The Council heard the Report of the Committee Membership Task Group (J. Quiter, Chair).

22-8-1-a The Council voted to approve the Report of the Committee Membership Task Group with amendments as recommended by the Task Group.

Changes in committee membership approved by the Council are included as Minutes Attachment 22-8-1-a.

Council Chair James Golinveaux recused himself from deliberations and vote on all Viking Group, Inc. and NFSA applicants; Council Member Kenneth Bush recused himself from deliberations and vote on all NFPA 1 Technical Committee and Correlating Committee applicants; Council Member Mike Crowley recused himself from deliberations and vote on all Coffman Engineers applicants; Council Member Jeffrey Foisel recused himself from deliberations and vote on all Dow applicants; Council Member Richard Gallagher recused himself from deliberations and vote on all Zurich Services, Corp. applicants; Council Member David Klein recused himself from deliberations and vote on all Department of Veterans Affairs applicants; Council Member John Kovacik recused himself from deliberations and vote on all UL applicants; Council Member Rodger Reiswig recused himself from deliberations and vote on Johnston Controls applicants; and Council Member Catherine Stashak recused herself from
deliberations and vote on all Illinois Office of the State Fire Marshal and Illinois Emergency Management Agency applicants.

22-8-1-b The Council voted to approve the request of AFSA for reconsideration and appointment of a Principal and Alternate (classified as installer/maintainer) to the Technical Committee on Electronic Computer Systems (ELT-AAA).

22-8-1-c The Council voted to approve the request of Lilia Rodriguez for reconsideration of prior non-reappointment and to appoint her to the Technical Committee on Record Protection (REA-AAA).

22-8-1-d The Council heard an update on the review of the Multi-Representative policy and status on NFPA committees. No action was taken.

22-8-1-e The Council discussed classification of individuals applying to represent organizations with instructed votes on NFPA technical and correlating committees (e.g. organizational rep with instructed vote and expenses borne by the organization; organizational rep with instructed vote and expenses borne by the individual; organizational rep with no instructed vote and expenses borne by the organization; or organizational rep with no instructed vote and expenses borne by the individual). No action was taken.

22-8-2 The Council heard the Report of the Policy and Procedures Task Group (J. Foisel, Chair). No action was taken.

22-8-3 The Council heard a report on the April 2022 Council meeting minutes (ballot approval of April 27, 2022).

ISSUANCE OF STANDARDS
(Including Approvals and Amendments)

22-8-4 NFPA 25 The Council voted to issue NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, as acted on at the NFPA Technical Meeting, with five amendments. No appeals were filed on this standard. Issuance date of August 12, 2022, and an effective date of September 1, 2022.

22-8-4-a CAM 25-3: Accept an Identifiable Part of Committee Comment No. 3. This motion (CAM 25-3) passed vote of the participating Membership during the NFPA Technical Meeting and passed the ballot of the responsible Technical Committee. The Council voted to issue the amendment.

22-8-4-b CAM 25-10: Reject Second Revision No. 4. This motion (CAM 25-10) passed vote of the participating Membership during the NFPA Technical Meeting. This CAM did not require a ballot of the responsible committee per Table 1 of the Regulations. The Council voted to issue the amendment.

22-8-4-c CAM 25-16: Reject Second Revision No. 2. This motion (CAM 25-16) passed vote of the participating Membership during the NFPA Technical Meeting. This CAM did not require a ballot of the responsible committee per Table 1 of the Regulations. The Council voted to issue the amendment.

22-8-4-d CAM 25-16 Follow-Up: Reject an Identifiable Part of Second Revision No. 13 (Table 5.1.1.2. Under “inspection”, line 22, which states: ‘Sprinklers (concealed) frequency every five years’ and referenced paragraph 5.2.1.1.1). This motion passed vote of the participating Membership during the NFPA Technical Meeting. This CAM did not require a ballot of the responsible committee per Table 1 of the Regulations. The Council voted to issue the amendment.
CAM 25-17: Reject an Identifiable Part of Second Revision No. 13. This CAM did not require a ballot of the responsible committee per Table 1 of the *Regulations*. The Council voted to issue the amendment.

The Council voted to issue NFPA 70®, *National Electrical Code®*, with eighteen amendments and four concurrently issuing Tentative Interim Amendments. Fourteen Appeals were filed on this standard. Issuance date of August 12, 2022, and an effective date of September 1, 2022.


CAM 70-48: Reject Second Correlating Revision No. 110. This motion (CAM 70-48) passed vote of the participating Membership during the NFPA Technical Meeting, passed the ballot of the responsible Code Making Panel, and passed the ballot of the Correlating Committee. The Council voted to issue the amendment.

CAM 70-49: Reject an Identifiable Part of Second Correlating Revision No. 160. This motion (CAM 70-49) passed vote of the participating Membership during the NFPA Technical Meeting, passed the ballot of the responsible Code Making Panel, and passed the ballot of the Correlating Committee. The Council voted to issue the amendment.

CAM 70-51: Reject an Identifiable Part of Second Correlating Revision No. 126. This motion (CAM 70-51) passed vote of the participating Membership during the NFPA Technical Meeting, passed the ballot of the responsible Code Making Panel, and passed the ballot of the Correlating Committee. The Council voted to issue the amendment.

CAM 70-53: Reject an Identifiable Part of Second Revision No. 8466. This motion (CAM 70-53) passed vote of the participating Membership during the NFPA Technical Meeting, failed the ballot of the responsible Code Making Panel, and passed the ballot of the Correlating Committee. The Council voted to issue the amendment.

APPEAL DECISION D#22-14 At its meeting of August 10-12, 2022, the Standards Council considered an appeal from George Zimmerman of CME Consulting, Inc. and multiple Code-Making Panel 3 (“CMP 3”) members. The appeal requests that the Standards Council overturn the amendment ballot results of CMP 3 and uphold the action of the voting Association Members during the NFPA Technical Meeting for Certified Amending Motion (“CAM”) 70-53 on the 2023 edition of NFPA 70®, *National Electrical Code®* (NEC®). Specifically, the appeal requests revision of section 722.135(E).

As background, Code-Making Panel 3 voted to approve Second Revision No. 8466 at second draft on section 722.135(E). A Notice of Intent to Make a Motion was filed by Trevor Bowmer, Bunya Telecom Consulting, LLC to Reject an Identifiable Part of Second Revision No. 8466 and was certified by the Motions Committee, then presented for debate during the NFPA Technical Meeting as CAM 70-53. CAM 70-53 achieved the necessary simple majority support of the voting Association Members during the NFPA Technical Meeting. When CAM 70-53 was balloted, it passed the Correlating Committee but failed to achieve the necessary support of CMP 3. The results of the balloting yielded a recommendation to return to previous edition text. Following the close of CMP 3 ballots, Mr. Zimmerman filed appeal and included the support letter of 17 (out of 18) principal CMP 3 members, as well as 9 alternates, urging the Council to uphold the appeal to Reject an Identifiable Part of Second Revision No. 8466 despite the ballot results.

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1 Note: As Article 722 is new in its entirety, there was no previous section 722.135(E) text to which to return.
The text subject to the appeal of CAM 70-53 did not gain sufficient support within the standards development process for inclusion in the 2023 edition of NFPA 70, *National Electrical Code*. The appeal requests that the Council overturn the results yielded by the standards development process. On appeal, the Council accords great respect and deference to the NFPA standards development process. In conducting its review, the Council will overturn the results of that process only where a clear and substantial basis for doing so is demonstrated.

According to the Appellant, CAM 70-53 is one of multiple related CAMs that sought to move optical fiber cable requirements from one article to a different article. The other related CAMs passed CMP 3 ballots, and in that context, the unintended result of CAM 70-53 failing would be that important certain requirements would be removed from the NEC. The Appellant also points to serious safety implications if the optical fiber cable requirements are removed.

The Council has reviewed the entire record concerning this matter and has considered all the arguments put forth in this appeal. In the view of the Council, this appeal presents clear and substantial bases upon which to overturn the results yielded by the NFPA standards development process given the overwhelming support of the responsible CMP to accept CAM 70-53. Accordingly, the Council has voted to uphold the appeal. The effect of this action is that the NFPA 70, *National Electrical Code* will include the text of CAM 70-53 (thereby rejecting an identifiable part of Second Revision No. 8466).

Council Members John Kovacik and Rodger Reiswig recused themselves from the deliberations and vote on the appeal.

Council Members Michael Johnston and Jack Poole were not in attendance during the August 2022 meeting and therefore did not participate in the deliberations and vote on the appeal.

<table>
<thead>
<tr>
<th>22-8-5-e CAM 70-55: Reject an Identifiable Part of Second Revision No. 109. This motion (CAM 70-55) passed vote of the participating Membership during the NFPA Technical Meeting, passed the ballot of the responsible Code Making Panel, and passed the ballot of the Correlating Committee. The Council voted to issue the amendment.</th>
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<tr>
<td>22-8-5-f CAM 70-56: Reject an Identifiable Part of Second Correlating Revision No. 136. This motion (CAM 70-56) passed vote of the participating Membership during the NFPA Technical Meeting, passed the ballot of the responsible Code Making Panel, and passed the ballot of the Correlating Committee. The Council voted to issue the amendment.</td>
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<td>22-8-5-g CAM 70-57: Reject Second Correlating Revision No. 135. This motion (CAM 70-57) passed vote of the participating Membership during the NFPA Technical Meeting, passed the ballot of the responsible Code Making Panel, and passed the ballot of the Correlating Committee. The Council voted to issue the amendment.</td>
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<td>22-8-5-h CAM 70-58: Reject Second Correlating Revision No. 111. This motion (CAM 70-58) passed vote of the participating Membership during the NFPA Technical Meeting, passed the ballot of the responsible Code Making Panel, and passed the ballot of the Correlating Committee. The Council voted to issue the amendment.</td>
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<td>22-8-5-i See Council Decision D#22-4</td>
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At its meeting of August 10-12, 2022, the Standards Council considered an appeal from Peter Graser of Copperweld. The appeal requests that the Standards Council overturn the results of the voting Association Members during the NFPA Technical Meeting on CAM 70-61 and Accept Public Comment No. 490 for the 2023 Edition of NFPA 70®, *National Electrical Code®* (“NEC”). Specifically, the appeal requests revision of section 250.62.

As background, Code-Making Panel 5 (“CMP 5”) rejected Public Comment No. 490 at second draft on section 250.62. A Notice of Intent to Make a Motion (“NITMAM”) was filed by Peter Graser to Accept Public Comment No. 490 and was certified by the Motions Committee then presented for debate during the NFPA Technical Meeting as CAM 70-61. CAM 70-61 failed to achieve the necessary simple majority support of the membership during the NFPA Technical Meeting. Mr. Graser filed an appeal with the Council based upon the unsuccessful result of CAM 70-61.

The text subject to the appeal of CAM 70-61 did not gain sufficient support within the standards development process for inclusion in the 2023 edition of NFPA 70, *National Electrical Code*. The appeal requests that the Council overturn the results yielded by the standards development process. On appeal, the Council accords great respect and deference to the NFPA standards development process. In conducting its review, the Council will overturn the results of that process only where a clear and substantial basis for doing so is demonstrated. The Council finds no such basis demonstrated in this matter.

The Appellant was dissatisfied with CMP 5’s response to PC 490 on the grounds that it was “vague” and expressed concern that more expertise on these materials is necessary for full consideration of the technical issues in this Appeal. The record reflects that CMP 5 did respond to the Appellant’s PC 490 with technical justification. CMP 5 also formed a Task Group which included responsibility for evaluating this technical issue. The Appellant was part of this Task Group, but disagreed with the approach for analyzing the technical arguments.

Appellant also asserted that some of the manufacturers on CMP 5 who oppose the inclusion of copper-clad steel 40% as a recognized material for use as a grounding electrode conductor, also belong to other membership organizations represented on CMP 5, and therefore effectively have more than one vote on the panel. Based on the graphic presented by the Appellant in the appeal and during the hearing, it appears that, as it pertains to CMP 5, this argument is focused on two voting principal members, one from Encore Wire, representing the Aluminum Association pursuant to a “directed vote” and the other from ABB Installation Products, Inc., representing the National Electrical Manufacturers Association (NEMA) pursuant to a directed vote. The other two individuals identified as not having an “independent vote” are alternates on the panel to organizational representatives from the Steel Tube Institute of North America and the Copper Development Association. Each of the identified organizations has a different approach for developing the direction on a vote. NEMA has approximately 325 member companies according to their website, and that includes the Appellant’s company, Copperweld. The Copper Development Association has approximately 36 full members and three associate members.

Generally, on the NEC, members who represent a membership organization are valued participants because they bring to bear the collective view of their members (as opposed to the single view of one company). While some of the identified CMP 5 members work for companies who are members of more than one trade or membership organizations, there was no evidence on the record that demonstrated their companies were a majority voice in more than one directed vote on CMP 5. The Council notes that CMP 5 is balanced by interest classification, and, the Council acted on an application from Copperweld and appointed a principal and alternate to CMP 5 at its August 2022 meeting.

The Council has reviewed the entire record concerning this matter and has considered all the arguments put forth in this appeal. In the view of the Council, this appeal does not present any clear and substantial
basis upon which to overturn the results yielded by the NFPA standards development process. Accordingly, the Council has voted to deny the appeal. The effect of this action is that the NFPA 70, *National Electrical Code* will not include the text of Public Comment No. 490.

Council Members John Kovacik and Rodger Reiswig themselves from the deliberations and vote on the appeal.

Council Members Michael Johnston and Jack Poole were not in attendance during the August 2022 meeting and therefore did not participate in the deliberations and vote on the appeal.

**22-8-5-k**

**CAM 70-63:** Accept Public Comment No. 2028. This motion (CAM 70-63) passed vote of the participating Membership during the NFPA Technical Meeting, failed the ballot of the responsible Code Making Panel, and passed the ballot of the Correlating Committee. The Council voted to not issue the amendment.

**22-8-5-k-1**

**APPEAL DECISION**

**D#22-2** At its meeting of August 10-12, 2022, the Standards Council considered an appeal from Joseph Andre, Consultant, Sequim, Washington. The appeal requests that the Standards Council overturn the ballot results of Code-Making Panel 6 (“CMP 6”) on Certified Amending Motion (“CAM”) 70-63 for the 2023 edition of NFPA 70®, *National Electrical Code*® (NEC®). Specifically, the appeal requests the acceptance of Public Comment No. 2028 to revise section 334.12(A).

As background, Code-Making Panel 6 rejected Public Comment No. 2028 to revise section 334.12(A) during the second draft. A Notice of Intent to Make a Motion was filed by Joseph Andre, JFA Consulting, to accept Public Comment No. 2028 and was certified by the Motions Committee, then presented for debate during the NFPA Technical Meeting as CAM 70-63. CAM 70-63 achieved the necessary simple majority support of the voting Association Members during the NFPA Technical Meeting. When CAM 70-63 was balloted, it passed the Correlating Committee on correlation but failed to achieve the necessary support of CMP 6. The results of the balloting yielded a recommendation to return to previous edition text.

The text subject to the appeal of CAM 70-63 did not gain sufficient support within the standards development process for inclusion in the 2023 edition of NFPA 70, *National Electrical Code*. The appeal requests that the Council overturn the results yielded by the standards development process. On appeal, the Council accords great respect and deference to the NFPA standards development process. In conducting its review, the Council will overturn the results of that process only where a clear and substantial basis for doing so is demonstrated.

The Appellant alleged that there were procedural errors during NFPA standards development process: specifically, that a change occurred within the requirements of NFPA 70 based upon changes in definitions of Type IV and Type V buildings in NFPA 5000®, *Building Construction and Safety Code*® and the *International Building Code®*, and the impact of these changes were not fully considered by CMP 6 (either through amending text, public input, committee input or public comment).

The record of CMP 6’s review of changes to the definitions of Type IV and Type V construction is well documented and raised the attention of CMP 6 between revision cycles. CMP 6 formed a task group to review and report on Public Inputs that would affect Article 344. As part of this work, the task group discussed the implications and effect of the amendments within NFPA 5000 and the IBC prior to CMP 6’s First Draft meeting. Based upon task group findings and recommendations, CMP 6 made no revisions to section 334.12(A) at First Draft. The task group continued to meet in preparation for the Second Draft meeting, reviewing research that went into the changes in NFPA 5000 and the IBC to ensure that no safety issues were identified or called for a need to limit NM cable installations based upon height of structures. At Second Draft, CMP 6 again made no revisions based upon the task group’s findings and discussions.
during the meeting which gave no indication of a known safety issue to support an amendment to limit NM cable installations to a specific height.

The Council has reviewed the entire record concerning this matter and has considered all the arguments put forth in this appeal. In the view of the Council, this appeal does not present any clear and substantial basis upon which to overturn the results yielded by the NFPA standards development process. Accordingly, the Council has voted to deny the appeal. The effect of this action is that the NFPA 70, *National Electrical Code* will not include the text of CAM 70-63.

Council Members John Kovacik and Rodger Reiswig recused themselves from the deliberations and vote on the appeal.

Council Members Michael Johnston and Jack Poole were not in attendance during the August 2022 meeting and therefore did not participate in the deliberations and vote on the appeal.

