)
* The proposal is aligned with ASHRAE 90.1 and IECC-R.
* Proposal is almost completely coordinate with REPI-95, which was approved by residential committee
* Exhaust fans are aligned with ENEGY STAR value.
* John Bade (California Investor-Owned Utilities)
  + Confirmed that cfm/watt is not underlined, and the last column of the table will be removed.
* Ellen Eggerton (City of Alexandria)
* Asked whether efficacy is included in the test procedures in the code.
* Mike Moore (Stator LLC)
* Code has efficacy already for most types.
* Range hoods, larger than 200 cfm fans, and balanced hood are newly added.
* The rest remains the same.
* Mike Kennedy
  + Asked to clear how to calculate efficacy for two fans with two airflows.
* Mike Moore (Stator LLC)
* Footnote AHRI clarifies
* Balanced ERV and HRV of two airflows- supply and exhaust. If you get 50 cfm and 50 cfm exhaust. Efficacy will be calculated as 50/total power cfm/watt
* Steve Rosenstock (Edison Electric Institute)
* Asked whether the efficacy requirements align with current ENERGY STAR.
* Mike Moore (Stator LLC)
* Confirmed the new number is aligned with ENERGY STAR requirement.
* Steve Rosenstock (Edison Electric Institute)
* ENERGY STAR represents the top 25% of the products in the market.
* And does this mean it requires top 25% of the market?
* Mike Moore (Stator LLC)
  + It depends on the product.
  + The levels in this proposal are easily reachable by many types of equipment.
  + ERV and HRV can be meet the requirement without going through ECM.
* Steve Rosenstock (Edison Electric Institute)
* Asked about the elimination of the products in the market.
* Mike Moore (Stator LLC)
* The products are currently HVI certified. HVI database has efficacy, but not the products’ market share.
* The high performer may have low market share. Low performer may have high market share. Depending on the market, some will be cut out.
* ENERGY STAR v4.1 for fans was published several years ago.
* John Bade (California Investor-Owned Utilities)
* This was addendum to ASHRAE 90.1, same questions came up.
* Price comparisons of ENERGY STAR vs non-ENERGY STAR comparison was provided in the mechanical subcommittee. It was noted that ENERGY STAR fans for the same price as non ENERGY STAR fans.
* Mike Moore (Stator LLC)
* Some states are accepting the minimum cfm/watt.
* Mark Heizer (Oregon Bldg Codes Div)
  + Manufacturers are showing fan wattage independent of lights.
  + Asked question how to determine if fan met cfm/watt requirements.
* Mike Moore (Stator LLC)
  + Watts in HVI-certified products includes fans only. It doesn’t include light.
* Mark Heizer (Oregon Bldg Codes Div)
* Electrical draw will be giving amp, not watt.
* more about what comes on the box and on the fan, and what the building official will see in the field. Could be hard for the BO to determine compliance.
* Skip Ernst (Daiken)
* Asking whether the proposal is consolidated with ASHRAE proposal (CEPI-121 and CEPI-122 consolidated)
* Mike Moore (Stator LLC)
  + This was the intent but couldn’t get official “buy in” from ASHRAE due to process but incorporated as many comments as possible.
* Skip Ernst (Daiken)
* Would like to see the full proposal.
* Comments to hear CEPI-122 at the same time, chair pulled up 122 to review simultaneously.
  + CEPI-122 is similar, but does not include balanced ventilation or range hood information
* Aaron Gunzner, AMCA international
  + Part of ASHRAE 90.1 subcommittee.
  + Preference for CEPI-121 as it adds more clarity. Also, mentioned consistency between ASHRAE 90.1 and IECC, but sees updates made in CEPI-121 to be clearer.
* John Bade (California Investor-Owned Utilities)
* Proposed to take a straw poll.
* Three committee members prefers CEPI-122.
  + Mark Heizer. Frank Morrison, and Drake Erbe
* Eight committee members prefers CEPI-121.
* Mike Moore (Stator LLC)
* Placing efficacy labels on equipment can be challenging. The products may have MERV filter. Efficacy will vary based on MERV filter. Products with MERV 11 will not have the same performance for product with MERV 8. Manufactures may need to use larger label to include MERV filter info. And/or on the label.
* For the enforcement perspectives, manufacturers can have large level.
* Ellen Eggerton (City of Alexandria)
* Based on the discussion, she prefers to use on cfm info on the label optional.
* **Ellen Eggerton moved to approve CEPI-121 as modified, seconded by Jim Yeoman.**
* **Motion to approve as modified passes 14-2-2**

