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**International Energy Conservation Code**

**Electric Power, Lighting, and Renewables (PLR) Subcommittee**

**Meeting Agenda**

May 20, 2022

11:00 AM EST to 2:00 PM EST (3 hours)

[Webex Link](https://iccsafe.webex.com/iccsafe/j.php?MTID=mf1ba2cea2622c4fbc1a113ec366e2e57)

May 23, 2022

11:00 AM EST to 2:00 PM EST (3 hours)

[Webex Link](https://iccsafe.webex.com/iccsafe/j.php?MTID=m1229fe0cc2c1cc33dcb67619c1e01087)

**Committee Chair:** Michael Jouaneh (mjouaneh@lutron.com); **Committee Vice Chair:** Jack Bailey (jbailey@oneluxstudio.com); **Note Taker:** Michael Myer (Michael.myer@pnnl.gov)

1. Call to order – Jouaneh **[start 11:02 am]**

2. Roll Call – Bailey (11 SC voting members needed for quorum)

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| --- | --- | --- | --- | --- |
|  | **First Name** | **Last Name** | **Category** | **Company** |
|  | Ali | Alaswadi\* | Gov. Regulator | DC |
| **X** | **Jack** | **Bailey\*** | **User** | **One Lux Studio/Int'l Assoc. of Lighting Designers** |
| X | Bernard | Bauer | User | Integrated Lighting Concepts |
| X | Payam | Bozorgchami | Gov. Regulator | CA Energy Comm |
| X | Joe  | Cain | Manufacturer | Solar Industries Assoc |
|  | Nick | Ferzacca | User | IMEG Corp. |
|  | Anthony  | Floyd\* | Gov. Regulator | City of Scottsdale |
|  | Glenn | Heinmiller | User | Lam Partners/Int'l Assoc. of Lighting Designers |
| X | Bryan | Holland\* | Standards Promulgator  | NEMA |
| X | Harold | Jepsen | Manufacturer | Legrand |
| **X** | **Michael** | **Jouaneh\*** | **Manufacturer** | **Lutron** |
|  | Joyce | Kelly | User | GLHN Architects & Engineers |
|  | Andrew | Klein\* | Consumer | BOMA |
|  | Mark  | Lien | Standards Promulgator  | IES |
| X | Jon | McHugh | Gov. Regulator | McHugh Energy |
|  | Hope | Medina\* | Gov. Regulator | Cherry Hills Village |
| X | Melissa | Moseley\* | User | HDR/American Society of Interior Designers |
|  | Susan | Musngi\* | Consumer | Camden |
| **X** | **Michael** | **Myer** | **Consultant** | **PNNL** |
| X | Steven | Rosenstock\* | Utility | Edison Electric Institute |
| X | Wayne  | Stoppelmoor | Manufacturer | Schneider Electric |
|  | Mitchell | Tolbert | Gov. Regulator | City of Austin |
| X | Michael | Turns | Utility | MA Program Administrator |

\*denotes member of EC4 consensus committee

3. Introduction of any guests -- Bailey (name/representation type into chat)

* Diana Burk, NBI
* Barbara Conti, MN Commerce Dept.
* Shannon Corcoran – American Gas
* Anthony Floyd

4. Review/approve agenda – Jouaneh

* 1st – Bryan Holland
* 2nd – Payam

5. Meeting conduct -- Jouaneh

* [Antitrust](https://www.iccsafe.org/wp-content/uploads/PPG-12-AntiTrust-Compliance-Guidelines.pdf) Reminder
* Identification of Representation / Conflict of Interest ([CP#7](https://www.iccsafe.org/wp-content/uploads/CP07-04.pdf) Section 5.1.10)
* [Code of Ethics](https://www.iccsafe.org/wp-content/uploads/CodeOfEthics.pdf)

6. Review key actions from last meeting and approve minutes – Jouaneh

* 1st – Bernie Baurer
* 2nd – Steve Rosenstock

7. New business.

* Proposal grouping update – Bailey **[end by 11:10 am]**

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| **Number** | **Standalone Proposals (2)** |
| CEPI-007/233-21 | Consensus energy storage |
| CEPI-192-21 | Transformer efficiencies. |

CEPI-007/233-21

* Proponent: Diana Burk, NBI
* Joint proposal requiring Energy Storage System (ESS)
* Steve Rosenstock (EEI): Wouldn’t batteries increase the cost of construction? What if the system does not include PV?
* Diana Burk (NBI): The requirement is batteries or system ready. Intent was to tie into on-site renewable requirements.
* Discussion about physical area and capacity of ESS
* Jack Bailey (One Lux): Concerns that it is left to the architect and working with a manufacturer, but the manufacturer is only involved if a product is being specified. Concerns about code review. Supports a minimum size requirement.
* Jon McHugh: This is similar to EV-ready proposals. Code enforcement for future capacity, California has required solar-ready since 2013 for area on roof and delineating on building plans. Supports a minimum size requirement.
* Diana Burk: ESS don’t have to be installed indoors, most are installed outdoor because of fire requirements.
* Joe Cain: For security and safety, ESS would be located along an exterior wall to allow easy access for fire. Addressed other comments.
* Steve Rosenstock suggested a possible additional reference to include in IECC
* Jack Bailey: Agrees that it allows to located outside, but there is a 10’ buffer. Therefore, many of these will be located inside buildings.
* Payam: Rather supportive. Raised an example of rolling blackouts and this proposal helps reduce potential blackouts
* Motion: Approve as modified (including change of UL9540a 2020) and combination of 007/233-21
	+ 1st Bryan Holland
	+ 2nd Harold Jepsen
	+ Discussion:
		- Joe Cain: proposed a minor word change related to “dual pole”
		- Diana Burk: Assume that UL 9540a will be added as a public comment
	+ Vote: 9 yes | 5 no | 2 abstain
	+ Reason statement: This proposal will reduce the future cost of installing ESS by requiring ESS-ready criteria.