**22-8-5-1** CAM 70-82: Reject Second Correlating Revision No. 46. This motion (CAM 70-55) passed vote of the participating Membership during the NFPA Technical Meeting, passed the ballot of the responsible Code Making Panels 3 and 14 respectively, and passed the ballot of the Correlating Committee. The Council voted to issue the amendment.

**22-8-5-m** CAM 70-83: Reject Second Revision No. 8298 and any related portions of First Revisions and First Correlating Revisions. This motion (CAM 70-83) passed vote of the participating Membership during the NFPA Technical Meeting. This CAM did not require a ballot of the responsible committee per Table 1 of the *Regulations*. The Council voted to issue the amendment.

**22-8-5-n** CAM 70-85: Reject Second Revision No. 8133 and any related portions of First Revisions and First Correlating Revisions. This motion (CAM 70-85) passed vote of the participating Membership during the NFPA Technical Meeting. This CAM did not require a ballot of the responsible committee per Table 1 of the *Regulations*. The Council voted to issue the amendment.

**22-8-5-o** APPEAL DECISION

D#22-8 At its meeting of August 10-12, 2022, the Standards Council considered an appeal from James Moellmann of Maxivolt. The appeal requests that the Standards Council overturn the results of the voting Association Members during the NFPA Technical Meeting on CAM 70-88 and to Accept Public Comment No. 583 for the 2023 Edition of NFPA 70®, *National Electrical Code®* (“NEC®”). Specifically, the appeal requests revision of section 225.42(E).

As background, the response of Code-Making Panel 10 (“CMP 10”) to Public Comment No. 583 was “Reject”. A Notice of Intent to Make a Motion (“NITMAM”) was filed by Megan Hayes of NEMA to Accept Public Comment No. 583 and was certified by the Motions Committee, then presented for debate during the NFPA Technical Meeting as CAM 70-88. CAM 70-88 failed to achieve simple majority support of the membership during the NFPA Technical Meeting. Mr. Moellmann filed an appeal with the Council based upon the unsuccessful result of CAM 70-88.

The text subject to the appeal of CAM 70-88 did not gain sufficient support within the standards development process for inclusion in the 2023 edition of NFPA 70, *National Electrical Code*. The appeal requests that the Council overturn the results yielded by the standards development process. On appeal, the Council accords great respect and deference to the NFPA standards development process. In

1 For Megan Hayes, NEMA, to pursue a NITMAM on Public Comment No. 583, she needed permission of Vincent Saporita as the submitter of Public Comment No. 583 per the *Regulations Governing the Development of NFPA Standards*, Table 1. Mr. Saporita so acknowledged and extended permission for Ms. Hayes to pursue a motion to accept Public Comment No. 583 at the Technical Meeting.
conducting its review, the Council will overturn the results of that process only where a clear and substantial basis for doing so is demonstrated.

The record reflects that CMP 10 acted on and responded to PC 583 with a technical reason for rejecting the comment. While the Appellant disagrees with the sufficiency of the Panel’s technical justification, the Council declines to substitute its judgement for CMP 10’s technical conclusion. The Appellant also argued that CMP 10 was misplaced in its reliance on a IEEE standard in its technical justification. When presented with the fact that a representative of IEEE (a member of Panel 10 with a directed vote from IEEE) voted to reject PC 583, the Appellant pointed out that the voting IEEE member represents a different IEEE society. The record reflects continued technical debate on this issue.

The Appellant also expressed concern that the CMP 10 Chair engaged in misconduct by misleading the NFPA membership at the 2022 Technical Meeting by describing the technical issue at hand as “typical” during the debate. Appellant asserts that the issue is in fact “atypical”. Based on the record, Council finds that Appellant had equal opportunity to contradict the characterization during the debate at the Technical Meeting and further found no evidence of misconduct in violation of NFPA’s Guide for Conduct in the use of the word “typical” in that context.

Council encourages the Appellant to continue participating in the standards development process and encourages the Appellant to apply for membership on CMP 10. Additionally, Council encourages CMP 10 to take any additional information provided into consideration should a Tentative Interim Amendment or Public Input to the next revision cycle be filed.

The Council has reviewed the entire record concerning this matter and has considered all the arguments put forth in this appeal. In the view of the Council, this appeal does not present any clear and substantial basis upon which to overturn the results yielded by the NFPA standards development process. Accordingly, the Council has voted to deny the appeal. The effect of this action is that the NFPA 70, National Electrical Code will not include the text of Public Comment No. 583.

Council Members John Kovacik and Rodger Reiswig recused themselves from the deliberations and vote on the appeal.

Council Members Michael Johnston and Jack Poole were not in attendance during the August 2022 meeting and therefore did not participate in the deliberations and vote on the appeal.

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**22-8-5-p APPEAL DECISION**

D#22-7 At its meeting of August 10-12, 2022, the Standards Council considered an appeal from James Moellmann of Maxivolt. The appeal requests that the Standards Council overturn the results of the voting Association Members during the NFPA Technical Meeting on CAM 70-89/70-109 and to Accept an Identifiable Part of Public Comment No. 1918 for the 2023 Edition of NFPA 70®, National Electrical Code® (NEC®). Specifically, the appeal requests revision of section 215.18(E).

As background, the response of Code-Making Panel 10 (“CMP 10”) to Public Comment No. 1918 was “Reject but see related Second Revision No. 8218.” A Notice of Intent to Make a Motion (“NITMAM”) was filed by James Moellmann to Accept an Identifiable Part of Public Comment No. 1918 and was certified by the Motions Committee then presented for debate during the NFPA Technical Meeting as CAM 70-89/70-109. CAM 70-89/70-109 failed to achieve the necessary simple majority support of the membership during the NFPA Technical Meeting. Mr. Moellmann filed an appeal with the Council based upon the unsuccessful result of CAM 70-89/70-109.

The text subject to the appeal of CAM 70-89/70-109 did not gain sufficient support within the standards development process for inclusion in the 2023 edition of NFPA 70, National Electrical Code. The appeal requests that the Council overturn the results yielded by the standards development process. On appeal,
the Council accords great respect and deference to the NFPA standards development process. In conducting its review, the Council will overturn the results of that process only where a clear and substantial basis for doing so is demonstrated. The Council finds no such basis demonstrated in this matter.

The record reflects that CMP 10 acted on and responded to PC 1918 with a technical reason for rejecting the comment. While the Appellant disagrees with the sufficiency of the Panel’s technical justification, the Council declines to substitute its judgement for CMP 10’s technical conclusion. The Appellant also argued that CMP 10 was misplaced in its reliance on a IEEE standard in its technical justification. When presented with the fact that a representative of IEEE (a member of Panel 10 with a directed vote from IEEE) voted to reject PC 1918, the Appellant pointed out that the voting IEEE member represents a different IEEE society. The record reflects continued technical debate on this issue.

The Appellant also expressed concern that the CMP 10 Chair engaged in misconduct by misleading the NFPA membership at the 2022 Technical Meeting by describing the technical issue at hand as “typical” during the debate. Appellant asserts that the issue is in fact “atypical”. Based on the record, Council finds that Appellant had equal opportunity to contradict the characterization during the debate at the Technical Meeting and further found no evidence of misconduct in violation of NFPA’s Guide for Conduct in the use of the word “typical” in that context.

Council encourages the Appellant to continue participating in the standards development process and encourages the Appellant to apply for membership on CMP 10. Additionally, Council encourages CMP 10 to take any additional information provided into consideration should a Tentative Interim Amendment or Public Input to the next revision cycle be filed.

The Council has reviewed the entire record concerning this matter and has considered all the arguments put forth in this appeal. In the view of the Council, this appeal does not present any clear and substantial basis upon which to overturn the results yielded by the NFPA standards development process. Accordingly, the Council has voted to deny the appeal. The effect of this action is that the NFPA 70, National Electrical Code will not include the text of Public Comment No. 582 and the specified Identifiable Part of Public Comment No. 1918.

Council Members John Kovacik and Rodger Reiswig themselves from the deliberations and vote on the appeal.

Council Members Michael Johnston and Jack Poole were not in attendance during the August 2022 meeting and therefore did not participate in the deliberations and vote on the appeal.

| 22-8-5-q | **D#22-9** At its meeting of August 10-12, 2022, the Standards Council considered an appeal from James Moellmann of Maxivolt. The appeal requests that the Standards Council overturn the results of the voting Association Members during the NFPA Technical Meeting and Accept Public Comment No. 522 for the 2023 Edition of NFPA 70®, National Electrical Code® (“NEC®”). Specifically, the appeal requests revision of section 230.67(E).

As background, the response of Code-Making Panel 10 (“CMP 10”) to Public Comment No. 522 was “Reject”. A Notice of Intent to Make a Motion (“NITMAM”) was filed by Megan Hayes of NEMA to Accept Public Comment No. 522 and was certified by the Motions Committee, then presented for debate.

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1 For Megan Hayes, NEMA, to pursue a NITMAM on Public Comment No. 522, she needed permission of Vincent Saporita as the submitter of Public Comment No. 522 per the Regulations Governing the Development of NFPA Standards, Table 1. Mr. Saporita so acknowledged and extended permission for Ms. Hayes to pursue a motion to accept Public Comment No. 522 at the Technical Meeting.
during the NFPA Technical Meeting as CAM 70-90. CAM 70-90 failed to achieve simple majority support of the membership during the NFPA Technical Meeting. Mr. Moellmann filed an appeal with the Council based upon the unsuccessful result of CAM 70-90.

The text subject to the appeal of CAM 70-90 did not gain sufficient support within the standards development process for inclusion in the 2023 edition of NFPA 70, National Electrical Code. The appeal requests that the Council overturn the results yielded by the standards development process. On appeal, the Council accords great respect and deference to the NFPA standards development process. In conducting its review, the Council will overturn the results of that process only where a clear and substantial basis for doing so is demonstrated.

The record reflects that CMP 10 acted on and responded to PC 522 with a technical reason for rejecting the comment. While the Appellant disagrees with the sufficiency of the Panel’s technical justification, the Council declines to substitute its judgement for CMP 10’s technical conclusion. The Appellant also argued that CMP 10 was misplaced in its reliance on a IEEE standard in its technical justification. When presented with the fact that a representative of IEEE (a member of Panel 10 with a directed vote from IEEE) voted to reject PC 522, the Appellant pointed out that the voting IEEE member represents a different IEEE society. The record reflects continued technical debate on this issue.

The Appellant also expressed concern that the CMP 10 Chair engaged in misconduct by misleading the NFPA membership at the 2022 Technical Meeting by describing the technical issue at hand as “typical” during the debate. Appellant asserts that the issue is in fact “atypical”. Based on the record, Council finds that Appellant had equal opportunity to contradict the characterization during the debate at the Technical Meeting and further found no evidence of misconduct in violation of NFPA’s Guide for Conduct in the use of the word “typical” in that context.

Council encourages the Appellant to continue participating in the standards development process and also encourages the Appellant to apply for membership on CMP 10. Additionally, Council encourages CMP 10 to take any additional information provided into consideration should a Tentative Interim Amendment or Public Input to the next revision cycle be filed.

The Council has reviewed the entire record concerning this matter and has considered all the arguments put forth in this appeal. In the view of the Council, this appeal does not present any clear and substantial basis upon which to overturn the results yielded by the NFPA standards development process. Accordingly, the Council has voted to deny the appeal. The effect of this action is that the NFPA 70, National Electrical Code will not include the text of Public Comment No. 522.

Council Members John Kovacik and Rodger Reiswig recused themselves from deliberations and vote on the appeal.

Council Members Michael Johnston and Jack Poole were not in attendance during the August 2022 meeting and therefore did not participate in the deliberations and vote on the appeal.

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<tr>
<th>22-8-5-r</th>
<th>APPEAL DECISION</th>
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<tr>
<td>D#22-10</td>
<td>At its meeting of August 10-12, 2022, the Standards Council considered an appeal from Greg Woyczynski of Association of Home Appliance Manufacturers. The appeal requests that the Standards Council overturn the results of the voting Association Members during the NFPA Technical Meeting and Reject Second Revision No. 7956 for the 2023 Edition of NFPA 70®, National Electrical Code® (NEC®). Specifically, the appeal requests revision of section 210.8(A).</td>
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As background, Section 210.8(A) was broadly revised to expand GFCI protection for receptacles in dwelling units at Code Making Panel 2’s (CMP 2) First Draft meeting, but the revisions failed the First Draft ballot. At the Second Draft meeting, CMP 2 again revised Section 210.8(A) to expand GFCI in specific locations, including the kitchen and other areas of a dwelling unit. The revisions passed Second Draft ballot. The appellant filed Certified Amending Motion 70-94, seeking to return to previous edition text and narrow the application of GFCI requirements. CAM 70-94 failed to achieve simple majority support of the membership during the NFPA Technical Meeting.

On appeal, the Council accords great respect and deference to the NFPA standards development process. In conducting its review, the Council will overturn the results of that process only where a clear and substantial basis for doing so is demonstrated.

The Appellant alleges that circuit breaker manufacturers exerted dominance at NFPA’s 2022 Technical Meeting in violation of the American National Standards Institute (ANSI) Essential Requirements for Due Process (the “Essential Requirements”). When a claim of dominance is asserted in writing by a directly and materially interested party, it is considered a “procedural grievance” that the Standards Developer must review. See ANSI’s Guidance on Lack of Dominance within the American National Standards (ANS).

Under Section 1.2 of the Essential Requirements, “[d]ominance means a position or exercise of dominant authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints.” The Essential Requirements have no specific test defined for dominance. Instead, ANSI’s “Guidance on ‘Lack of Dominance’ within the American National Standards (ANS)” outlines the following considerations for assessing whether an attempt is being made by a person or organization to exclude the fair and equitable consideration of other viewpoints:

- acting deliberately in a way which precludes others from having the opportunity to express their viewpoints;
- submitting comments that are intended to or always cause a new vote;
- taking actions to “control the agenda, the meeting schedule, ballot issuance, membership on the consensus body and/or related work groups”

In accordance with ANSI’s Guidance on Lack of Dominance, Council has reviewed the NFPA standards development process as it pertains to the revision of Section 210.8(A), which is the subject of the Appellant’s dispute. Council also reviewed the related activities and membership of CMP 2 during the 2023 revision cycle for the NEC as well as the conduct of the 2022 NFPA Technical Meeting. As set forth below, Council specifically finds that there was no dominance exerted in violation of ANSI Essential Requirements.

1. **NFPA’s Standards Development Process**

As an ANSI-accredited standards developer and Audited Designator, NFPA is required to maintain ANSI-accredited procedures that comply with the Essential Requirements and establish a consensus-based standards development process to develop an American National Standard (ANS). NFPA standards development procedures are set forth in its Regulations Governing the Development of NFPA Standards (the “Regs”) and exceed the Essential Requirements. NFPA’s Standards Council, with assistance from NFPA staff, maintains the Regs, which are ultimately approved and issued by NFPA’s Board of Directors. Modifications to the Regs are submitted and reviewed by ANSI, in addition to review of the Regs.

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1 NFPA is an ANSI “Audited Designator”, which means NFPA is an “ANSI-Accredited standards developer who has been granted the authority to designate its standards as American National Standards (ANS) without such standards being reviewed and approved by the ANSI Board of Standards.” This authority is granted to an accredited standards developer “who has demonstrated a consistent record of voluntary standards development” (See 5.0 of the Normative policies and procedures for ANSI Audited Designators).
conducted by ANSI as part of its regular audit. The Regs were most recently reviewed by ANSI in the first quarter of 2022 as meeting the Essential Requirements (done as part of NFPA’s regularly scheduled audit). The Regs include a description of the NFPA Technical Meeting and the voting of an unbalanced NFPA membership as one step in the development of consensus.

Under the Regs, all NFPA standards are developed by a balanced consensus body (known as a “Panel” or “Technical Committee”). The Technical Committee is balanced by interest classification, which is a Committee member’s primary interest related to the activity of the Committee. NFPA has nine interest classifications, which are outlined on its website. NFPA staff are responsible for publishing all public notices related to the standards development process, including, but not limited to stages in the process, First and Second Draft meetings, agendas, minutes and other notices that may affect the development of a standard (e.g. Tentative Interim Amendments, Errata, etc.). Each NFPA standard has a dedicated staff liaison, who participates in the standards development process primarily as a facilitator. Under NFPA’s Guide for Conduct, NFPA staff liaisons are responsible for the “fair, open and efficient operation of the NFPA standards development process.” (See Section 4 of the NFPA Guide for the Conduct of Participants in the NFPA Standards Development Process.)

NFPA’s standards development process is detailed in the Regs, but generally includes the following steps for revision of an existing ANSI:

- **Public Input (“PI”)**—any member of the public and/or other committees has the opportunity to provide input for the Technical Committee’s consideration to develop the First Draft. PIs are submitted electronically by any person.

- **At the First Draft meeting,** the Technical Committee provides a response to and acts on every PI received. The Technical Committee creates First Revisions which is initial meeting consensus of the Committee by simple majority. The final position of the Committee (including the Correlating Committee) is established by a ballot, which requires approval by at least two-thirds of the Technical Committee. First revisions that pass ballot are compiled and publicly published as the First Draft Report on NFPA’s website.