1. CEPI-122 Low-Capacity Fans (Emily Toto)

Proponents: Emily Toto, representing ASHRAE

* **Drake Erbe moved to approve CEPI-122, seconded by Frank Morrison.**
* **Reason**: this one aligns with ASHRAE, inappropriate to make changes to proposals that differ from ASHRAE.
* Steve Rosenstock (Edison Electric Institute)
  + Questioned around the IECC process if both CEPI-122 and CEPI-123 pass.
* Kris Stenger (ICC Staff)
  + Intention of committees to work out conflicting proposals. But if there are, it is worked out at committee and typically the last proposal has precedent.
* Motion failed 4-10-5
* **Ellen Eggerton moved to disapprove CEPI-122, seconded by Kevin Rose** (NEEA)**.**
* Motion to disapprove passes 14-3-2

**Reason**: Based on the committee action, as CEPI-121 is approved and CEPI-122 is disapproved.

1. CEPI-118, Elevator Shaft Dampers (Emily Toto)

Proponents: Emily Toto (ASHRAE) was not present.

* John Bade (California Investor-Owned Utilities)
* Elevator shaft vents are no longer required by most model codes. But, many elevator manufacturers insist on an opening in the shaft to help maintain shaft temperatures when the motor is top of the elevator. It may result in acceptable shaft temperature.
* Vents are only opened under the certain condition, for example, configure to open upon the activation of the building’s fire alarm system.
* **Drake moved to approve, seconded by Mark Heizer.**
* **Motion to approve passes 19-0-1.**
  + Jeff Kleiss abstained.
* **Reason**:
* Stand on reason statement provided.
* This section was amended many times. Only elevator shaft was added to the previously amended proposal.
* Rejoined the meeting after a beak at 11:35 am CT
* 14 voting members were present.

1. CEPI-111 A/M, Parking Garage Ventilation (Emily Toto) (returned from E4C, tabled from 2/24 to fix definition)

Proponents: Emily Toto, representing ASHRAE

* John Bade (California Investor-Owned Utilities)
  + Shut down by the full committee as definition. It seems very clear that it is where airflow is restricted – suggested that full height of solid wall is way to go. Proposing the opening. Normally closed garage.
  + Section means to the parking garage section. Committee is ok to repeat, and fine with the change
* Drake Erbe
  + It was reworked so many times.
  + Question about whether this becomes a committee proposal.
  + Proposed to disapprove the original and make this internally generated, as the proposal is not close to what was proposed.
  + Prefers to make this a new committee proposal – CECPI-6
  + Will withdraw CEPI-111
* **Dan Hall moved to approve, seconded by Ellen Eggerton.**
* **Motion to approve passes 18-0-1.**
  + - Friendly amendment to remove self-reference in definition
    - Friendly amendment to add “all” to definition for clarity
* **Reason: Stand on reason statement.**

1. CEPI-072, Air curtain clarification (Amanda Hickman)

Proponents: Amanda Hickman, representing Air Movement and Control Association (AMCA), Emily Toto, representing ASHRAE

* Amanda Hickman (Hickman Group for AMCA International)
  + Updating terminology, reviewed by envelope subcommittee of IECC.
  + Straighthood proposal. Updating the terminology of air curtain unit. Approved by ASHARE and reviewed by the envelope committee overwhelming.
* Ellen Eggerton (City of Alexandria)
* Question around why changing “velocity” to “jet speed”, when it is measured 6 inches above the floor and is really “velocity” at that point since jet speed is right at the discharge.
* Frank Cuaderno (Mars Air Systems, LLC)
* The door height varies, and installation type varies too.
* Core velocity is used in the industry.
* Dave Johnson (Berner International LLC)
  + The reason was changes, velocity is a vector, speed and direction. Jet is speed is just referring to speed.
* John Bade (California Investor-Owned Utilities)
  + Is “jet speed” a defined and well understood term? Is it in AMCA 220?
* Frank Cuaderno (Mars Air Systems, LLC)
  + They are typically tested at certain distance.
* Ellen Eggerton (City of Alexandria)
  + Proposed move back to “velocity”, since to her jet speed connotes right at the discharge.
  + Unit of measurement doesn’t have direction. 6 inches above the floor- not in favor,
* Amanda Hickman (Hickman Group for AMCA International)
  + Fine with friendly modification, “velocity” is consistent with AMCA standards
* **Ellen Eggerton (City of Alexandria) moved to approve CEPI-72 as modified, seconded by Tom Schultz.**
* **Motion to approve passes 18-0-1.**
  + - Drake Erbe abstained.
* **Reason**: stand on reason statement given.

