

INDIANA ELECTRICAL CODE UPDATE COMMITTEE

MEETING MINUTES

Meeting Details

Date: May 25, 2022

Time: 9:00 AM

Location: Government Center South, Conference Room 29

Member Attendance

Name	Present		Means of Participation
	Yes	No	
Michael Popich	<input checked="" type="checkbox"/>	<input type="checkbox"/>	In Person
Paul Meyers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	In Person
John Luppacchino	<input checked="" type="checkbox"/>	<input type="checkbox"/>	In Person
Tim McClintock	<input checked="" type="checkbox"/>	<input type="checkbox"/>	In Person
John A. Jackson III	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NA
Stephen Culbert	<input checked="" type="checkbox"/>	<input type="checkbox"/>	In Person
Mike Patarino	<input checked="" type="checkbox"/>	<input type="checkbox"/>	In Person
Lynn Madden	<input checked="" type="checkbox"/>	<input type="checkbox"/>	In Person
Randy Gulley	<input checked="" type="checkbox"/>	<input type="checkbox"/>	In Person
Charlie Eldridge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	In Person

Notes

Additional information may be available at the [Committee's Web Page](#).

Also in attendance:

Dustin Dyer, Director of Boards and Commissions, IDHS

1. **Call to Order** – Chairman Popich called the meeting to order at 9:02am.
2. **Roll Call and Determination of Quorum** – All were present but one. Quorum was met. See attendance record above.
3. **Review of Minutes** – Committee members voted to table the minutes
4. Commission Items

675 IAC 90.1(a) and (b) – Scope (Randy Gulley) – Proponent withdrew proposals.

90.2 – Scope (Charlie Eldridge) – Mr. Meyers asked about language in this proposal related to list items 90.2(a)(5) and 90.2(a)(6) in the model code. They are not included in the current proposal. Committee members indicated that list item 5 is neither a Class I or Class II Building. Mr. Eldridge indicated that he did not know whether boat docks were covered. The NEC does indicate some requirements for marinas, which were covered in the 2009 Indiana Electrical

Code. Chairman Popich wondered why we were deleting the six points in the model code and replacing it with the language that has been carried over for previous codes. Mr. McClintock suggested that list items 1 through 6 could be added to the end of Mr. Eldridge's proposal, without the addition of parking lots. Mr. Eldridge indicated that parking lots need to stay, except when provided by a utility. Mr. Meyers indicated that this is already covered under section B(5)'s exclusive installation language. Mr. Popich suggested that we could simply clarify that public and private premises could include Class I and Class II structures.

Mr. Popich indicated that if Mr. Eldridge withdrew his motion, Mr. Popich would write a new motion changing the language as follows:

New Proposal: Replace "public and private premises" in section 90.2(A)(1) with "Class I and Class II structures." Replace 90.2(B) with the language from the amendment, rather than the model code language.

Mr. Eldridge agreed to withdraw his proposal.

675 IAC 17-1.9-2 Section 90.2(A) Scope – Proponent withdrawn.

90.4 – Enforcement (Charlie Eldridge) – Committee voted to approve the code change proposal as submitted.

90.6 Formal Interpretations (Charlie Eldridge) – Withdrawn

675 IAC 17-1.9-5 (Randy Gulley) – Committee voted to accept the motion as submitted.

90.8 – (A) and B (Randy Gulley) – Withdrawn

90.8 Wiring Planning (Charlie Eldridge) – Mr. Meyers indicated that he was curious why Mr. Eldridge wished to delete this section. Mr. Eldridge indicated that he wished it deleted because we do not legislate for the future, and the section does not mandate the practice. Mr. Popich indicated that the section seemed vague, and Mr. McClintock and Mr. Meyers indicated that it was considered more of an informational note with no enforcement action. Mr. Culbert noted that this is simply bringing forward what is already in the code. Committee voted to approve the proposal as submitted.

90.9 Units of Measurement (Charlie Eldridge) – Proponent withdraws.

90.9 (Randy Gulley) – Committee voted to approve the proposal as submitted. Committee members noted that Mr. Gulley's proposal does not include list item (D) from the model code. Mr. Popich indicated that this section only shows what way the book is laid out, and does not create a mandate to use either SI units or foot-pound units. Mr. Meyers noted that the Committee needs a formal vote to show that this should not carry over into the future. Motion was made to approve the proposal. Motion failed.

Break from 10:30 – 10:45

Article 100 – Definitions (Charlie Eldridge) – Mr. Meyers wanted to know what purpose the word 'eating' serves in the definitions. Mr. Culbert indicated that the word 'eating' was included in the 2009 Amendments. Mr. Eldridge indicated that he did not know what the history of the addition was. Committee members indicated that the 2008 Model code uses 'cooking'. Mr. Popich indicated that it might be referring to dining rooms, which would be on 20 Amp circuits. Committee members wondered whether the inclusion of 'eating' would affect the definition of 'dwellign unit' if no dining room was present. Mr. Lupacchino wondered whether it was a

change to reflect a change to the residential code. Mr. Meyers indicated that it is not included in the amended Indiana Residential Code.