- **Public Comment**—After the First Draft Report is posted, any person may submit a Public Comment on the First Draft. Any objections or changes to the First Draft must be submitted at the Public Comment stage. After the Public Comment closing date, the Technical Committee holds its Second Draft Meeting.

- **At the Second Draft Meeting** the Committee reviews the First Draft and may make additional revisions to the Standard. The Committee responds to and acts on all Public Comments and uses the Comments to assist in the development of Second Revisions to the Standard. The Second Draft reflects the simple majority agreement of the Technical Committee during the Second Draft meeting to establish meeting consensus. The final position of the Technical Committee is established by a ballot, which requires approval by at least two-thirds of the Technical Committee. Second Revisions that pass ballot are compiled and publicly published at the Second Draft Report.

- **NITMAMs**—Once the Second Draft Report is posted, the public can review it and a Notice of Intent to Make a Motion (NITMAM) may be filed by anyone who meets the requirements set forth in the Regulations Governing the Development of NFPA Standards. A NITMAM must be first certified as proper under the Regs by the Motions Committee of the Standards Council. If the NITMAM is proper, it is certified as a “Certified Amending Motion” or CAM. The Motions Committee report is publicly published in advance of the Technical Meeting and only Certified Amending Motions (and proper Follow-up Motions) are permitted at the Meeting.

- **NFPA Technical Meeting**—Annually, NFPA’s members and others meet to consider and debate any CAMs that have been received. The purpose of a CAM is to recommend a change to the resulting draft Standard from the Technical Committee’s recommendations as published in the Second Draft. Only individuals who have been an NFPA Member for 180 days or more are eligible to vote at the Technical Meeting; however, any person may become an NFPA Member.
and non-members may attend and present their position on a CAM. The NFPA Membership is not a consensus body and therefore is not balanced. For that reason, if the NFPA Membership supports a CAM, it then gets returned to the Technical Committee for ballot, or, depending on the type of motion, it returns text to the previous edition of the Standard, which generally reflects the last point of consensus.

- The Standards Council – is the official issuer of Standards and is the body responsible for hearing appeals.
- The NFPA Board of Directors – issues the Regs and hears petitions, which is a limited right of review of the actions of the Standards Council when “extraordinary circumstances requiring the intervention of the Board of Directors exist”.

As noted above, NFPA’s standards development process is accredited by ANSI as meeting the Essential Requirements.

2. The 2023 revision cycle of 210.8(A) reflected no evidence of dominance

The record of the 2023 revision cycle relating to 210.8(A) reflects that the standards development process was conducted in accordance with the Regs. NFPA’s Standards Council Secretary provided a memorandum dated August 9, 2022 to the Council and to AHAM in advance of the hearing on this appeal, which outlines a factual record of each step of the revision cycle, CMP 2 membership through the cycle, timing for agendas, meetings, and participation (the “Council Secretary’s Memo”). The Council attaches the Council Secretary’s Memo to this Decision as Attachment 1. Based on the Council Secretary’s Memo, this appeal and the information provided during the hearing, Council finds that there was no evidence of dominance exerted in violation of the Essential Requirements for the following reasons:

a. CMP 2 remained in balance during the 2023 revision cycle.

While “balance” is different from “dominance”, the Council found that CMP 2 was in balance during the 2023 revision cycle. At the time of the Second Draft Ballot on Second Revisions, the interest classifications on CMP 2 reflected the following:

- 3 Manufacturers – 20% (National Electrical Manufacturers Association (NEMA), Schneider Electric and Leviton Manufacturing Company, Inc.)
- 1 Labor -6% (International Brotherhood of Electrical Workers)
- 3 Installer/Maintainers- 20% (Independent Electrical Contractors (IEC), National Electrical Contractors Association (NECA) and Faith Technologies Electrical Contractor)
- 2 Enforcers-13% (International Association of Electrical Inspectors (IAEI) and New York City Department of Buildings)
- 1 Research/Testing -6%(Underwriters Laboratory (UL))
- 1 Special Expert-6% (University of Houston Clear Lake)
- 3 Users-20% (American Chemistry Council (ACC), IEE-IAS/PES, National Association of Home Builders (NAHB));
- 1 Utility -6% (Electric Light & Power Group)
- US Consumer Product Safety Commission was also on the panel as a nonvoting member

At the time of the Second Draft ballot, CMP membership was meeting the requirement that a single interest not exceed 1/3rd of the voting membership on the panel.

b. All meetings notices, agendas and minutes for CMP 2 meetings were published publicly by NFPA staff pursuant

Pursuant to NFPA’s standards development process, the record reflects that all meeting notices, agendas and meeting minutes for CMP 2 were publicly and timely published on NFPA’s website. The record
further reflects that NFPA alone was responsible for setting the agenda, schedule and publicly publishing information about the meetings. The meetings occurred on the dates and at the times they were scheduled to occur, and all CMP 2 meetings were conducted remotely over Microsoft Teams, as was indicated in the meeting notices. There is no evidence to suggest that any party controlled or acted to influence an agenda.

c. There was broad, active and equitable participation by diverse interests in the revision of Article 210, with no evidence of exclusion of a party

As more fully described in the Council Secretary’s Memo, there was active and broad participation in the revision of the Articles within the scope of CMP 2. Section 210.8 alone received 22 Public Inputs (PIs), which came from a variety of diverse sources, including, but not limited to: a master electrician, a person representing themselves, the National Electrical Manufacturers Association (NEMA), the International Association of Electrical Inspectors (IAEI), Schneider Electric, the State of Minnesota Department of Labor and Industry and the City of Janesville, Wisconsin. AHAM did not submit PIs on Section 210.8, but did submit PIs for other sections of the NEC, so there is nothing on the record to suggest that AHAM was excluded from participating in the PI stage.

The First Draft Meeting reflected that 39 guests attended and 7 different guests made presentations to CMP 2. The record shows each presenter was offered equal time to present. AHAM did not attend the meeting and there is no record of AHAM requesting to speak or present at the meeting. Accordingly, there is no information on the record to suggest AHAM was excluded from attending or participating in the First Draft Meeting.

CMP 2 made a revision to 210.8(A) at the First Draft, which was intended to expand requirements for GFCI in a dwelling unit. CMP 2 stated a technical basis for the revision. Ultimately, these First Revisions failed to achieve the necessary 2/3rd support. 8 CMP members were in support, and 6 were opposed to the First Revisions. The supporters were from diverse interest classifications: 3 manufacturers, one user, one special exporter, one installer/maintainer, one labor and one research/testing laboratory. The CMP 2 members who voted against the First Revisions were two enforcers, two users, one installer/maintainer, and one utility. There is nothing in this record to support any one person, organization or interest classification acted to exclude the fair and equitable consideration of a party. The record reflects CMP 2 had not reached consensus on this topic at First Draft.

After the First Draft was publicly published to NFPA’s website, the Public Comment (PC) period opened and CMP 2 received 9 PCs on Section 210.8(A). The record again reflects active participation from a range of interests, including from the Appellant, as follows:

- PCs received from International Association of Electrical Inspectors (IAEI), Schneider Electric, National Electrical Manufacturers Association (NEMA), an individual representing himself, American Circuit Breakers Manufacturers Association (ACBMA), ChargePoint Inc., Association of Home Appliance Manufacturers (AHAM), Arcadis U.S. Inc., and the correlating note from the NEC Correlating Committee.

AHAM’s PC on Section 210.8(A) did not propose any revision; rather, it detailed a statement about its technical position on the subject of 210.8(A). In NFPA’s standards development process, Section 4.4.4.3(c) of the Regs provide that “…[e]ach Public Comment shall include the following…proposed text of the Public Comment, including the wording to be added, revised (and how revised), or deleted…” CMP 2 responded to AHAM’s PC by noting that there was no text offered or proposed for CMP 2 to respond.

Following the submission of its PC, AHAM attended the Second Draft Meeting and presented to CMP 2 along with 6 other presenters. All presenters were offered equal presentation time according to the
minutes of the meeting. There were 48 guests in attendance who represented a range of interests, including but not limited to, consulting companies, utilities, manufacturers, labor, associations, enforcers, contractors, etc. (See page 4-5 of Attachment 5 to the Council Secretary’s Memo). The Council finds the record through this point shows no interest group, organization or individual was exercising a position of authority, leadership, or influence by reason of superior leverage, strength, or representation such that AHAM (or any other party) was denied an opportunity to have their viewpoints fairly and equitably considered by CMP 2.

CMP 2 made Second Revisions on 210.8(A), which are the subject of AHAM’s appeal. These revisions expanded GFCI requirements in dwelling units, but not as expansively as proposed in the First Revisions. The Second Revisions passed ballot, in particular, the ballot results of SR No. 7956 reflected 11 CMP 2 members in support and 4 against. The four negative with comment were from an enforcer, a user, an installer/maintainer and a utility classification. CMP 2’s statement was generally that the expansion of GFCI requirements was based on concerns for providing protection for individuals “working on cord-and-plug appliances and/or cord and plug-connected equipment…” Opponents generally cited concern that the requirement was too broad and should focus on wet areas. The Council finds this record shows genuine technical disagreement and that CMP 2 has reasonably stated a technical justification for its position. There is no evidence to suggest that CMP 2 failed to equitably consider views, or that there was an interest, organization or individual who had a position or exercise of dominant authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints. Rather, the record reflects that the panel reached consensus from the position it had started with at First Draft.

d. AHAM made a motion and had its views considered and debated by the NFPA Membership present at the 2022 Technical Meeting

After the Second Draft was publicly posted, AHAM filed a Notice of Intent to Make a Motion (NITMAM), which was certified by NFPA’s Motions Committee of the Standards Council as a “Certified Amending Motion” (or “CAM”). The Technical Meeting is yet another option in NFPA’s standards development process, which allows an eligible person who is not satisfied with the work of the Panel after the Second Draft to make CAM for the NFPA membership’s consideration and vote.

As described in the Regs, NFPA’s Technical Meetings are “meetings of the NFPA membership, authorized by these regulations and the NFPA bylaws at Section 4.3, for the purpose of making recommendations to the Standards council on the issuance of NFPA standards.” These “recommendations” are accomplished through the filing and presentation of CAMs. The NFPA technical meeting “provides the opportunity for further consideration of views and objections.” In addition to NFPA members, any member of the public may attend, speak and participate in the debate at the Technical Meetings.

The NFPA membership is not a balanced body and is not a consensus body, nor does NFPA’s standards development process treat it as such. For that reason, a successful CAM must be confirmed by the Technical Committee as outlined in the Regs. When the NFPA membership votes at an NFPA technical meeting, it becomes a “recommendation” in the process, and it is not a substitute for the Technical Committee or Panel, which is the consensus body. See Generally, Section 4.5.3.2 of the Regs on “Authority of an NFPA Technical Meeting”.

The Appellant’s specific claim is that circuit breaker manufacturers exerted dominance at the 2022 because there were a disproportionate number of voting NFPA Members in attendance who are also circuit breaker manufacturers. Since the NFPA membership is not a balanced body, there are not

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2 An NFPA member must be in good standing for at least 180 consecutive days prior to the Technical Meeting and be in attendance to be eligible to vote on CAMs.
restrictions on which NFPA members can attend the technical meeting based on interest classification or affiliation. The meeting is open to all voting members, as well as stakeholders for debate.

The record reflects that the Appellant had an opportunity to present his CAMs and they were fully discussed and debated by parties for and against the motions. The Appellant, and all others who spoke on the CAMs, had an equal amount of time to speak (as reflected by the use of a timer at the technical meeting to give equal speaking time to all). There were varied interests who rose to speak for the motion: a representative of the National Association of Home Builders spoke twice, and the Appellant rose to speak once to make his motion, and then a second time to address issues raised in debate. Four parties spoke against the motion, including Schneider Electric, the National Electrical Manufacturers Association (NEMA), Eaton, and Siemens.

While NFPA does not publish the names and affiliation of every NFPA member voting at a given time during the technical meeting. Even so, the Appellant estimated that there were 250 NFPA members, who were also circuit breaker manufacturers who voted at the Technical Meeting. There were 561 votes on CAM 70-94, and requires only simple majority to pass. The record shows that CAM 70-94 failed by 492 against and 69 in support. This reflects overwhelming lack of support. The result is that the Standards Council receives a record showing the text recommended by CMP 2 (the consensus body) at the Second Draft, the recommendation by the NFPA membership at the technical meeting, and the Appellant’s appeal, which is another opportunity in the process to express disagreement with the position of CMP 2. Council finds that AHAM had an equal opportunity to express its views to several bodies in NFPA’s standards development process, including CMP 2, the NFPA membership and the Standards Council through its PCs, participation at the Second Draft meeting, making a presentation to CMP 2, presenting a CAM to the membership and also presenting this appeal. There is no evidence to suggest that there was such an exercise of authority or influence to the point of excluding AHAM from having its views fairly and equitably considered. In addition, there is no evidence on the record that any other party claimed that there was any position or exercise of dominant authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints.

As outlined above, Council finds that CMP 2 is balanced by interest classification and that all interested parties had equal opportunity to participate in the 2023 NEC revision cycle. Yet, the Council acknowledges that by expanding GFCI protection for receptacles in dwelling units, the requirements in Article 210 impact AHAM’s home appliance members in new ways. The Council agrees with the Appellant that it is therefore important to expand CMP 2 membership to add additional parties that may now be directly impacted by Article 210. AHAM was added to CMP 2 at the Council’s December 2021 meeting and a manufacturer of HVAC equipment was added to CMP 2 at the most recent Council meeting (see Minutes Attachment 22-8-1-a). With the addition of new manufacturers, Council specifically directs NFPA staff to call for additional members to CMP 2 in other interest classifications as well. See SC Decision 22-8-16-d, -e and -f for a similar direction regarding a call for members on CMP 2.

Lastly, the Appellant describes technical concerns about the interoperability between GFCI and modern appliances, and the serious practical challenges this may present in the field. Council is aware of a similar interoperability concern from the HVAC industry, and has considered appeals on 210.8(F) for similar reasons (see, e.g. SC D#21-8 and SC D#22-12). In the case of HVAC interoperability with GFCI, the Council directed the formation of a task group of affected stakeholders, which considered the technical issues at hand and proposed a path forward. Council believes the same approach is warranted in this matter and directs the formation of a Task Group of affected stakeholders, including AHAM, appliance manufacturers, ground fault circuit interruptor manufacturers, among other interested parties, to evaluate the issues raised and consider whether a TIA may be appropriate.

The Council has reviewed the entire record concerning this matter and has considered all the arguments
Council Members Rodger Reiswig and John Kovacik recused themselves from the deliberations and vote on this appeal.

Council Members Michael Johnston and Jack Poole were not in attendance during the August 2022 meeting and therefore did not participate in the deliberations and vote on the appeal.

*Note: See posting of decision at www.nfpa.org/sc2022 for attachment to this decision.

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**22-8-5-s**

**APPEAL DECISION**

**D#22-11** At its meeting of August 10-12, 2022, the Standards Council considered an appeal from Greg Woyczynski of the Association of Home Appliance Manufacturers. The appeal requests that the Standards Council overturn the results of the voting Association Members during the NFPA Technical Meeting and Reject an Identifiable Part of Second Revision No. 7966 for the 2023 Edition of NFPA 70®, *National Electrical Code®* ("NEC®"). Specifically, the appeal requests revision of section 210.8(D).

As background, Section 210.8(D) was revised at both first second draft to expand GFCI requirements to specific appliances. The First Revisions and Second Revisions to 210.8(D) passed ballot by the necessary 2/3 affirmative vote by the responsible code-making panel, CMP 2. The appellant filed Certified Amending Motion 70-95 ("CAM 70-95"), seeking to narrow the application of GFCI requirements to fewer specified appliances. Certified Amending Motion 70-95 failed to achieve simple majority support of the membership during the NFPA Technical Meeting.

On appeal, the Council accords great respect and deference to the NFPA standards development process. In conducting its review, the Council will overturn the results of that process only where a clear and substantial basis for doing so is demonstrated.

As part of this appeal, Appellant re-asserted a claim of dominance identical to that asserted in a separate appeal by Appellant on CAM 70-94, (see Standards Council Agenda Item SC#22-8-5-r at www.nfpa.org/sc2022). The claim specifically alleges that circuit breaker manufacturers dominated NFPA’s 2022 Technical Meeting and violated ANSI Essential Requirements. Given that this dominance assertion is virtually identical and also relates to Section 210, Council refers to its decision D#22-10 for analysis and conclusion regarding Appellant’s allegation of dominance. For the reasons set forth in D#22-10, as well as the reasons set forth below (as they pertain to Section 210.8(D)), Council specifically finds that there was no dominance exerted in violation of ANSI Essential Requirements.