1. CEPI-124, Ceiling Fan Energy Index (Amanda Hickman)

Proponents: Amanda Hickman, representing Air Movement and Control Association (AMCA),

* Amanda Hickman (Hickman Group for AMCA International)
  + Proposal is consistent with federal standards and what is going through ASHRAE 90.1
  + It adds same minimum energy conservation in ASHRAE 90.1 and adopted by DOE.
* Steve Rosenstock (Edison Electric Institute)
  + US DOE is undergoing rulemaking for ceiling fans. Is this consistent with the current an ongoing activity?
  + [https://www1.eere.energy.gov/buildings/appliance\_standards/standards.aspx?productid=5](https://iccsafe.webex.com/iccsafe/url.php?frompanel=false&gourl=https%3A%2F%2Fwww1.eere.energy.gov%2Fbuildings%2Fappliance_standards%2Fstandards.aspx%3Fproductid%3D5)
  + Aaron Gunzner (AMCA International)
    - the most recent document. AMCA is involved. The new rule making will not take effect for several years.
* Won’t speak for DOE, DOE did provide a technical support document and AMCA responded. DOE process is still ongoing. New rulemaking won’t take effect for several years, so this could potentially be revisited then if needed. Indications point to keeping CFEI metric and potentially changing test procedure.
* Amanda Hickman (Hickman Group for AMCA International)
* current proposal is consistent with current law
* Chris Perry (US DOE)
  + feedback from DOE appliance standards colleagues is that this is consistent and is not an issue
* Drake Erbe, ASHRAE
  + matches current law, supports matching current law even if it needs to be updated later
* John Bade (California Investor-Owned Utilities)
  + Confirmed that the DOE Notice of Proposed Rulemaking for the test procedure kept the CFEI metric.
* **Drake Erbe: moved to approve, seconded by Frank Morrison.**
* **Motion to approve passes 18-0-1.**
* **Reason**: matches current federal regulations

1. CEPI-077, High-Capacity Gas Boiler Systems (Emily Toto)

Proponents: Emily Toto, representing ASHRAE (etoto@ashrae.org)

* John Bade (California Investor-Owned Utilities)
  + Large boiler systems must comply. 10 million btu/h limit is there because it can be difficult for very large boilers to meet the requirement. But the range in the proposal covers the great majority of applications.
  + It was discussed with boiler manufacturers and designers.
  + This was a second public review of the 90.1 proposal revision after discussion with many boiler manufacturers.
* Chris Perry
* Proposal was based on the pre-existing water heating proposal that was similar for water heating systems. Confirmation that since this is based on large systems and new construction, federal preemption is not an issue with DOE, AHRI, manufacturers.
* Kevin Rose (NEEA)
  + The section C403.10, so there will be a numbering issue.
* Kris Stenger, IECC
  + renumbering is an administrative issue that IECC staff can handle. There will be multiple other renumbering efforts as all the proposals are combined.
* Some discussion around the best place to put this language. SC decided to make it a new section, any reorganization can be addressed if needed through public comment.
* **Laura Petrillo-Groh (AHRI) moved to approve, seconded by Drake Erbe (ASHRAE).**
* **Motion to approve passes 19-0-0.**
* **Reason**: reference existing but can be cleaned up.

1. CEPI-128, High-Capacity Water Heating Systems (Emily Toto)

Proponents: Emily Toto, representing ASHRAE

* John Bade (California Investor-Owned Utilities)
  + Intent is to make language more precise and more enforceable.
  + Added a minor modification from 100,000 to 105,000 in exception 3
* **Gary Klein moved to approve as modified, seconded by Drake Erbe.**
* **Motion to approve passes 18-0-0.**
* **Reason**: reference reason statement.
* No objections to moving CEPI-85 ahead of CEPI-130.

1. CEPI-130 A/M, Service Water Heating Piping Insulation (Gary Klein)
2. CEPI-085, Service Water Pressure-Boosting Pumps (Nick O’Neil)

Proponents: Nicholas O'Neil and Kevin Rose (NEEA) presented the proposal.