Building Commissioner Burgess indicated that he was unsure why the definition of Building was included in the Electrical Code, but that the IBC defines firewall in a way that differs from area separation walls. Commissioner Burgess indicated that he did not know of anything in the IEC that would require area separation walls.

Alan Blunk indicated that area separation wall was defined in a previous code going back to UBC, and that an ASW would be treated as a firewall under current classifications.

Committee voted to approve the proposal with the following amendments: delete the definition of Building.

110.15 High-Leg Markings (Charlie Eldridge) – Mr. Eldridge indicated that red and orange are used by AES Power to mark specific phases, red for high phase. Changing the model code in this way ensures that the Electrical Code Commission is putting out the best product possible for clarity and safety. Mr. Culbert questioned whether the informational note should suggest to coordinate with the utility. Mr. Eldridge indicated that he did not believe this was necessary based on the language in the second sentence of the informational note. Committee voted to approve the proposal as submitted.

110.26(a)(1)(b); Depth of Working Space (Charlie Eldridge) – Committee voted to approve the proposal as submitted.

110.26(e)(1)(a) Dedicated Electrical Space – Mr. Jackson, via Teams, indicated that he was concerned that a large panel behind a door with a latch mechanism at working height could be mistaken for a door handle. Mr. Culbert suggested that the proposal should not be restricted to dwelling units only if panels are installed behind doors in utility spaces. Mr. McClintock suggested that the wording should be changed for the entire section, which would require a new code change submittal. 110.26(a) should have a sentence at the end of the main body that brings it in line with the Residential Code. Mr. Popich agreed to write the new proposal. Committee moved to approve the motion as submitted. Motion failed.

Break for Lunch at 11:40.

210.8, 210.8(A), 210.8(A)(5), 210.8(F) GFCI Protection (Mike Patarino and Lynn Madden) – Withdrawn until a joint proposal can be reached.

210.12(D) Branch Circuit Extensions or Modifications (Charlie Eldridge) – Tim McClintock spoke in opposition to the motion. While Indiana Code only applies to new installations, extending a branch circuit would be subject to a new installation. Mr. Eldridge explained that he believed that AFCIs are excellent property saving devices, but does not believe that the state should mandate this. Mr. Jackson pointed out that the section applies to more than just residential areas, including dormitories, hotels, guest suites, etc. Committee members expressed concern about whether new arc faults would be required in extensions of circuits not currently protected by arc fault. Committee moved to approve. **Motion failed.**

210.52, 210.52(C) – Withdrawn while a joint proposal is reached.

Member of the public wanted to know what prevents the Committee from adding language from 2023 Code Edition. Mr. Popich indicated that nothing is preventing an interested party from submitting a code proposal with language from the 2023 Code.

210.52(G) Garage, Basement, and Accessory Building Receptacles (Mike Patarino) – Mr. Patarino indicated that he believes there are other ways of handling this other than an outlet. Mr. Meyers indicated that there is an exception to this code section that addresses Mr. Patarino’s concerns. Mr. Patarino indicated that the language concerning “multifamily dwelling” causes some complications with that interpretation. Committee members discussed whether there were alternate wording that would serve a similar purpose to distinguish a different set of requirements for attached vs unattached garages. Mr. Patarino withdraws his motion in order to rewrite for next month.

210.52(I) Dwelling Unit Receptacle Outlets – Foyers (Charlie Eldrige) – Mr. Popich indicated that he believes we should consider fiscal savings on this code due to the fact that the code is more lenient, so there should be a fiscal savings. Ms. Madden believes that this would affect approximately half of new homes built due to the size of the larger foyer. Committee members discussed various savings at different threshold and size levels and what the requirements would be at different foyer sizes and configurations.

Committee voted to **table** the proposal until such time as the fiscal impact numbers can be revised and the metric measures can be added.

220.53 (Paul Meyers) -- Mr. Meyers indicated that the proposal would assist installation in the field by clarifying load factor calculations, and the language is included in the current draft of the 2023 NEC. Committee voted to **approve** the proposal as written.

225.30 Errata No. 70-20-3 (Randy Gulley) – Included because the model code is not correct in the first printing. Committee voted to **approve** the motion as submitted.

225.30(C) Special Occupancies (Charlie Eldridge) – Mr. Meyers wanted to know if a utility would need to approve additional branches or feeders or if the AHJ could approve on their own. Committee voted to **approve** the proposal as submitted.

230.2(B) Number of Services (Charlie Eldrige) – Mr. Eldridge indicates that this proposal is being brought forward from the 2009 code. Committee voted to **approve the submittal as amended**: Strike the first section of the proposal and only consider the 2nd and 3rd parts.