1. **The 2023 revision cycle of 210.8(D) reflected no evidence of dominance**

The record of the 2023 revision cycle relating to 210.8(D) reflects that the standards development process was conducted in accordance with the *Regulations Governing the Development of NFPA Standards* ("Regs"). NFPA’s Standards Council Secretary provided a memorandum dated August 9, 2022, to the Council and to AHAM in advance of the hearing on this appeal, which outlines a factual record of each step of the revision cycle, CMP 2 membership through the cycle, timing for agendas, meetings, and participation (the “Council Secretary’s Memo”). The Council attaches the Council Secretary’s Memo to this Decision as Attachment 1. Based on the Council Secretary’s Memo, this appeal, and the information provided during the hearing, Council finds that there was no evidence of dominance exerted...
in violation of the Essential Requirements as set forth in D#22-10 and for the following additional reasons as it pertains to Section 210.8(D):

a. There was broad, active and equitable participation by diverse interests in the revision of Article 210 (and specifically 210.8(D)), with no evidence of exclusion of a party

While Council’s analysis in its decision D#22-10 focused generally on Article 210, the Council also conducted a specific analysis as to the conduct of Panel 2 in its revision of the section at issue in this appeal: Section 210.8(D). As more fully described in the Council Secretary’s Memo, there was active and broad participation in the revision of the Articles within the scope of CMP 2. Section 210.8 alone received 22 Public Inputs (PIs), which came from a variety of diverse sources, including, but not limited to: a master electrician, a person representing themselves, the National Electrical Manufacturers Association (NEMA), the International Association of Electrical Inspectors (IAEI), Schneider Electric, the State of Minnesota Department of Labor and Industry and the City of Janesville, Wisconsin. Section 210.8(D) received 5 PIs. AHAM did not submit PIs on Section 210.8, but did submit PIs for other sections of the NEC. Taking into account the evidence of participation and engagement documented, there is nothing on the record to suggest that AHAM was excluded from participating in the PI stage.

CMP 2 made a revision to 210.8(D) at the First Draft, which expanded GFCI requirements for specific appliances. The First Revision on this cycle passed ballot with two negative votes, from the CMP 2 members with a “utility” interest classification and an “enforcer” interest classification. All other members of CMP 2 supported the First Revisions. CMP 2 provided the following statement in support of the First Revisions:

The proposed language will ensure GFCI protection is located in the branch circuit to provide protection of any outlets supplying the list of appliances regardless of vintage and whether or not GFCI protection is included in the appliance or in the cord. This change adds clarity to what specific appliances shall be required to have GFCI protection and the methods the installer can use to provide this GFCI protection.

There is nothing in the standards development record to suggest or support that an interest group, organization or individual was exercising a position of authority, leadership, or influence by reason of superior leverage, strength, or representation such that AHAM (or any other party) was denied an opportunity to have viewpoints fairly and equitably considered by CMP 2 through the First Draft stage.

After the First Draft was publicly published to NFPA’s website, the Public Comment (PC) period opened, and CMP 2 received 3 PCs on Section 210.8(D). The record again reflects participation from varied interests, including from the Appellant, as follows:

- PCs from the National Electrical Contractors Association (NECA), Simmons Electrical Services, and an individual representing himself
- There was no PC from AHAM submitted on this section

While it did not submit any PCs on Section 210.8(D), AHAM attended the CMP 2 Second Draft Meeting and presented to the panel, in addition to 6 other presenters. The Second Draft Meeting minutes reflect that AHAM’s presentation was related to Section 210.8(A) and Section 210.12. All presenters were offered equal presentation time according to the minutes of the meeting. Additionally, there were 48 guests in attendance who represented a range of interests, including but not limited to, consulting companies, utilities, manufacturers, labor, associations, enforcers, contractors, etc. (See page 4-5 of Attachment 5 to the Council Secretary’s Memo). The Council finds the record shows no interest group, organization or individual was exercising a position of authority, leadership, or influence by reason of superior leverage, strength, or representation such that AHAM (or any other party) was denied an
opportunity to have their viewpoints fairly and equitably considered by CMP 2 during the Second Draft stage of NFPA’s process.

CMP 2 made Second Revisions on 210.8(D), which are the subject of AHAM’s appeal. These revisions expanded GFCI requirements to additional appliances. The Second Revisions on 210.8(D) passed ballot with four negative votes, from the CMP 2 members with the “utility” interest classification, the “user” interest classification, an “installer/maintainer” classification and an “enforcer” classification. CMP 2’s statement in support of the changes was:

The referenced cooking appliances in the comment were added to 210.8(D). Due to the nature of the hazard with these installations. This requirement was placed in 210.8(D) to address all outlets and not be limited to only receptacle outlets found in 210.8(A). Section 210.8(D) now includes new list items (8) through (12), as these are sometimes hard wired to outlets and would not be a part of the GFCI requirements found for receptacles in laundry areas as part of 210.8(A) and 210.8(B). The shock hazard does not go away due to hard wired versus cord-and-plug connected equipment.

Opponents expressed multiple concerns: for needing further substantiation; for compatibility between current GFCI requirements and the affected appliances; and about “nuisance tripping”. The Council finds this record shows genuine technical disagreement and that CMP 2 has reasonably stated a technical justification for its position. There is no evidence to suggest that CMP 2 failed to equitably consider views, or that there was an interest, organization or individual who had a position or exercise of dominant authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints. Rather, the record reflects that the panel reached consensus.

b. AHAM made a motion and had its views considered and debated by the NFPA Membership present at the 2022 Technical Meeting

After the Second Draft was publicly posted, AHAM filed a Notice of Intent to Make a Motion (“NITMAM”), which was certified by NFPA’s Motions Committee of the Standards Council as a “Certified Amending Motion” (or “CAM”). The Technical Meeting is yet another opportunity in NFPA’s standards development process, which allows an eligible person who is not satisfied with the work of the Panel after the Second Draft to make a CAM for the NFPA membership’s consideration and vote1. All CAMs to be considered at the NFPA Technical Meeting are publicly posted on the NFPA website in advance.

As described in the Regs, NFPA’s Technical Meetings are “meetings of the NFPA membership, authorized by these regulations and the NFPA bylaws at Section 4.3, for the purpose of making recommendations to the Standards Council on the issuance of NFPA standards.” These “recommendations” are accomplished through the filing and presentation of CAMs. The NFPA technical meeting “provides the opportunity for further consideration of views and objections.” In addition to NFPA members, any member of the public may attend, speak, and participate in the debate at the Technical Meetings.

The NFPA membership is not a balanced body and is not a consensus body, nor does NFPA’s standards development process treat it as such. For that reason, a successful CAM must be confirmed by the Technical Committee as outlined in the Regs. When the NFPA membership votes at an NFPA technical meeting, it becomes a “recommendation” in the process, and it is not a substitute for the Technical

1 An NFPA member must be in good standing for at least 180 consecutive days prior to the Technical Meeting and be in attendance to be eligible to vote on CAMs.
Committee or Panel, which is the consensus body. See Generally, Section 4.5.3.2 of the Regs on “Authority of an NFPA Technical Meeting”.

The Appellant’s specific claim is that circuit breaker manufacturers exerted dominance at the 2022 Technical Meeting because there were a disproportionate number of voting NFPA Members in attendance who are also circuit breaker manufacturers. Since the NFPA membership is not a balanced body, there are not restrictions regarding which NFPA members can attend the Technical Meeting based upon interest classification or affiliation. The meeting is open to all voting members, as well as non-member stakeholders for debate.

The record reflects that the Appellant had an opportunity to present his CAMs and that each was fully discussed and debated by parties for and against the motions. The Appellant, and all others who spoke on the CAMs, had an equal amount of time to speak (as reflected by the use of a timer at the Technical Meeting to give equal speaking time to all). The following interests rose to speak for the motion subject to this appeal: a representative of the National Association of Home Builders, and the Appellant rose to speak once to make his motion, and then a second time to address issues raised in debate. Four parties spoke against this motion, including the Chair of CMP 2 reporting the panel’s position, Schneider Electric, the National Electrical Manufacturers Association (NEMA), Eaton, and Siemens.

NFPA does not publish the names and affiliation of every NFPA member voting at a given time during the Technical Meeting. Even so, the Appellant estimated that there were 250 NFPA members, who were also circuit breaker manufacturers who voted at the Technical Meeting. What is documented in the record is that there were 558 votes on CAM 70-95, and that a CAM requires only simple majority to pass. The record further shows that CAM 70-95 failed by 424 against and 134 in support. This reflects overwhelming lack of support. The result is that the Standards Council received a record showing the text recommended by CMP 2 (the consensus body) at the Second Draft, the recommendation by the NFPA membership at the technical meeting (which supported the panel’s recommendation), and the Appellant’s appeal, which is another opportunity in the process to express disagreement with the position of CMP 2. Council finds that AHAM had an equal opportunity to express its views to several bodies in NFPA’s standards development process, including CMP 2, the NFPA membership and the Standards Council through its PCs, participation at the Second Draft meeting, making a presentation to CMP 2, presenting a CAM to the membership and also presenting this appeal. There is no evidence to suggest that there was such an exercise of authority or influence to the point of excluding AHAM from having its views fairly and equitably considered. In addition, there is no evidence on the record that any other party claimed that there was any position or exercise of dominant authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints.

As outlined above, Council finds that CMP 2 is balanced by interest classification and that all interested parties had equal opportunity to participate in the current NEC revision cycle. The Council acknowledges that by expanding GFCI protection in a way that expands the affects on appliances, the requirements in Article 210 impact AHAM’s home appliance members in new ways. The Council agrees with the Appellant that it is therefore important to expand CMP 2 membership to add additional parties that may now be directly impacted by Article 210. AHAM was appointed to CMP 2 at the Council’s December 2021 meeting and a manufacturer of HVAC equipment was appointed to CMP 2 at the most recent Council meeting (see Minutes Attachment 22-8-1-a). With the addition of new manufacturers, Council specifically directs NFPA staff to call for additional members to CMP 2 in other interest classifications as well. See SC Decision 22-8-16-d, -e and -f for a similar direction regarding a call for members on CMP 2.

Lastly, the Appellant raises concerns that GFCI requirements related to appliances are not properly in the scope of Article 210 (and therefore the responsibility of CMP 2), rather, that appliances are addressed in
Article 422 and therefore within the scope of CMP 17. The matter of technical scope among articles within the NEC is the responsibility for the NEC Correlating Committee, which is balloted on correlation between articles within the NEC. Section 210.8(D) addresses receptacle protection based on the equipment that may be used with the receptacle, and therefore Council finds no reason to second guess the NEC Correlating Committee on this issue. However, the Council encourages the NEC Correlating Committee to review this specific concern, to the extent there may be overlap that requires clarification between CMP 2 and CMP 17.

The Council has reviewed the entire record concerning this matter and has considered all the arguments put forth in this appeal. In the view of the Council, this appeal does not present any clear and substantial basis upon which to overturn the results yielded by the NFPA standards development process. Accordingly, the Council has voted to deny the appeal. The effect of this action is that the NFPA 70, National Electrical Code will not include the text of an Identifiable Part of Second Revision No. 7966.

Council Members Rodger Reiswig and John Kovacik recused themselves from the deliberations and vote on this appeal.

Council Members Michael Johnston and Jack Poole were not in attendance during the August 2022 meeting and therefore did not participate in the deliberations and vote on the appeal.

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CAM 70-117: Accept Public Comment No. 2058. This motion (CAM 70-120) passed vote of the participating Membership during the NFPA Technical Meeting, failed the ballot of the responsible Code Making Panel, and passed the ballot of the Correlating Committee. The Council voted to not issue the amendment and to return to previous edition text.

D#22-3 At its meeting of August 10-12, 2022, the Standards Council considered an appeal from Frederic Hartwell, of Hartwell Electrical Services, Inc. The appeal requests that the Standards Council overturn the ballot results of Code-Making Panel 17 (Panel 17) and Accept Public Comment No. 2058 for the 2023 Edition of NFPA 70®, National Electrical Code® (NEC®). Specifically, the appeal requests revision of section 680.26(B).

As background, Mr. Hartwell submitted Public Comment No. 2058 to limit the copper ring bonding means to above ground pools and require a structural or copper bonding grid for all other permanently installed swimming pools. Panel 17 disagreed, rejected the Public Comment, thereby unanimously agreeing to maintain the alternate means at Second Draft. A Notice of Intent to Make a Motion was filed by Mr. Hartwell to Accept Public Comment No. 2058 and was certified by the Motions Committee, then presented for debate during the NFPA Technical Meeting as CAM 70-117. CAM 70-117 achieved the necessary simple majority support of the voting Association Members during the NFPA Technical Meeting. When CAM 70-117 was balloted, it passed the Correlating Committee on correlation but failed to achieve the necessary support of CMP 17. The results of the balloting yielded a recommendation to return to previous edition text. Mr. Hartwell filed an appeal urging the Council to uphold the appeal to Accept Public Comment No. 2058 despite the ballot results.

On appeal, the Council accords great respect and deference to the NFPA standards development process. In conducting its review, the Council will overturn the results of that process only where a clear and substantial basis for doing so is demonstrated.

There have been several cycles of technical debate over the minimum standard for reducing voltage gradients around the perimeter of a pool, which date back to the 2008 edition of the NEC. In 2011, Fire Protection Research Foundation (FPRF) conducted research to document the then-current knowledge on
this subject and to identify gaps in knowledge. FPRF’s report pointed out the lack of available data and outlined next steps that could meaningfully develop the research based on the knowledge gaps. The record does not reflect further study based on the specific gaps identified in the FPRF report, but there has been at least one subsequent report in 2018 by the Electric Power Research Institute (EPRI).

During the 2023 NEC revision cycle, Panel 17 maintained the means for reducing voltage gradients in a pool area within the text, as it had done for several previous editions. Appellant, among others, renewed arguments for eliminating the copper ring installation alternative and requiring the use of a copper grid. In support of this argument, the record included anecdotes of shock in pool areas, but none of these examples documented the connection to this particular technical issue. There were also references to tests that have been performed in Texas, Indiana and Florida, without any citation to the studies, reports, or substantive reporting on the data from such studies included with proposals this cycle. The Panel’s response during the revision cycle generally echoed a conclusion found in the 2011 FPRF report, which was that there continued to be no evidence of actual occurrences observed in the field where the “single conductor” bonding option failed to provide adequate protection.

However, after Panel 17 was balloted on the second draft, additional data has been brought forward and new tests have been performed that the Standards Council finds warrant review. During the 2022 Technical Meeting and at the hearing on this appeal, the Appellant referenced a 2021 U.S. Coast Guard Report that the Appellant claimed had examples of shock injuries and deaths due to the lack of adequate protection in a pool area. During the hearing, Appellant also cited a new test was performed by EPRI the week before, with a report that will be forthcoming and instructive on this technical debate. In addition, a Tentative Interim Amendment was proposed to require use of a copper grid, which included substantiation new case studies on two examples of homeowners experiencing uncomfortable shock sensations around their pools. The homeowners had used the single wire bonding option in the perimeter of their pools when constructed and after changing to a copper grid installation, the owners reported the issue had resolved. These are the first two examples on the record that were the subject of a study and report by EPRI.

The body of additional and/or new information requires timely analysis, but given its highly technical nature, it must be evaluated by interested parties with technical expertise. The Council directs a balanced Task Group to review the new and/or additional new data cited by the Appellant: namely, the the 2021 U.S. Coast Guard Report referenced during the hearing, the results of the most recent EPRI report, the case studies brought forward in a the recent (and related) TIA No. 1661 and any other new and existing reports referenced on this topic. Council directs the Task Group to report the following by November 30, 2022 (in advance of the Council’s December 2022 meeting): (1) its findings based on this data; (2) its recommendations, if any, as to the minimum safety standard within the NEC for reducing voltage gradient in the perimeter of a pool; (3) if a change to Article 680 is recommended, whether TIA No. 1661 would address the Task Group’s findings; and (4) any other findings or actions that the Task Group deems necessary based on its analysis.

In a separate appeal on TIA No. 1661 (which proposes an amendment identical to that which is proposed by the Appellant), Council voted to defer action pending the report from this Task Group (See D#22-13).

The Council has reviewed the entire record concerning this matter and has considered all the arguments put forth in this appeal. In the view of the Council, this appeal does not present any clear and substantial basis upon which to overturn the results yielded by the NFPA standards development process.

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1 During the hearing, the appellant called this report into question because the first draft had differences in conclusions from what appeared in the final report. The appellant confirmed, however, that the data in the report remained unchanged from the draft version to the final report. Draft reports are often different from a final report, so the Council finds no other legitimate basis to question the independence or validity of the report given that the data was reported out consistently.
Accordingly, the Council has voted to deny the appeal. The effect of this action is that the NFPA 70, *National Electrical Code* will not include the text of Public Comment No. 2058.

Council Members John Kovacik and Rodger Reiswig recused themselves from the deliberations and vote on this appeal.

Council Members Michael Johnston and Jack Poole were not in attendance during the August 2022 meeting and therefore did not participate in the deliberations and vote on the appeal.

### 22-8-5-x CAM 70-120: Accept Public Comment No. 2198. This motion (CAM 70-120) passed vote of the participating Membership during the NFPA Technical Meeting, failed to achieve the necessary support of the Code Making Panel, but passed the Correlating Committee when balloted. The Council voted to not issue the amendment and to return to previous edition text.