* Kevin Rose (NEEA)
* Requirement has been in ASHRAE 90.1 since 2010, and has been shown to be cost effective
* Mark Heizer (Oregon Bldg Codes Div)
  + just a note to staff regarding numbering.
  + Staff may need to find the most appropriate location.
  + Suggested it should go in the water heating section – C405
* John Bade (California Investor-Owned Utilities)
  + applies to all service water pumps, not just hot water, so C404 is not appropriate
* **Kevin Rose moved to approve the motion as submitted, seconded by Dan Hall.**
* **Motion to approve passes 18-0-0.**
* **Reason**: reference reason statement.

1. CEPI-083 A/M and CEPI-145, Pump Efficiency will be heard together (Nick O’Neil and Steve Rosenstock, respectively)

Proponents: Nicholas O'Neil, representing NEEA and Kevin Rose, representing Northwest Energy Efficiency Alliance (NEEA)

* John Bade (California Investor-Owned Utilities)
  + CEPI matches exactly as ASHARE 90.1 but not align the table. The series of reference to calculate the efficiency.
  + CEPI-83 has modified PEI.
  + CEPI-83 is way to approach but compact.
  + Asked committee members to review and contact proponent, if needed.
  + Action will be taken at the May 12, 2022 meeting

1. CEPI-126, Water Heating Efficiency (Steve Rosenstock) Not heard
2. CEPI-127 A/M, Water Heating Efficiency (Mike Kennedy) Not heard

9. **Other business**.

1. The Power, Lighting and Renewable Energy Subcommittee passed CEPI-75 as submitted. The chair has asked us to review it because it includes some mechanical elements.

* Some discussion around application of other sections (proposal only references section 6 and 8 of 90.4.
* Members of the subcommittee have some concerns, but these can likely be addressed in public comments.
* **Motion by John Bade to communicate to PLR subcommittee that there are no objections from HVAC SC with moving this to the full committee. Seconded by Gary Klein.**
* **Motion to approve passes 13-1-0.**
  + Dick Lord opposed.

1. Discuss order for hearing proposals for next meeting

Currently proposed order:

|  |  |  |  |
| --- | --- | --- | --- |
| CEPI Number | Title | Proponent | Proposed subcommittee date |
| CEPI-079-21 | Minimum Pipe Insulation thickness | Howard Ahern | 5/12/2022 |
| CEPI-080-21 | Pipe insulation protection | Howard Ahern | 5/12/2022 |
| CEPI-082-21 Part I | Roof Gutter de-icing | Nick Thompson | 5/12/2022 |
| CEPI-099-21 | Grid Integrated Thermostat Controls | Kim Cheslak | 5/12/2022 |
| CEPI-119-21 | Fan Power Limits | John Bade | 5/12/2022 |
| CEPI-120-21 | Central Fan Integrated efficacy | Mike Moore | 5/12/2022 |
| CEPI-125-21 | Grid Integrated Water Heating | Kim Cheslak | 5/12/2022 |
| CEPI-129-21 | Service WH for R-1 and R-2 | Evan Green | 5/12/2022 |
| CEPI-131-21 | Service water heating pump | Lisa Rosenow | 5/12/2022 |
| CEPI-078-21 | Air Handler insulation and sealing | Anthony Palucci | 5/26/2022 |
| CEPI-084-21 | Dehumidification Horticulture | Diana Burk | 5/26/2022 |
| CEPI-218-21 Part I | Alterations fuel gas pipe testing | Sean Denniston | 5/26/2022 |
| CEPI-219-21 | Alteration Duct Testing | Sean Denniston | 5/26/2022 |
| CEPI-227-21 | Alterations HVAC controls | Sean Denniston | 5/26/2022 |
| CEPI-228-21 | Alterations sizing HVAC equipment | Sean Denniston | 5/26/2022 |

1. Identify and schedule discussion dates for proposals that were sent to us from other subcommittees, if applicable.

11. **Upcoming meetings**.

a. Second and fourth Thursday of each month, 11:00am – 2:00pm Eastern Time

Next meeting is May 12, 2022.

12. **Adjourn**.

FOR FURTHER INFORMATION BE SURE TO VISIT THE ICC WEBSITE:

[ICC Energy webpage](https://www.iccsafe.org/products-and-services/codes-standards/energy/)

[Code Change Monograph](https://www.iccsafe.org/wp-content/uploads/2021-Public-Input-Complete-Monograph.pdf)

FOR ADDITIONAL INFORMATION, PLEASE CONTACT EITHER

* John Bade, Subcommittee Chair at [johnbade@2050partners.com](mailto:johnbade@2050partners.com).
* Blake Shelide, Subcommittee Vice-Chair at [blake.shelide@energy.oregon.gov](mailto:blake.shelide@energy.oregon.gov)