CEPI-192

* Steve Rosenstock (EEI): Supported ASHRAE in the proposal. This is clean-up language and matches language in ASHRAE 90.1
* Bryan Holland: NEMA
* Motion to approve as submitted:
	+ 1st – Steve Rosenstock
	+ 2nd – Bryan Holland
	+ No discussion
	+ Vote: 13 yes | 0 no | 3 abstain
	+ Reason statement: This will update the language for transformers to align with ASHRAE 90.1 and includes a footnote to clarify efficiency requirements for other transformers.

CEPI-233-21

* Proponent: Joe Cain
* Motion: To disapprove 233 based on the action of vote of CEPI-007
	+ 1st – Steve
	+ 2nd – Bryan Holland
	+ Discussion: none
	+ Vote: 14 – yes | 0 no | 1 abstain
	+ Reason statement: The action of the combined CEPI-007/233.

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| **Number** | **Alterations (2)** |
| CEPI-230-21 | Alterations language and exceptions |
| CEPI-231-21 | Alterations language and exceptions |
|  | **[end by 12:10 pm]** |

CEPI-230:

* Proponent: Jack Bailey
* Sean via chat function: By replacing C503.5 in its entirety, this proposal would wipe out part of our proposal CEPI-229 and all of our CEPI-231, which have both passed through sub-committee. CEPI-229 includes requirements that all but minor alterations to lighting systems would trigger the acceptance testing requirements of C408 for the entire lighting system (not just the new portions as currently required). CEPI-231 requires that all but minor alterations to lighting systems be provided with controls that meet the current code.

Jack graciously reached out to us and we worked with him to on the modified version of CEPI-230. This version both incorporates the intent of 229 and 231 and actually implements them better than 229 and 231 did. Lighting replacements represent one of the most common events in the lifecycle of a building, and so are an important opportunity to improve the energy efficiency of buildings using the building code. This proposal leverages reasonable project types to improve the efficiency and controllability of these lighting systems. We urge your approval.

* Steve Rosenstock raised some questions
* Harold Jepsen: Appreciates the work, but believes it moves backwards in terms of energy savings
* Jon McHugh: Provided some examples from a similar California example
* Mitchell Tolbert: Provided some perspective from code official’s point of view
* Votes of the modifications that occurred during the review
* Motion to approve as modified:
	+ 1st – Jack Bailey
	+ 2nd – Mitchell Tolbert
	+ Discussion: Specific modifications discussed
	+ Vote: 3 yes | 6 no | 6 abstain
* Motion for disapproval of modifications and proposals
	+ 1st – Harold Jepsen
	+ 2nd – Bryan Holland
	+ Discussion: Confirming the disapproval of the modifications and original proposal
	+ Vote: 8 yes | 2 no | 4 abstain
	+ Reason statement: Does not bring many lighting altered spaces up to base code efficiency requirements

CEPI-231:

* Proponent unavailable
* Steve Rosenstock: Sought lighting professionals feedback
* Discussion of semantics on terms and background
* Motion to disapprove:
	+ 1st – Steve Rosenstock
	+ 2nd – Bryan Holland
	+ Discussion: no
	+ Vote: 11 yes | 1 no | 3 abstain
	+ Reason statement: There are issues with the clarity of the provisions in terms of interpretation and enforcement.

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| **Number** | **EV Charging (1)** |
| CEPI-146, Part 1 | EV charging (proponents requested disapproval) |
|  | **[end by 12:15 pm]** |

CEPI-146

* Motion to disapprove
	+ 1st – Payam
	+ 2nd – Ali
	+ Vote: 13 yes | 0 no | 2 abstain
	+ Discussion: no
	+ Reason: Based on the actions already taken on the consensus proposal CECPI-1-21.

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| **Number** | **Standalone Proposals (2)** |
| **CEPI-202-21** | **Lamp efficacy** |
| **CEPI-133-21** | **Lighting general scope** |
|  | **[end by 1:50 pm]** |

CEPI-202

* Full committee accepted C406.3.3 (90 lm/W for a lamp, and 55 lm/W for a luminaire)
* Steve Rosenstock: Officially withdraws CEPI-202

CEPI-133

* Scope
* Motion: Table to Monday, May 23
* Vote: 14 yes | 0 no | 1 abstain

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| **Number** | **Daylight responsive controls (2)** |
| **CEPI-162-21** | **Daylight responsive controls** |
| **CEPI-164-21** | **Daylighting controls** |
|  | **[end by 1:00 pm]** |

CEPI-162 / 164

* Planned for Monday, May 23

8. Other business – Jouaneh **[end by 1:59 pm]**

* [Teams site](https://teams.microsoft.com/l/team/19%3AKMleRbAtrEAu1N0HzdWt_R8FCMc_WjlV58mrFRjV8fA1%40thread.tacv2/conversations?groupId=edefc94e-e6ed-4695-a40b-c7af90c71fd8&tenantId=173eec12-7e3d-46d0-b83f-5a74246b3037)
* Withdrawals: CEPI 005, 026, 143, 144, 151, 155, 157, 158, 159, 160, 165, 170, 190, 191, 201, 258
* Proposals for PNNL cost effective analysis: CEPI 162/164, 176
* Potential summer items

9. Future meeting: **11:00 am – 1:00 pm ET on Friday June 13, 2022 [back to 2-hours]**

10. Adjourn **[2:00 pm]**

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:

Subcommittee Chair