### 22-8-5-y APPEAL DECISION

**D#22-4** At its meeting of August 10-12, 2022, the Standards Council considered an appeal from Peter Graser of Copperweld Bimetallics, LLC regarding issuance of NFPA 70®, *National Electrical Code®,* 2023 Edition. In his appeal identified as agenda item 22-8-5-y, Mr. Graser sought Standards Council action to overturn the results of the voting Association Members during the NFPA Technical Session and Accept an Identifiable Part of Committee Comment (FR No. 8371 (CAM 70-126) which failed reballoting of the responsible CMP at Second Draft stage); and in his appeal identified as agenda item 22-8-5-aa-1, to overturn the ballot results of Code-Making Panel 6 on Certified Amending Motion 70-128, which had achieved the necessary support of the voting members during the NFPA Technical Meeting to Accept an Identifiable Part of Committee Comment FR No. 8427 for the 2023 Edition of NFPA 70, *National Electrical Code* (NEC). Specifically, the appeal requests revision of sections 310.3(A), 210.24, Table 210.24(2), 334.104, Table 310.16, Table 310.17, and 330.104 in the 2023 Edition of NFPA 70.

As background, at its August 2019 meeting, the Standards Council heard appeals from Mr. Graser, who, at the time, was seeking the Council to overturn the results of the standards development process and require copper-clad aluminum to be listed, and also to add certain ampacities to the NEC for 14 AWG copper-clad aluminum. As part of its decisions in those appeals, the Standards Council formed a balanced bimetals task group (the “Bimetallic Task Group” or the “Task Group”) to “review the proposed changes to the 2020 edition of the NEC that relate to copper-clad aluminum conductors and recommend changes through a tentative interim amendment and/or provide public inputs for the next revision cycle”. See Standards Council Decisions D#19-2 and D#19-23.

The Bimetallic Task Group carried out its charge by the Council, and in the course of its work determined that testing was necessary to address unresolved questions that had been raised during Task Group meetings and by CMP 6 during the 2020 NEC revision cycle. One of the Task Group members arranged and executed such testing at Eaton Laboratories from July-August 2020 (the “Eaton Test”). The Eaton Test focused on testing issues such as temperatures on terminals and conductors, wire-splicing devices, wiring devices, and “flexing durability” of 14 AWG copper-clad aluminum as more fully described in the report on the Eaton Test. The Eaton Test was performed comparatively on 14 AWG copper and 14 AWG copper-clad aluminum.

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1 As part of the filed appeal on CAM 70-126, Peter Graser sought Standards Council action on three related CAMs that he did not pursue at the Technical Meeting based upon his belief that differing results would have created correlation issues. Those three CAMs specifically were to: Reject an Identifiable Part of Second Correlating Revision No. 43 (CAM 70-60); Accept an Identifiable Part of Committee Comment FR No. 8435 (CAM 70-127); and Accept an Identifiable Part of Committee Comment FR No. 8420 (CAM 70-129).

2 During the hearing on appeals, the Appellant requested that the Standards Council act upon these two appeals be acted upon in a single decision. Council has granted the Appellant’s request and therefore a single decision is being issued to act upon these two agenda items.

3 The report on the Eaton Test is dated August 28, 2020 and was developed by Chuck Mello on behalf of the Bimetallics Task Group.
copper-clad aluminum. The Task Group concluded that, for the specific temperature testing conducted in the Eaton Test, 14 AWG copper-clad aluminum had “terminal and conduct temperatures that were generally less than copper when tested at the 60 degree C ampacity values.” This Eaton Test served as the substantiation for a number of Public Inputs (PIs) developed by the Task Group in the 2023 revision cycle, including a series of PIs for consideration by CMP 6. The Task Group did not propose any tentative interim amendments based on their work.

At the First Draft Meeting in the 2023 cycle, CMP 6 accepted the Task Group’s PIs on sections that are the subject of this appeal and within CMP 6’s scope (Section 310.3, 310.16, 334.104) (collectively, the “Affected Sections”). As a result, CMP 6 developed First Revision Nos. 8371, 8435, 8427, and 8435, which generally recognized the 14 AWG copper-clad aluminum as a minimum conductor size and also added 16 AWG copper as a recognized conductor size. These First Revisions passed ballot of CMP 6 by a vote of 11 affirmative and 2 negative. The two negative votes were from the representative of the Aluminum Association and the representative from the Copper Development Association. Both negative votes expressed concern about using smaller size conductors and the risk of overheating. The First Draft was posted online and made publicly available on June 28, 2021.

After the First Draft was posted, the document was opened for Public Comment (“PC”) through August 19, 2021. CMP 6 received several PCs on this technical issue, all of which raised concern about the temperature of 14 AWG copper-clad aluminum conductors in branch circuit applications. Substantiation for this line of PCs included reference to a test performed by Cerrowire Company at the Marmon Innovation and Technology Center (the “Cerrowire Test”), which tested the copper-clad conductors in thermal insulation, which was a materially different condition than that used in the Eaton Test. Cerrowire stated that its test was “terminated due to safety concerns” for high temperature. A test was also performed (and submitted as substantiation) by Southwire at D.B. Cofer Technology Center (the “Southwire Test”), which similarly raised concern about the high temperature of 14 AWG copper-clad aluminum. In the Southwire test, like in the Cerrowire Test, the 14 AWG copper-clad aluminum was tested in insulation because “Southwire believes testing in normal residential and commercial installation environments (within insulated walls and ceilings/attics) is also needed to properly assess the safety of 14 AWG copper-clad aluminum conductors at these ampacities.” The Copper Development Association reported on a test it performed at the Hampton Tedder facility, which tested 14 AWG copper clad-aluminum conductors in open air and insulation conditions (the “Copper Development Association Test”). The Copper Development Association reported similar conclusions about 14 AWG copper-clad aluminum exceeding accepted temperatures in thermal insulation, but noted the temperature did not exceed the threshold temperature in open air. As with the Southwire Test and Cerro Wire Test, the Copper Development Association Test did not include comparative testing of copper as the Eaton Test did.

At its Second Draft meeting, CMP 6 acted on and responded to all PCs, and also heard presentations on this issue from Mark Ode, on behalf of Copper Development Association; Dave Watson, on behalf of Southwire; Chuck Mello on behalf of Copperweld; and Christel Hunter, on behalf of Cerrowire. See Second Draft Meeting CMP 6 Chair Report. In addition, on October 25, 2021, a representative of Southwire emailed a report to all CMP 6 members, which analyzed a test it commissioned at Cable Technology Laboratories (the “Second Southwire Test”). The Second Southwire Test tested non-metallic sheathed cable (prototype NMB) in 14 AWG copper-clad aluminum in open air and in insulation. The summary from the Second Southwire Test generally was that the 14 AWG copper-clad aluminum in sheathed cable was within an acceptable range of temperature, whereas 14 AWG copper-clad aluminum THHN conductors in metal conduit in insulation generally exceeded the acceptable temperature range.

After considering the PCs and numerous reports and presentations, CMP 6 reverted back to the 2020 edition of the NEC text of the Affected Sections, which effectively removed 14 AWG copper-clad aluminum and 16 AWG copper conductors in branch circuits. CMP 6’s resolution statement for their actions at the Second Draft meeting on these Affected Sections stated, in part:
“to ensure public safety, further time is needed to study 14 AWG copper-clad aluminum and 16 AWG copper as minimum conductor sizes... after considering all the information and results presented in the reports, public inputs, and public comments, concerns were recognized about conductor overheating in common, everyday installations that need to be addressed prior to reducing the allowable branch circuit conductor size. Primarily, the evidence of excessive heat rise that occurs when wiring methods are installed in thermal insulation needs to be addressed…”

CMP 6 also cited concerns about voltage drop and outlined information that would need to be brought “from credible sources and qualified testing laboratories” to address all such concerns.

After the Second Draft Meeting, the Appellant conducted a test at Copperweld’s Fayetteville, Tennessee facility from December 1-3, 2021. The test was performed by Copperweld and witnessed over live video by Intertek (the “Copperweld Test”). The Copperweld Test was performed “to compare the temperature performance of 14 AWG copper and 14 AWG copper-clad aluminum conductors under equivalent conditions…” Generally, the conclusion was the temperature of the copper conductors was higher than the copper-clad aluminum conductors in each condition tested. Since the Copperweld Test was conducted after the Second Draft Meeting, Appellant distributed it to CMP 6 members by attaching it to the Second Draft Ballot before the ballot was recirculated.

The Second Revisions made to revert to the text of the 2020 edition of the NEC on the Affected Sections failed the Second Draft ballot because it failed to receive the required two-thirds affirmative vote. The 8 supporters of the Second Revisions and 6 votes against the actions taken by CMP 6. The supporters of the proposal to revert to the 2020 text were the principal representing the American Chemistry Council (classified as “user”), the principal representing the Vinyl Institute (classified as “manufacturer”), the principal representing the National Electrical Contractors Association (classified as “installer/maintainer”), the principal representing the National Electrical Manufacturers Association (classified as “manufacturer”), the principal representing the Copper Development Association (classified as “manufacturer”), the principal representing the Aluminum Association (classified as “manufacturer”), the principal representing IEE-IAS/PES JTCC (classified as “user”) and the principal representing UL LLC (classified as “research/testing laboratory”). Four of the supporters commented on concerns such as the test laboratories had interests aligned with one or more parties, or managed by an independent organization, fire hazards in normal building construction and concerns about significant overheating.

The negative votes on the Second Revisions came from the principal representing the International Brotherhood of Electrical Workers (IBEW)(classified as “labor”), Copperweld (classified as a “manufacturer”), the principal representing the Independent Electrical Contractors Inc. (classified as “installer/maintainer”), the Chair of CMP 6, representing the International Association of Electrical Inspectors (classified as “enforcer”), the principal representing the Electric Light & Power Group/EEI (classified as “utility”) and the principal representing Intertek Testing Services (classified as “research/testing laboratory”). All negative votes sought to support the First Draft text, substantiated by the work of the Bimetallics Task Group. Most of the negative ballots also pointed out concerns that the Eaton Test was the only test that compared copper and copper-clad aluminum, and found no basis to reject inclusion of 14 AWG copper-clad aluminum when the Eaton Test suggested that perhaps 14 AWG copper reached a higher temperature in those conditions.

In summary, on the Second Draft Ballot, four manufacturers, one installer/maintainer, two users and one research/testing laboratory supported the change to revert to 2020 edition text and not include 14 AWG copper-clad aluminum and 16 AWG copper conductors in branch circuits. On the other hand, one manufacturer, one labor, one installer/maintainer, one enforcer, one utility and one research/testing laboratory opposed the change and sought to allow 14 AWG copper-clad aluminum and 16 AWG copper conductors in branch circuits. In NFPA’s standards development process, when a Second Revision fails
and there is a related First Revision, as was the case here, a Supplementary Ballot is conducted to determine whether the panel is in support of the related First Revision(s).

The Supplementary Ballot on First Revisions on the Affected Sections failed to achieve two-thirds affirmative votes. 5 members of CMP 6 voted in support of the First Revisions and 7 members of CMP 6 voted against the First Revisions. The CMP members in support of the First Revisions were one manufacturer, one research/testing laboratory, one installer/maintainer, one user, one labor. The CMP members against the First Revisions were four manufacturers, one installer/maintainer, one research/testing laboratory and one user. Pursuant to NFPA’s standards development process, since the Supplementary Ballot of the First Revisions failed ballot, it was not included in the Second Draft. Instead, the related text automatically returns to previous edition text, which is the 2020 edition text of the NEC. The result yielded by the process is that the 14 AWG copper-clad aluminum and 16 AWG copper conductors in branch circuits would not be included in the 2023 NEC.

After the Second Draft posted on March 21, 2022, the Appellant (Mr.Graser) filed Notices of Intent to Make a Motion (“NITMAMs”), which were ultimately certified as CAMs 70-60, 70-126, 70-127, 70-128, and 70-129 for consideration at the 2022 Technical Meeting. Mr. Graser attended the NFPA Technical Meeting on June 9, 2022 to move the CAMs. The first CAM he presented (based on the agenda) was 70-126 (which was about conductor sizes). Mr. Graser, the Chair of CMP 6, and three other individuals spoke for and against the motion. A representative of the IBEW stood to call the question after that, and ultimately, the motion narrowly failed by a vote of 196 in favor and 198 opposed. Mr. Graser then moved 70-128 (which was about ampacities related to copper-clad aluminum conductors). Mr. Graser, the Chair of CMP 6 and about ten other individuals spoke for and against the motion. The motion passed by a vote of 225 in support and 172 against. When the Presiding Officer proceeded with Mr. Graser’s next motion on the agenda (CAM 70-129), Mr. Graser withdrew 70-129 and his remaining CAMs because he believed they were dependent on CAM 70-126, which had failed.

Pursuant to NFPA’s standards development process, after the Technical Meeting, CAM 70-128 was balloted by CMP 6 and failed ballot by a vote of 8 in support CAM 70-128 and 5 opposed to CAM 70-128. The voting patterns and reasons mirrored that of the Second Draft ballot, except that one manufacturer who was previously opposed to including 14 AWG copper-clad aluminum at the Second Draft chose to abstain from the vote on CAM 70-128, citing “…conflicting data from different industries on opposite sides of this issue.”

On appeal, the Council accords great respect and deference to the NFPA standards development process. In conducting its review, the Council will overturn the results of that process only where a clear and substantial basis for doing so is demonstrated.

During the 2023 revision cycle, CMP 6 reviewed at least 6 test reports regarding the technical issues at hand, including: the Eaton Test, the Cerrowire Test, the Southwire Test, the Copper Development Association Test, the Second Southwire Test and the Copperweld Test. These tests had many differences from one another: some compared copper and copper-clad aluminum, and most did not; some tested sheathed cable, or metallic conduit, and some did not; some conducted open air testing, some conducted testing in insulation, some conducted comparative testing in both open air and insulation.

As CMP 6 members recognized, the tests (or reports) reached disparate conclusions and were not conducted by impartial test laboratories. The Eaton Test was performed at Eaton’s laboratory, and the report on the test was written by Chuck Mello, who identified himself as a consultant to Copperweld at the hearing on this Appeal. The Cerrowire Test was performed at the Marmon Center, and Cerrowire is

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4 Appellant filed other NITMAMs as well, but they are not part of this appeal and therefore not described in this Decision.
a Marmon company. The Copper Development Association Test was performed by Hampton Tedder Technical Services, and one of the “Lead Testing Team Members” was an individual representing the Copper Development Association in a presentation before CMP 6. The Southwire Test was performed by Southwire at Southwire’s own D.B. Cofer Technology Center. The Second Southwire Test was performed at an independent laboratory, but the background of the report states that Southwire designed the “non-standard test program” used and also provided its “prototype” materials. The Copperweld Test was likewise performed by Copperweld at its own facilities and witnessed remotely by Intertek.

The record reflects that a simple majority of CMP 6 found it difficult to ignore the four (out of six) reports raise a concern that acceptance of 14 AWG copper-clad aluminum may result in a fire hazard when installed in homes and commercial occupancies. CMP’s statement at the Second Draft meeting noted an explicit concern for “public safety” given that these conductors could be used in “common, everyday installations.” Branch circuit wiring may be used widely in insulated walls and ceilings in commercial and residential settings and 8 members of CMP 6 concluded that further study in insulation was needed from “credible sources and qualified testing laboratories.” The record supports the reasoned, technical position of the majority.

The Appellant points out that the product test standard uses an open air test, and not an insulation test when measuring temperature. Six members of CMP 6 agreed that the sounder technical reasoning was to rely on the Eaton Test, which was an open air test on termination and connection points. The Eaton Test was the basis on which CMP 6 originally sought to allow 14 AWG copper-clad aluminum as a branch circuit wire, and reflected a technically substantiated response to CMP 6’s concern at the end of the 2020 NEC revision cycle.

The Council finds the position of CMP 6 has technical substantiation and the record reflects continuing, legitimate debate over the serious concern about fire safety implications of using 14 AWG copper-clad aluminum and 16 AWG copper conductors in residential and commercial branch circuit wiring installations. For that reason, the Council will not substitute its judgment for the consensus body with expertise on this issue.

However, Council finds this technical matter requires timely, expert attention. Given the dedicated work and expertise brought by the Bimetallic Task Group, and given that most reports were received by CMP 6 after the Bimetallic Task Group completed its work, Council directs this Task Group to reconvene and (1) examine the tests and reports on the record, including the test methods and determine whether a tentative interim amendment (TIA) may be appropriate based on analysis of this information; and (2) develop the scope of a project to engage the Fire Protection Research Foundation to conduct independent reporting or testing sufficient to resolve the technical issues presented through this Appeal. Council directs the Bimetallic Task Group to report back to Council for its December 2022 meeting.

The Appellant also alleges that while CMP 6 is balanced by interest classification, the manufacturers on the panel who oppose the inclusion of 14 AWG copper-clad aluminum conductors in branch circuits also belong to other membership organizations on the panel and therefore effectively have more than one vote on the panel. Based on the graphic presented by the Appellant in the appeal and during the hearing, it appears that, as it pertains to CMP 6, this argument is focused on three members: Dave Watson of Southwire, representing the National Electrical Manufacturers Association (NEMA); Christel Hunter of Cerrowire, representing the Aluminum Association; and Brian Deacy of Atkore International, representing the Copper Development Association. Atkore is a member of NEMA and the Copper Development Association; Cerrowire is a member of NEMA, Copper Development Association and the Aluminum Association and Southwire is a member of NEMA and Aluminum Association.