230.67 Surge Protection (Lynn Madden) – Mr. Eldridge believe that lightning protection should be done on every home for property and safety. Mr. Eldridge attested that a large amount of energy comes through power lines and through underground cabling into homes even with a large number of lightning arrestors installed by the utility. Mr. Patarino inquired as to whether lightning protection is required for commercial structures. Mr. McClintock indicated that several types of facilities require it. Mr. Patarino indicated that he believes at the end of the day, it’s a market risk rather than a fire and life safety risk. Mr. McClintock indicated that Code Panel 10 submitted a statement covering more than just property protection, as the code is meant to reduce unnecessary exposure to electrical risk. Mr. Patarino indicates that, anecdotally, he does not remember any instances of this being a large problem in dwelling units. Mr. Gulley indicated that there are no good sources of fire statistics in Indiana, and that the general public tends not to think about fire and electrical safety in the home until the damage is already done.

A public comment was made that the estimated costs of the protection are likely overstated, and that the overall savings from protection greatly outweigh the costs, and that the surge protection is only required on the service, not for every unit, which reduces the calculated fiscal impact. Mr. Meyers indicated that he believes the fiscal impact for single family and two-family homes is likely also far less than the calculated number. Mr. Jackson indicated that the

average residential homeowner does not understand the risks they are taking by not including surge protection as the grid diversifies, including electric cars and home battery packs, and that this change would end up paying dividends in potential savings if approved.

Chairman asked for a hand vote for clarity of numbers. Committee moved to **approve** the proposal. Motion **fails** 4-5.

230.67 Surge Protection (Mike Patarino) – Withdrawn.

230.67(D) Surge Protection (Charlie Eldridge) – Mr. Meyers disagrees that the section is not covered under an Installation code, as replacement would require pulling a permit, depending on jurisdiction. Mr. Eldridge suggests that even with a permit needed, the equipment is replacing like with like, which falls under maintenance. Mr. Meyers questioned whether pulling out a panel or other equipment and replacing it would require updating to the newest code requirement, and whether that would qualify as new installation. Mr. Popich indicates that it would depend on the circumstance. Committee voted to **approve** the motion 5-4 by hand vote.

230.85 Emergency Disconnects (Lynn Madden) – Mr. Meyers indicates that the current delay on supply lines should not be taken into consideration given the amount of time it would take the model code to be approved. Mr. Gulley indicates that flipping the service disconnect would serve the same purpose. Mr. McClintock clarified that the change was suggested by firefighters to ensure that power can be disconnected as quickly as possible at the scene of a fire and the National Association of Homebuilders. Mr. Popich asked how IFD handled underground services. Mr. Gulley indicated that he was unsure what IPL does. Mr. Eldridge indicated that the utility would disconnect at the transformer, but this requires working the transformer insulated and safely, which would take at least 30 minutes. Mr. Culbert asked whether having an external disconnect could result in malicious activity for security and alarm systems. Mr. Gulley indicated that he has seen an active transformer vandalized for this purpose at a Marsh store. Mr. Eldridge indicated that it would be no more difficult than cutting off power at the meter. Mr. McClintock notes that you can already lock an external disconnect. Mr. Eldridge supports this, noting that it's already done in certain circumstances, such as with solar panels. Mr. Gulley indicates that the fire service rarely does meter disconnects due to the potential hazards. Mr. McClintock suggests that it would be equally unappealing to a person with malicious intent to tamper with a meter, but less so with an external disconnect. Mr. Meyers suggests that a meter main would be a solution that requires a single piece of equipment.

Mr. Popich called for a hand vote. Motion was **approved** 6-3.

240.81 Indicating (Charlie Eldridge) – Committee voted to **approve** the motion as submitted.

240.85 Applications – Mr. Meyers asked whether this was a change of intent or a clarification. Mr. Eldridge noted that this is intended to be a clarification. Committee voted so **approve** the motion as submitted.

242.54 Interconnections (Charlie Eldridge) – Mr. Meyers asked whether we believed that all AHJ's have the technical expertise necessary to be able to make a decision on something that seems to be an engineering question, as the model code feels it important enough to seek special approval. Mr. Culbert does not believe that local inspectors would know all situations in which an engineer should be sought. Mr. Popich believed that they would know in most circumstances, or would be aware that they lack the expertise to make a decision either way, and that 'special permission' has already been defined in a way that does not require an engineer's input. Committee voted to **approve** the motion as submitted.

250.52 Rod Electrodes (Charlie Eldridge) – Committee voted to **approve** the proposal as submitted.

250.104(A)(1) Metal Water Piping – General (Charlie Eldridge) – There is some question as to where the verbiage of the exception would go, as (a)(1) appears to have four subsections. Mr. Popich suggested that as written below subsection 4, as the exception would apply to the entire section. Mr. Eldridge suggested altering the proposal to change the exception to be under **250.90**. Mr. Culbert asked whether this would apply to swimming pools, as the pools article references back to this article. Mr. Eldridge withdrew his proposal.

5. **Next Meeting – July 29th, 2022 at 9:00am.** 302 W. Washington, Indianapolis, IN 46204. Government Center South, Conference Room 29.

Public notice and virtual/electronic meeting access details will be provided on the [Committee's Web Page](#) in advance of the meeting.

6. **Closing Comments and Adjournment** – Meeting adjourned at 4:17pm.