On CMP 6, the representatives of NEMA, the Aluminum Association and Copper Development all participate pursuant to a “directed vote” of their organizations. Each organization has a different approach
for developing the direction on a vote. NEMA has approximately 325 member companies according to their website, and that includes the Appellant’s company, Copperweld. The Copper Development Association has approximately 36 full members and three associate members. Generally, on the NEC, members who represent a membership organization are valued participants because they bring to bear the collective view of their members (as opposed to the single view of one company). While each of the three identified CMP 6 members work for companies who are members of more than one trade or membership organizations, there was no evidence on the record that demonstrated they or their companies were a majority voice in more than one directed vote on CMP 6.

The Appellant also noted “early cloture of CAM 70-126” at the Technical Meeting to suggest that there was effort to restrict full debate on that CAM. However, the record reflects that the question was called by an individual representing the IBEW, which is also an organization who is represented on CMP 6 and the IBEW voted in support of keeping 14 AWG-copper-clad aluminum at the Second Draft. Absent any other information, the Council finds no reason to conclude that the representative of an organization that supported the requirements that were reflected in the CAM, would then seek to restrict debate.

The Council has reviewed the entire record concerning this matter and has considered all the arguments put forth in this appeal. In the view of the Council, this appeal does not present any clear and substantial basis upon which to overturn the results yielded by the NFPA standards development process. Accordingly, the Council has voted to deny the appeal. The effect of this action is that the NFPA 70, National Electrical Code will not include the text of CAMs 70-126, 70-60, 70-127, 70-128; and will not include the text of CAM 70-129.

Council Members John Kovacik and Rodger Reiswig themselves from the deliberations and vote on the appeal.

Council Members Michael Johnston and Jack Poole were not in attendance during the August 2022 meeting and therefore did not participate in the deliberations and vote on the appeal.

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<thead>
<tr>
<th>22-8-5-z</th>
<th>See Council Decision D#22-4</th>
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<tbody>
<tr>
<td><strong>APPEAL DECISION</strong></td>
<td><strong>CAM 70-128</strong>: Accept an Identifiable part of Committee Comment (FR No. 8427 that failed reballoting at Second Draft stage). This motion (CAM 70-128) passed vote of the participating Membership during the NFPA Technical Meeting, failed the ballot of the responsible Code Making Panel, and passed the ballot of the Correlating Committee. The Council voted to not issue the amendment and to return to previous edition text.</td>
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<tr>
<td>22-8-5-aa</td>
<td><strong>See Council Decision D#22-4</strong></td>
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<td><strong>APPEAL DECISION</strong></td>
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<tr>
<td>22-8-6</td>
<td>The Council voted to issue NFPA 86, Standard for Ovens and Furnaces, as acted on at the NFPA Technical Meeting, with no amendments (CAMs failed), in accordance with actions taken at the NFPA</td>
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Technical Meeting. One appeal was filed on this standard. Issuance date of August 12, 2022 and an effective date of September 1, 2022.


**22-8-6-1 APPEAL DECISION**

At its meeting of August 10-12, 2022, the Standards Council considered an appeal from Mike Grande, Wisconsin Oven Corporation. The appeal requests that the Standards Council overturn the results of the voting Association Members during the NFPA Technical Session and Reject Second Revision No. 7 for the 2023 edition of NFPA 86, *Standard for Ovens and Furnaces*. Alternatively, the appellant requests that the Standards Council delays issuance of the 2023 edition of NFPA 86 until Tentative Interim Amendment No. 1674 has completed balloting and is considered by the Council for issuance concurrently. The appeal specifically requests to revise Section 5.3.1.

As background, the Technical Committee voted to approve Second Revision No. 7 at second draft on section 5.3.1. The Second Revision was the result of the Technical Committee taking action on Public Comment No. 17. A Notice of Intent to Make a Motion (NITMAM) was filed by Mr. Grande to Reject Second Revision No. 7 and was certified by the Motions Committee, then presented for debate during the NFPA Technical Meeting as Certified Amending Motion (“CAM”) 86-6. CAM 86-6 failed to achieve the necessary simple majority support of the membership during the NFPA Technical Meeting. Mr. Grande filed an appeal with the Council based upon the unsuccessful result of CAM 86-6.

The text subject to the appeal of CAM 86-6 did not gain sufficient support within the standards development process for inclusion in the 2023 edition of NFPA 86, *Standard for Ovens and Furnaces*. The appeal requests that the Council overturn the results yielded by the standards development process. On appeal, the Council accords great respect and deference to the NFPA standards development process. In conducting its review, the Council will overturn the results of that process only where a clear and substantial basis for doing so is demonstrated. The Council finds no such basis demonstrated in this matter.

The standard development process shows that the text subject to this appeal was part of a larger Task Group focused effort to clarify requirements in section 5.3.1 overall. Nonetheless, the Appellant expressed concern that he was caught off guard about the extent of the committee’s revision. Council specifically notes that Appellant has submitted TIA No. 1674 to accomplish the same technical result as the CAM which failed to achieve necessary support within the standards development process this cycle. TIA No. 1674 is currently processing, with the public being able to submit support or opposition through September 14, 2022. Once balloting of the TIA is finalized, it will be forwarded to the Council for action. Council finds merit in allowing the TIA to complete processing and encourages the Appellant and other interested parties to continue participating in the standards development process.

The Council has reviewed the entire record concerning this matter and has considered all the arguments put forth in this appeal. In the view of the Council, this appeal does not present any clear and substantial basis upon which to overturn the results yielded by the NFPA standards development process. Accordingly, the Council has voted to deny the appeal, including the alternative request to delay issuance of NFPA 86 awaiting final Technical Committee ballot results of TIA No. 1674. The effect of this action is that the NFPA 86, *Standard for Ovens and Furnaces* will include the text of Second Revision No. 7.

Council member Richard Gallagher recused himself from the deliberations and vote on the appeal.

Council Members Michael Johnston and Jack Poole were not in attendance during the August 2022 meeting and therefore did not participate in the deliberations and vote on the appeal.
| 22-8-7 | NFPA 130 | The Council voted to issue NFPA 130, *Standard for Fixed Guideway Transit and Passenger Rail Systems*, with no amendments (CAMs did not pass) in accordance with the actions taken during the NFPA Technical Meeting. No appeals were filed on this standard. Issuance date of August 12, 2022, and an effective date of September 1, 2022.


| 22-8-8 | NFPA 285 | The Council voted to issue NFPA 285, *Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components*, with no amendments (CAMs did not pass) in accordance with the actions taken during the NFPA Technical Meeting. No appeals were filed on this standard. Issuance date of August 12, 2022, and an effective date of September 1, 2022.

| 22-8-9 | NFPA 502 | The Council voted to issue NFPA 502, *Standard for Road Tunnels, Bridges, and Other Limited Access Highways*, with five amendments. No appeals were filed on this standard. Issuance date of August 12, 2022, and an effective date of September 1, 2022.

| 22-8-9-a | CAM 502-2: | Accept Public Comment No. 12. This motion (CAM 502-2) passed vote of the participating Membership during the NFPA Technical Meeting and passed the ballot of the responsible Technical Committee. The Council voted to issue the amendment.

| 22-8-9-b | CAM 502-4: | Accept an Identifiable Part of Public Comment No. 13. This motion (CAM 502-4) passed vote of the participating Membership during the NFPA Technical Meeting and passed the ballot of the responsible Technical Committee. The Council voted to issue the amendment.

| 22-8-9-c | CAM 502-5: | Accept Public Comment No. 17. This motion (CAM 502-5) passed vote of the participating Membership during the NFPA Technical Meeting and passed the ballot of the responsible Technical Committee. The Council voted to issue the amendment.

| 22-8-9-d | CAM 502-7: | Accept Public Comment No. 18. This motion (CAM 502-7) passed vote of the participating Membership during the NFPA Technical Meeting and passed the ballot of the responsible Technical Committee. The Council voted to issue the amendment.

| 22-8-9-e | CAM 502-9: | Accept an Identifiable Part of Public Comment No. 13. This motion (CAM 502-9) passed vote of the participating Membership during the NFPA Technical Meeting and passed the ballot of the responsible Technical Committee. The Council voted to issue the amendment.

| 22-8-10 | NFPA 855 | The Council voted to issue proposed Tentative Interim Amendment No. 1633 to replace current Figure 25.8.2.4(b) of the 2019 edition of NFPA 13, *Standard for the Installation of Sprinkler Systems*. The TIA achieved the necessary support of the Technical Committee on technical merit and emergency nature and the Correlating Committee on correlation when balloted prior to submission to the Standards Council.

| 22-8-11 | NFPA 13 | The Council voted to issue proposed Tentative Interim Amendment No. 1641 to revise Annex A.8.2.6.4.1 of the 2022 edition of NFPA 13, *Standard for the Installation of Sprinkler Systems*. The
<table>
<thead>
<tr>
<th>NFPA 13</th>
<th>TIA achieved the necessary support of the Technical Committee on technical merit and emergency nature and the Correlating Committee on correlation, when balloted prior to submission to the Standards Council.</th>
</tr>
</thead>
<tbody>
<tr>
<td>22-8-13 NFPA 30B</td>
<td>The Council voted to issue proposed Tentative Interim Amendment No. 1652 to revise 4.3.1 item (2) of the proposed 2023 edition of NFPA 30B, <em>Code for the Manufacture and Storage of Aerosol Products</em>. The TIA achieved the necessary support of the Technical Committee on technical merit and emergency nature, when balloted prior to submission to the Standards Council.</td>
</tr>
</tbody>
</table>
| 22-8-14 NFPA 70 | The Council voted to issue proposed Tentative Interim Amendment No. 1632 to add a new item “e” to paragraph 700.10(B)(5) of the 2017 and 2020 editions of NFPA 70®, *National Electrical Code*®. The TIA achieved the necessary support of the Code Making Panel on technical merit and emergency nature and the Correlating Committee on correlation, when balloted prior to submission to the Standards Council.  
Council members John Kovacik and Rodger Reiswig recused themselves from deliberations and vote on the issuance of this Tentative Interim Amendment. |
| 22-8-15 NFPA 70 | The Council voted to not issue proposed Tentative Interim Amendment No. 1649 to revise paragraph 314.29(A) of the proposed 2023 edition of NFPA 70®, *National Electrical Code*®. The TIA failed to achieve the necessary support of the Code Making Panel on both technical merit and emergency nature, but passed the Correlating Committee on correlation, when balloted prior to submission to the Standards Council.  
Council members John Kovacik and Rodger Reiswig recused themselves from deliberations and vote on the issuance of this Tentative Interim Amendment. |
| 22-8-16 NFPA 70 | The Council voted to issue proposed Tentative Interim Amendment No. 1653 to revise paragraph 2108(F) of the 2020 edition of NFPA 70®, *National Electrical Code*®. The TIA failed to achieve the necessary support of the Code Making Panel on technical merit, but achieved the necessary support on emergency nature, and passed the Correlating Committee on correlation, when balloted prior to submission to the Standards Council.  
Council members John Kovacik, Rodger Reiswig and Catherine Stashak recused themselves from deliberations and vote on this Tentative Interim Amendment and associated appeal. |
| 22-8-16-d 22-8-16-e 22-8-16-f | **APPEAL DECISION**  
**D#22-12** At its meeting of August 10-12, 2022, the Standards Council considered appeals from three appellants: William Koffel representing the Leading Builders of America (LBA), Mary Koban, Air-Conditioning, Heating, and Refrigeration Institute (AHRI), and David Bixby, Air Conditioning Contractors of America (ACCA). These appellants request that the Standards Council overturn the ballot results and recommendations of Code-Making Panel 2 (“CMP 2”) and the NEC Correlating Committee (“CC”). If upheld, the result of the Council’s action would be to issue TIA Nos. 1653 and 1654 and not issue TIA Nos. 1656 and 1657 on the 2020 and 2023 Editions of NFPA 70. Specifically, the appeals request that the Standards Council issue TIA Nos. 1653 and 1654 which revise section 210.8(F) and Exception No. 2(new).  
As background, the text of §210.8(F), and the subject of ground fault circuit interruptor protection for outdoor HVAC equipment, has been at the heart of multiple processed TIAs, as well as extensive Task Group work since issuance of the 2020 Edition of NFPA 70. During that period, Council reviewed 5 TIAs.  

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7 TIA No. 1593, issued by Council at its August 2021 meeting, was one of four TIAs presented to the Council on section 210.8(F) for action at that meeting (three of which failed to achieve the necessary support of both CMP 2 and the CC). Additionally, a fifth TIA was processed and presented to Council at its December 2020 meeting, (TIA No. 1529 which failed to achieve the necessary support of the CC by one vote on emergency nature).
seeking to amend §210.8(F) within the 2020 Edition of the NEC: only one of which, TIA No. 1593, passed ballot. When TIA No. 1593 came before Council for issuance at its August 2021 meeting, it was the subject of appeal by multiple parties. While the Council did issue TIA No. 1593, in part of its decision on that appeal, the Council directed the formation of a Task Group of affected stakeholders “to evaluate and reach an informed, technically substantiated resolution to the issues raised [in the appeal].” The Council also encouraged the Task Group to submit a TIA, if appropriate.

In accordance with that direction, a Task Group was formed and included members from the HVAC industry, home builders industry, U.S. Consumer Product Safety Commission, GFCI manufacturers, as well as some members of CMP 2 and the NEC correlating committee. This Task Group developed TIA Nos. 1653 and 1654, which were supported by a simple majority of the Task Group members and submitted with Task Group approval by appellant William Koffel for processing. A minority of the Task Group members, however, favored different language and submitted TIA Nos. 1656 and 1657 for processing simultaneously: providing optional language for the responsible CMP’s consideration.

The four TIAs subject to this appeal were balloted by CMP 2 and the CC in accordance with the Regulations Governing the Development of NFPA Standards (Regs) to determine whether the necessary three-fourths majority support was achieved on technical merit, emergency nature, and correlation for recommendation of issuance. Two of the TIAs—TIA Nos. 1653 and 1656—were processed on the 2020 Edition, while the two remaining TIAs at issue—TIA Nos. 1654 and 1657—were processed concurrently on the 2023 Edition. TIA Nos. 1653 and 1654 each failed to achieve the necessary support of CMP 2 on technical merit, but achieved the necessary support on emergency nature, while achieving support of the CC on correlation. TIA Nos. 1656 and 1657 each achieved the necessary support of CMP 2 on both technical merit and emergency nature, as well as achieving support of the CC on correlation.

The text of TIA Nos. 1653 and 1654 subject to this appeal did not gain sufficient ¾ CMP support within the standards development process for inclusion in the 2020 and 2023 Editions of NFPA 70, respectively. On appeal, the Council accords great respect and deference to the NFPA standards development process. In conducting its review, the Council will overturn the results of that process only where a clear and substantial basis for doing so is demonstrated.

In reviewing the full record, the Appellants renewed some of the concerns Council has heard in the prior appeal, including the practical impact of yet unresolved interoperability issues between GFCI and HVAC equipment. Additionally, the ballots on TIA Nos. 1653 and 1654 reflect that CMP 2 agreed that “emergency nature” is met, however, each ballot failed on technical merit by a single vote. The Council found that the Task Group accomplished its charge, which was to bring diverse and materially affected interests together to seek resolution of the technical concerns presented in the appeal on a narrow issue within CMP 2’s scope. In the present case of dueling TIAs, and in light of the Task Group’s work, the Council found the Task Group’s TIAs to reflect the closest point of agreement to address this controversial matter.

The text of TIA Nos. 1653 and 1654 subject to this appeal did not gain sufficient ¾ CMP support within the standards development process for inclusion in the 2020 and 2023 Editions of NFPA 70, respectively. On appeal, the Council accords great respect and deference to the NFPA standards development process. In conducting its review, the Council will overturn the results of that process only where a clear and substantial basis for doing so is demonstrated.

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Appellants raised the concern that as of the date of the hearing, there was no HVAC industry representation on CMP 2, but simultaneously acknowledged the difficulty to find interested parties to participate given the broad scope of CMP 2. That said, the Council recognized that by expanding GFCI

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8 During the hearing, it was noted by Appellants and acknowledged by Council that although TIA Nos. 1653 and 1654 did not achieve support of ¾ of the voting CMP members as required for recommendation of issuance for a TIA, both TIAs did receive support of more than 2/3 of the voting CMP members which would have been sufficient to pass the text had it been completed in time for consideration as a Public Comment at Second Draft.

9 Although CMP 2 did not have representation of the HVAC industry at the time of processing the TIAs at issue nor at the time of the hearing, an application was pending for Council action at the August meeting. As part of the membership actions of Council during the August meeting, the individual applicant representing a single HVAC manufacturer was appointed to CMP 2.
protection requirements, Article 210 now impacts parties, such as the HVAC industry, in new ways. The Council agreed with the Appellant that it is therefore important to expand CMP 2 membership to add additional parties who may now be directly impacted by Article 210. Council encourages the participants and other members of the HVAC industry to apply for membership on CMP 2. Also, Council directs NFPA staff to call for additional members to CMP 2 in other interest classifications as well. (See D#22-10 for a similar direction regarding a call for members on CMP 2).

The Council has reviewed the entire record concerning this matter and has considered all the arguments put forth in this appeal. In the view of the Council, this appeal does present a clear and substantial basis upon which to overturn the results yielded by the NFPA standards development process. Accordingly, the Council has voted to uphold the appeal. The effect of this action is that the NFPA 70, *National Electrical Code* (2020 and 2023 editions) will include the text of TIA Nos. 1653 and 1654, rather than the text of TIA Nos. 1656 and 1657.

Council Members John Kovacik and Rodger Reiswig recused themselves from the deliberations and vote on the appeal.

Council Members Michael Johnston and Jack Poole were not in attendance during the August 2022 meeting and therefore did not participate in the deliberations and vote on the appeal.

<table>
<thead>
<tr>
<th>Date</th>
<th>NFPA 70</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>22-8-17</td>
<td>The Council voted to issue proposed Tentative Interim Amendment No. 1654 to revise paragraph 210.8(F) of the proposed 2023 edition of NFPA 70, <em>National Electrical Code</em>®. The TIA achieved the necessary support of the Code Making Panel on technical merit and emergency nature, and passed the Correlating Committee on correlation, when balloted prior to submission to the Standards Council. Council members John Kovacik, Rodger Reiswig and Catherine Stashak recused themselves from deliberations and vote on this Tentative Interim Amendment and associated appeal.</td>
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<tr>
<td>22-8-17-d</td>
<td>See Related Council Decision D#22-12</td>
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<tr>
<td>22-8-17-e</td>
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<tr>
<td>22-8-17-f</td>
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<tr>
<td>APPEAL DECISION</td>
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<tr>
<td>22-8-18</td>
<td>The Council voted to issue proposed Tentative Interim Amendment No. 1655 to revise paragraph 215.15 of the proposed 2023 edition of NFPA 70, <em>National Electrical Code</em>®. The TIA achieved the necessary support of the Code Making Panel on technical merit and emergency nature and the Correlating Committee on correlation, when balloted prior to submission to the Standards Council. Council members John Kovacik and Rodger Reiswig recused themselves from deliberations and vote on the issuance of this Tentative Interim Amendment.</td>
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<tr>
<td>22-8-19</td>
<td>The Council voted to not issue proposed Tentative Interim Amendment No. 1656 to revise paragraph 210.8(F) of the 2020 edition of NFPA 70, <em>National Electrical Code</em>®. The TIA achieved the necessary support of the Code Making Panel on technical merit and emergency nature and the Correlating Committee on correlation, when balloted prior to submission to the Standards Council. Council members John Kovacik, Rodger Reiswig and Catherine Stashak recused themselves from deliberations and vote on this Tentative Interim Amendment and associated appeal.</td>
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<tr>
<td>22-8-19-d</td>
<td>See Related Council Decision D#22-12</td>
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<td>22-8-19-e</td>
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<td>Date</td>
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<td>22-8-20</td>
<td>APPEAL DECISION</td>
<td>The Council voted to not issue proposed Tentative Interim Amendment No. 1657 to revise paragraph 210.8(F) of the proposed 2023 edition of NFPA 70, <em>National Electrical Code</em>®. The TIA achieved the necessary support of the Code Making Panel on technical merit and emergency nature and the Correlating Committee on correlation, when balloted prior to submission to the Standards Council. Council members John Kovacik, Rodger Reiswig and Catherine Stashak recused themselves from deliberations and vote on this Tentative Interim Amendment and associated appeal.</td>
</tr>
<tr>
<td>22-8-21</td>
<td>APPEAL DECISION</td>
<td>The Council voted to not issue proposed Tentative Interim Amendment No. 1658 to revise paragraph 555.13 of the proposed 2023 edition of NFPA 70, <em>National Electrical Code</em>®. The TIA failed to achieve the necessary support of the Code Making Panel on technical merit, but achieved the necessary support on emergency nature, and passed the Correlating Committee on correlation, when balloted prior to submission to the Standards Council. Council members John Kovacik and Rodger Reiswig recused themselves from deliberations and vote on the issuance of this Tentative Interim Amendment.</td>
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<tr>
<td>22-8-22</td>
<td>APPEAL DECISION</td>
<td>The Council voted to issue proposed Tentative Interim Amendment No. 1659 to revise paragraph 555.30 of the proposed 2023 edition of NFPA 70, <em>National Electrical Code</em>®. The TIA achieved the necessary support of the Code Making Panel on technical merit and emergency nature and the Correlating Committee on correlation, when balloted prior to submission to the Standards Council. Council members John Kovacik and Rodger Reiswig recused themselves from deliberations and vote on the issuance of this Tentative Interim Amendment.</td>
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<tr>
<td>22-8-23</td>
<td>APPEAL DECISION</td>
<td>The Council voted to issue proposed Tentative Interim Amendment No. 1660 to revise paragraph 555.35 of the proposed 2023 edition of NFPA 70, <em>National Electrical Code</em>®. The TIA achieved the necessary support of the Code Making Panel on technical merit and emergency nature and the Correlating Committee on correlation, when balloted prior to submission to the Standards Council. Council members John Kovacik and Rodger Reiswig recused themselves from deliberations and vote on the issuance of this Tentative Interim Amendment.</td>
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<tr>
<td>D#22-13</td>
<td>APPEAL DECISION</td>
<td>At its meeting of August 10-12, 2022, the Standards Council considered an appeal from Thomas Kilpatrick of Kilpatrick Law Group LLC (on behalf of Travis Brewer and Lonnie Miller). The appellant requests that the Standards Council overturn the Code-Making Panel 17 (Panel 17) ballot results and issue TIA No. 1661 on the 2023 edition of NFPA 70®, <em>National Electrical Code</em>®. Specifically, the appeal requests that the Standards Council issue TIA No. 1661, which seeks to revise section 680.26(B)(2)(b).</td>
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</table>
As background, the Appellant submitted this TIA on behalf of his clients, who contend that the NEC requirements in Section 680.26(B) for reducing voltage gradient around the perimeter of a pool deck are insufficient to provide adequate protection. The TIA was balloted through Panel 17 and the NEC Correlating Committee (CC) in accordance with the Regulations Governing the Development of NFPA Standards (Regs) to determine whether the necessary three-fourths majority support was achieved on technical merit, emergency nature, and correlation for recommendation of issuance. The TIA failed to achieve the necessary support of Panel 17 on both technical merit and emergency nature, but did achieve the necessary support of the CC on correlation.

On appeal, the Council accords great respect and deference to the NFPA standards development process. In conducting its review, the Council will overturn the results of that process only where a clear and substantial basis for doing so is demonstrated.

There have been several cycles of technical debate over the minimum standard for reducing voltage gradients around the perimeter of a pool, which date back to the 2008 edition of the NEC. The Appellant also raises a concern about what should be considered a safe level of step or touch voltage (potential) in the swimming pool area, although proposed no changes to that effect in this TIA. These issues were the subject of a 2011 Fire Protection Research Foundation (FPRF) project to document the then-current knowledge on this subject and to identify gaps in knowledge. FPRF’s report pointed out the lack of available data and outlined next steps that could meaningfully develop the research based on the knowledge gaps. Through the end of the 2023 NEC revision cycle, the record reflected no further study by any party based on the specific gaps identified in the FPRF report.

The case studies and data presented as substantiation for this TIA and appeal were not submitted to Panel 17 during this revision cycle. Also, in a separate but related appeal on this issue (see SC Decision #22-3), other new, and additional data and studies have come forward since Panel 17 was balloted on the second draft. Council finds that this body of new and additional information requires timely analysis.

In connection with a SC Decision #22-3, the Council has directed the formation of a balanced Task Group to review the material provided by the Appellant and to review the other studies brought forward through the 2022 Technical Meeting and related appeal on this same issue; namely, the 2021 U.S. Coast Guard Report, the results of the latest EPRI report (which, Council understands was performed the week prior to August 2022 hearings), the case studies brought forward in connection with this TIA, and any other new and existing reports referenced on this topic. Council directs the Task Group to report the following by November 30, 2022 (in advance of the Council’s December 2022 meeting): (1) its findings based on this data; (2) its recommendations, if any, as to the minimum safety standard within the NEC for reducing voltage gradient in the perimeter of a pool; (3) if a change to Article 680 is recommended, whether this TIA No. 1661 would address the Task Group’s findings; and (4) any other findings or actions that the Task Group deems necessary based on its analysis.

In light of the pending formation and report from this newly directed Task Group, the Council will defer action on this appeal and TIA No. 1661 to its meeting on December 7-8, 2022. The effect of this decision is that, at this time, the NFPA 70, National Electrical Code will not include the text of TIA No. 1661.

Council Members John Kovacik and Rodger Reiswig themselves from the deliberations and vote on this appeal.

Council Members Michael Johnston and Jack Poole were not in attendance during the August 2022 meeting and therefore did not participate in the deliberations and vote on the appeal.

The Council voted to not issue proposed Tentative Interim Amendment No. 1668 to revise Section 210.70, 210.70 Informational Note(new) and 210.7(D)(new) of the proposed 2023 edition of NFPA 70,
National Electrical Code®. The TIA failed to achieve the necessary support of the Code Making Panel on technical merit, but achieved the necessary support on emergency nature, and passed the Correlating Committee on correlation, when balloted prior to submission to the Standards Council.

Council members John Kovacik and Rodger Reiswig recused themselves from deliberations and vote on the issuance of this Tentative Interim Amendment.

22-8-26
**NFPA 72**
The Council voted to issue proposed Tentative Interim Amendment No. 1643 to revise 29.11.3.4 item (4)(a), (4)(b), (5)(a) and (5)(b) of the 2022 edition of NFPA 72, National Fire Alarm Signaling Code®. The TIA achieved the necessary support of the Technical Committee on technical merit and emergency nature and the Correlating Committee on correlation, when balloted prior to submission to the Standards Council.

Council member Rodger Reiswig recused himself from deliberations and vote on the issuance of this Tentative Interim Amendment.

22-8-27
**NFPA 855**
The Council voted to not issue proposed Tentative Interim Amendment No. 1648 to add new paragraph 9.1.5.3.2 of the proposed 2023 edition of NFPA 855, Standard for the Installation of Stationary Energy Storage Systems. The TIA failed to achieve the necessary support of the Technical Committee on both technical merit and emergency nature, when balloted prior to submission to the Standards Council.

22-8-28
**NFPA 1710**
The Council voted to issue proposed Tentative Interim Amendment No. 1637 to revise paragraph 4.1.2.3.1 of the 2020 edition of NFPA 1710, Standards for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments. The TIA achieved the necessary support of the Technical Committee on technical merit and emergency nature, when balloted prior to submission to the Standards Council.

22-8-29
**NFPA 1851**
The Council voted to issue proposed Tentative Interim Amendment No. 1662 to revise section 7.3.7.2 of the 2020 edition of NFPA 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting. The TIA achieved the necessary support of the Technical Committee on technical merit and emergency nature, and the Correlating Committee on correlation, when balloted prior to submission to the Standards Council.

22-8-30
**NFPA 1851**
The Council voted to not issue proposed Tentative Interim Amendment No. 1663 to revise section 7.3.13.1 of the 2020 edition of NFPA 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting. The TIA failed to achieve the necessary support of the Technical Committee on technical merit and emergency nature, and failed the Correlating Committee on correlation, when balloted prior to submission to the Standards Council.

22-8-31
**NFPA 1851**
The Council voted to not issue proposed Tentative Interim Amendment No. 1664 to add a new item (8) to paragraph 7.3.13.2 of the 2020 edition of NFPA 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting. The TIA achieved the necessary support of the Technical Committee on technical merit and emergency nature, but failed to achieve the necessary support of the Correlating Committee on emergency nature, when balloted prior to submission to the Standards Council.

22-8-32
**NFPA 1977**
The Council voted to issue proposed Tentative Interim Amendment No. 1669 to revise Section 5.1.1.7 of the 2022 edition of NFPA 1977, Standard on Protective Clothing and Equipment for Wildland Fire Fighting and Urban Interface. The TIA achieved the necessary support of the Technical Committee on technical merit and emergency nature, and the Correlating Committee on correlation, when balloted prior to submission to the Standards Council.

22-8-33
**NFPA 1851**
The Council voted to not issue proposed Tentative Interim Amendment No. 1628 to revise Section 1.3.1.5, Table 5.2.3.1.2(a), Table 5.3.3.2(a), Table 5.4.3.2(a), 7.1.8.2 and Table 7.1.8.2 of the 2022
The Council voted to issue proposed Tentative Interim Amendment No. 1650 to revise Section 1.3.1.5, Table 5.2.3.1.2(a), Table 5.3.3.2(a), Table 5.4.3.2(a), 7.1.8.2 and Table 7.1.8.2 of the 2022 edition of NFPA 1990, *Standards for Protective Ensembles for Hazardous Materials and Emergency Medial Operations*. The TIA achieved the necessary support of the Technical Committee on technical merit and emergency nature, and the Correlating Committee on correlation, when balloted prior to submission to the Standards Council.

The Council voted to issue proposed Tentative Interim Amendment No. 1651 to revise Sections 14.1.9 and 4.1.10 of the 2022 edition of NFPA 1990, *Standards for Protective Ensembles for Hazardous Materials and Emergency Medial Operations*. The TIA achieved the necessary support of the Technical Committee on technical merit and emergency nature, and the Correlating Committee on correlation, when balloted prior to submission to the Standards Council.

The Council voted to approve the request of the Correlating Committee on Combustible Dusts to remove NFPA 91, *Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Particulate Solids* from the consolidated standard known as NFPA 660, *Standard for Combustible Dusts* (comprised of NFPA standards 61, 91, 484, 652, 654, 655, and 664) and to open NFPA 91 for Public Input with a closing date of June 1, 2023.

The Council voted to approve the requests to change standards’ respective revision schedules as follows:

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<tbody>
<tr>
<td>NFPA 409</td>
<td>2022</td>
<td>PI Closing: January 4, 2024</td>
</tr>
<tr>
<td>NFPA 415</td>
<td>2022</td>
<td>PI Closing: January 4, 2024</td>
</tr>
<tr>
<td>NFPA 423</td>
<td>2022</td>
<td>PI Closing: January 4, 2024</td>
</tr>
<tr>
<td>NFPA 1082</td>
<td>2023</td>
<td>PI Closing: January 4, 2024</td>
</tr>
<tr>
<td>NFPA 1850</td>
<td>New</td>
<td>PI Closing: June 1, 2023</td>
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The Council voted to approve the request of the Correlating Committee on Combustible Dusts to enter the draft of NFPA 660, *Standard for Combustible Dusts* into its initial revision cycle, with a Public Input closing date of January 5, 2023.

The Council voted to approve the request of the Technical Committee on Hanging and Bracing for Fire Suppression Systems to enter the draft of NFPA 200, *Standard for Hanging and Bracing of Fire Suppression Systems* into its initial revision cycle, with a Public Input closing date of June 1, 2023.
### GENERAL ITEMS

<table>
<thead>
<tr>
<th>22-8-40</th>
<th>The Council voted to approve the request of the Technical Committee on Spaceports to enter the draft of NFPA 461, <em>Standard for Fire Protection and Life Safety at Spaceport and Support Facilities</em> into its initial revision cycle, with a Public Input closing date of June 1, 2023.</th>
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### 22-8-41 | The Council reviewed Annual 2025, Fall 2025, Annual 2026, and Fall 2026 revision cycle schedules for publication and posting. |

**Dates of upcoming Council meetings:**

- **December 7-8, 2022**
  - Location to be determined

- **March 22-23, 2023**
  - Location to be determined

- **August 23-25, 2023**
  - Boston, Massachusetts

### 22-8-42 | The Council heard updates from the Council Secretary including requests for action upon two, time sensitive, items which follow that submitted for Council’s consideration after agenda had posted. |

#### 22-8-42-a | To determine support and interest in NFPA standards development addressing cybersecurity to protect fire protection systems from security breaches, the Council requests that NFPA publish announcements in NFPA News, ANSI Standards Action, and other relevant publications/sites. Staff is to report back to Council at the December 2022 Council meeting with responses received and recommendations for Council’s further consideration. |

#### 22-8-42-b | The Council voted to deny the request of Joseph Andre to process Tentative Interim Amendment (TIA) No. 1675 proposing revisions to Section 334.12 in the 2002-2020 editions of NFPA 70, National Electrical Code.  

Note: TIA No. 1675 is identical to the text proposed as Public Comment No. 2028 and pursued as CAM 70-63 on the 2023 edition of NFPA 70, National Electrical Code. CAM 70-63 achieved simple majority support of the participating membership vote at the 2022 Technical meeting, failed ballot of the responsible Code Making Panel, and passed ballot of the Correlating Committee. **See related Council Decision D#22-2**

Respectfully Submitted,  

*Dawn Michele Bellis*  
Dawn Michele Bellis,  
Secretary, Standards Council
MEMORANDUM

TO: NFPA Standards Council

CC: Greg Woyczynski, Association of Home Appliance Manufacturers (AHAM)

FROM: Dawn Michele Bellis, Secretary

DATE: 9 August 2022

SUBJECT: Dominance Claim Investigation: Information for Consideration

I. Background and ANSI Requirements

NFPA received a written appeal from Greg Woyczynski, on behalf of the Association of Home Appliance Manufacturers (“AHAM”) (Standards Council agenda as item 22-8-5-r), which includes a written claim of dominance as one of the reasons he seeks the Council to overturn the results of NFPA Membership vote at the June 2022 Technical Meeting and issue Certified Amending Motion 70-94 (CAM-70-94). CAM-70-94 is an amendment to Section 210.8(A) on the National Electrical Code® (“NEC®”) and relates to ground fault circuit interrupter protection for certain receptacles in dwelling units.

As an American National Standard (ANS), the NEC must be developed in accordance with the Regulations Governing the Development of NFPA Standards (the “Regs”), which are accredited by American National Standards Institute (ANSI) to meet ANSI’s Essential Requirements for due process (the “Essential Requirements”). One of the Essential Requirements is a lack of dominance within the standards development process. Specifically, Section 1.2 of the ANSI Essential Requirements (2022 edition) states:

The standards development process shall not be dominated by a single interest category, individual or organization. Dominance means a position or exercise of dominant authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints.

Council has received AHAM’s written appeal and has granted AHAM a hearing on its appeal, which will give Council an opportunity to further investigate AHAM’s claim of dominance related to CAM 70-94. The purpose of this memo is to provide information about the recent NEC standard development process so that Council can fully review considerations that may be relevant to its assessment of this dominance claim.
II. ANSI Considerations in Reviewing a Dominance Claim

Analyzing the existence of dominance is different from determining whether an ANS consensus body meets the numeric requirements of balance for interest categories. The Essential Requirements have no specific test defined for dominance. Instead, ANSI’s “Guidance on ‘Lack of Dominance’ within the American National Standards (ANS)” offers suggested considerations that a standards developer may review in assessing whether an attempt is being made to exclude the fair and equitable consideration of other viewpoints. For reference, ANSI Essential Requirements and the “Guidance on Lack of Dominance” are hyperlinked and publicly available on the ANSI website.

ANSI Guidance states that in assessing whether an attempt is being made to exclude the fair and equitable consideration of other viewpoints, a developer may consider whether one or more person(s)/organizations:
- are deliberately acting in a way which precludes others from having the opportunity to express their viewpoints;
- submits comments that are intended to or always cause a new vote;
- take actions to “control the agenda, the meeting schedule, ballot issuance, membership on the consensus body and/or related work groups”

ANSI guidance also suggests that some ways to reduce the likelihood of dominance may include:
- a knowledgeable Chair in place to ensure fairness and due process;
- a clear, public meeting agenda issued and available in advance of a meeting discussion;
- in relation to meeting discussion, consider timekeeper/ time clock;
- be mindful of interest categories represented on the consensus body versus those represented at a meeting to ensure an opportunity for all viewpoints to be heard and considered

In the context of these considerations offered by ANSI, please find a summary of the NEC standards development process for the 2023 edition to date. The particular section of the NEC that AHAM seeks to amend is 210.8(A), for which Panel 2 is responsible. The included summary therefore focuses in part on Panel 2’s conduct during the process, as well as the participation related to Section 210.8(A).

III. Panel 2 Membership during the 2023 revision cycle (2020-present)

At the time of First Draft ballot, Panel 2 included 15 principal members, representing 8 distinct NFPA classifications. Specifically, there were: 2 Enforcer principals; 3 Installer/Maintainer principals; 1 Labor principal; 3 Manufacturer principals; 1 Special Expert principal; 1 Research and Testing principal; 3 User principals; and 1 Utility principal.

The following is a breakdown of the classifications and representation of the voting principals on the Panel at the First Draft ballot:
- 3 Manufacturers – 20% (National Electrical Manufacturers Association (NEMA), Schneider Electric and Leviton Manufacturing Company, Inc.)
- 1 Labor -6% (International Brotherhood of Electrical Workers)
At the time of Second Draft ballot, Panel 2 included 15 principal members, representing 8 distinct NFPA classifications. Specifically, there were: 2 Enforcer principals; 3 Installer/Maintainer principals; 1 Labor principal; 3 Manufacturer principals; 1 Special Expert principal; 1 Research and Testing principal; 3 User principals; and 1 Utility principal.

The following is a breakdown of the classifications and representation of the voting principals on the Panel at the Second Draft ballot:

- **3 Manufacturers – 20%** (National Electrical Manufacturers Association (NEMA), Schneider Electric and Leviton Manufacturing Company, Inc.)
- **1 Labor -6%** (International Brotherhood of Electrical Workers)
- **3 Installer/Maintainers- 20%** (Independent Electrical Contractors (IEC), National Electrical Contractors Association (NECA) and Faith Technologies Electrical Contractor)
- **2 Enforcers-13%** (International Association of Electrical Inspectors (IAEI) and New York City Department of Buildings)
- **1 Research/Testing -6%** (Underwriters Laboratory (UL))
- **1 Special Expert-6%** (University of Houston Clear Lake)
- **3 Users-20%** (American Chemistry Council (ACC), IEE-IAS/PES, National Association of Home Builders (NAHB));
- **1 Utility -6%** (Electric Light & Power Group)
- US Consumer Product Safety Commission was also on the panel as a nonvoting member

Currently, Panel 2 includes 16 principal members, representing 8 distinct NFPA classifications. Specifically, there are: 2 Enforcer principals; 3 Installer/Maintainer principals; 1 Labor principal; 4 Manufacturer principals; 1 Special Expert principal; 1 Research and Testing principal; 3 User principals; and 1 Utility principal. Largely the panel membership stayed the same throughout the 2023 NEC revision process, except for the addition of AHAM to the panel in December 2021 and some changes to the individuals representing organizations.

The following is a breakdown of the classifications and representation of the voting principals on the Panel:

- **4 Manufacturers – 26.6%** (Association of Home Appliance Manufacturers (AHAM), National Electrical Manufacturers Association (NEMA), Schneider Electric and Leviton Manufacturing Company, Inc.)
- **1 Labor -6%** (International Brotherhood of Electrical Workers)
- **3 Installer/Maintainers- 20%** (Independent Electrical Contractors (IEC), National Electrical Contractors Association (NECA) and Faith Technologies Electrical Contractor)
- **2 Enforcers-13%** (International Association of Electrical Inspectors (IAEI) and New York City Department of Buildings)
- **1 Research/Testing -6%** (Underwriters Laboratory (UL))
- **1 Special Expert-6%** (University of Houston Clear Lake)
- **3 Users-20%** (American Chemistry Council (ACC), IEE-IAS/PES, National Association of Home Builders (NAHB));
- **1 Utility -6%** (Electric Light & Power Group)
- US Consumer Product Safety Commission is also on the panel as a nonvoting member

<table>
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<tr>
<th>Full Name</th>
<th>Principal</th>
<th>Classification</th>
<th>Org Representative?</th>
<th>Directed Vote?</th>
<th>Employer</th>
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<tr>
<td>David G. Humphrey</td>
<td>Chair</td>
<td>E</td>
<td>International Association of Electrical Inspectors (IAEI)</td>
<td>Directed Vote</td>
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<td>Mathier Abbassi</td>
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<td>David W. Johnson</td>
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<td>CenTex IEC</td>
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<td>John McCamish</td>
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<td>NECA IBEW Electrical Training Center</td>
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<td>Greg Woyczynski</td>
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<td>N/A</td>
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<td>Steve Campolo</td>
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<td>Frederick P. Reyes</td>
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<td>UL, LLC. (UL)</td>
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<tr>
<td>Thomas L. Harman</td>
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<td>N/A</td>
<td>N/A</td>
<td>University of Houston-Clear Lake</td>
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<tr>
<td>Charles L. Boynton</td>
<td>Principal</td>
<td>U</td>
<td>American Chemistry Council (ACC)</td>
<td>Directed Vote</td>
<td>Dow/The DuPont Company, Inc.</td>
</tr>
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</table>
Greg Woyczynski from AHAM submitted applications for membership on CMP 2 and CMP 17 which were received April 19, 2021. When an applicant is representing a third party, NFPA’s Standards Development process requires that third party to confirm its agreement that the applicant is authorized to represent it on the panel. AHAM authorized Mr. Woyczynski’s representation on CMP 17 as an alternate on March 31, 2021, however, AHAM did not provide authorization for Mr. Woyczynski to represent it on Panel 2 as a voting principal until June 17, 2021. The deadline was June 10, 2021 for completed membership applications to be considered at the Standards Council’s August 2021 meeting. Membership application deadlines are in effect before every Council meeting to ensure sufficient time for NFPA staff and responsible Panel/Committee Chair recommendations on each application. Mr. Woyczynski was appointed to CMP 17 as alternate at the August 2021 Council meeting and appointed to CMP 2 as principal during Council’s December 2021 meeting. Mr. Woyczynski received email notification of his appointment to CMP 2 on December 14, 2021. Second Draft ballots for CMP 2 were sent December 7, 2021 for action; therefore, anyone appointed at the December Council was not included in the Second Draft balloting for the NEC.

IV. Summary of Panel 2’s NEC Standards Development Activity during the 2023 edition revision cycle

The Public Input period opened on November 1, 2020 and closed on September 10, 2021.

- There were 331 PIs received by Panel 2 and 22 of the PIs were on this Section.
  - PIs came from a variety of diverse sources, including, but not limited to: a master electrician, a person representing themselves, the National Electrical Manufacturers Association (NEMA), the International Association of Electrical Inspectors (IAEI), Schneider Electric, the State of Minnesota Department of Labor and Industry and the City of Janesville, Wisconsin;
  - The PIs on this Section 210.8(A) sought to address a range of technical matters such as: use of GFCI protection to mitigate shock hazards associated with proximity to water/plumbing fixtures, shock hazards in basement areas, as well as shock hazards associated with the use of appliances or appliance cords, etc.;
  - Multiple Public Inputs were the basis for the First Revision created by CMP 2 at the First Draft meeting;
  - AHAM submitted no PIs on this Section. AHAM submitted 1 Public Input for consideration by CMP 11 during the first draft stage of development. (Public Input 1919 (440.65 – Panel 11) submitted by Matt Williams, AHAM). This PI was on the topic of arc fault circuit interrupter (AFCI) protection and air conditioners. Panel 11 did not make a revision based on this PI, but did resolve the proposal with a paragraph-long response.
- The First Draft Meeting was January 11-16, 2021 and held remotely/electronically via Microsoft Teams. Notice of the meeting was publicly posted on NFPA’s website by
NFPA’s Staff on September 22, 2020. Alerts were also emailed to any person who was signed up to receive them. See attached for meeting notice (Attachment 1), which remains available on NFPA’s website.

- The First Draft Meeting Agenda was posted publicly on December 19, 2020, in advance of the meeting. The Agenda was developed by NFPA staff using the standard agenda template. See attached for public agenda (Attachment 2).
- The First Draft Meeting Minutes were posted publicly and show that Panel 2 heard presentations from 7 different guests. Guest presentations included individuals who had opposing views on AFCI expansion, receptacles, a guest speaking on a PI, among others. The minutes reflect that equal time was offered to all guests addressing the panel. See Attachment 3.
  - The minutes also reflect that 39 guests attended the meeting
  - The First Draft minutes show that Panel 2 acted on all 331 PIs and made 83 first revisions
- Panel 2 made a revision to 210.8(A) at First Draft, which ultimately failed the First Draft ballot and therefore became a “Committee Input” under NFPA’s Regulations Governing the Development of NFPA Standards (the Regs). This revision related to the CAM at issue in AHAM’s appeal. Specifically, the failed First Revision was:

  **(A) Dwelling Units.**
  All 125-volt through 250-volt receptacles installed in the locations specified in 210.8(A)(1) through (A)(11) and supplied by single-phase branch circuits rated 150 volts or less to ground shall have ground-fault circuit-interrupter protection for personnel be provided with GFCI protection.

1. Bathrooms
2. Garages and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas, and areas of similar use
3. Outdoors
4. Crawl spaces — at or below grade level
5. Basements

   Informational Note: See 760.41(B) and 760.121(B) for power supply requirements for fire alarm systems.
   Receptacles installed under the exception to 210.8(A)(5) shall not be considered as meeting the requirements of 210.52(G).
6. Kitchens — where the receptacles are installed to serve the countertop surfaces
7. Sinks — where receptacles are installed within 1.8 m (6 ft) from the top inside edge of the bowl of the sink
8. Boathouses
9. Bathubs or shower stalls — where receptacles are installed within 1.8 m (6 ft) of the outside edge of the bathtub or shower stall
10. Laundry areas
11. Indoor damp and wet locations
Exception No. 1: Receptacles that are not readily accessible and are supplied by a branch circuit dedicated to electric snow-melting, deicing, or pipeline and vessel heating equipment shall be permitted to be installed in accordance with 426.28 or 427.22, as applicable.

Exception No. 2: A receptacle supplying only a permanently installed fire alarm or burglar alarm security system shall not be required to have ground-fault circuit-interrupter (GFCI) protection.

Exception No. 3: Listed locking support and mounting receptacles utilized weight-supporting ceiling receptacles (WSCR) used in combination with compatible weight-supporting attachment fittings (WSAF) installed for the purpose of serving a ceiling luminaire or ceiling fan shall not be required to be ground-fault circuit-interrupter (GFCI) protected. If a general-purpose convenience receptacle is integral to the ceiling luminaire or ceiling fan, GFCI protection shall be provided.

Exception No. 4: All factory-installed receptacle outlets mounted internal to bathroom exhaust fans shall not require GFCI protection unless required by the installation instructions or listing.

The Committee’s statement was:

Committee Statement: This change recognizes the fact that the residential home provides many areas of vulnerability with regard to shock hazards.

There is a broad distribution of incidents over many products and product categories. National consumer product related electrocution estimates show that based on data collected by the CPSC for a 10-year period the US loses an average of 49 consumer lives every year. Lives are lost each year not just because of proximity to water but due to use of appliances, extension cords and other items that can be plugged into any receptacle outlet within a home. Outside of receptacle outlet examples, lighting examples of loss of life due to shock are also a statistic.

Exception No. 1 is modified to address the fact that the list of areas is no longer present.

Exception No. 2 for permanently installed fire alarm or security systems was expanded to any receptacle, regardless of location as this equipment can be found in more locations than the basement. The informational note was deleted as it is not necessary. In addition “burglar alarm” was replaced with “security” as security system is the proper terminology currently used.

Exception No. 3 changes add terminology for weight supporting ceiling receptacles and weight supporting attachment fittings. In addition, damp and wet locations are now included in the list of those areas not requiring GFCI protection when these devices are used as per their listing. Note to the correlating committee: The addition of the WSAF and WSCR terms are contingent upon the success of these added new terms not under the purview of CMP 2. If these definitions are not accepted the discrepancy should be reconciled with this first revision.

A new exception No. 4 was added to provide clarity regarding factory installed receptacles internal to exhaust fans while directing the user to follow installation instructions. This receptacle located internal to the exhaust fan is not meant for public use as it is dedicated for the exhaust fan. In addition, this receptacle would
not be required to have GFCI protection as per 90.7 due to the fact this is internal to the equipment.

- After the First Draft Meeting, on March 15, 2021, Panel 2 was balloted on the proposed First Draft. The ballot closed on March 29, 2021, and was circulated on March 30, 2021 with a closing date of April 6, 2021. The First Revision on 210.8(A) failed CMP 2 ballot.
- At the time of balloting, there were 15 members on CMP 2.
  - 8 voted “affirmative all” for all First Revisions;
  - 1 voted affirmative with comment on 210.8(A);
  - 6 voted against the revision proposed on 210.8(A).
- Specifically, the First Draft Ballot comments on 210.8(A) were as follows:

**Affirmative with Comment**

Cook, Mark Daniel (Installer/Maintainer classification)

- This will force installations of two circuits for dwellings. Lighting and receptacles. If both or on the same circuit and the GFCI trips it will leave the occupant potentially in the dark creating additional unseen hazards. Clarity should be given.

**Negative with Comment**

Abbassi, Mathher (Enforcer classification)

- I can't identify the added safety in making all circuits in a dwelling GFCI protected. There is no substantiation for the unnecessary expense to try to address a hazard that doesn't exist.

Boynton, Charles L. (User classification)

- Insufficient technical data to support expansion of GFCI's to all areas of the home. Expansion in these areas without justification, may limit adoption of certain parts of NEC in some states.

Humphrey, David G. (Enforcer classification)

- The expansion of GFCI to the whole house deviates significantly from the incremental approach to expansion that has been in place for many years. Without additional substantiation this FR could face significant opposition at the local and state levels.

Lujan, Cesar (User classification)

- No technical justification. Incorrect cost statement.

Neubauer, Fred (Installer/Maintainer classification)

- Insufficient substantiation has been provided that would now require GFCI protection of receptacles in all locations of a dwelling. GFCI protection is generally required in wet and damp locations which is what should be the primary requirement of when GFCI protection should be required. Adding this excessive requirement will add to the list of States that are not adopting the NEC in its entirety or in part.

Pavese, Christopher J. (Utility classification)

- Lack substantiation
Correlating Committee Note No. 113 provided the following information for CMP 2 to consider at Second Draft on Section 210.8(A): “The Correlating Committee notes that Exception No. 1 is a permissive exception and shall be located after the mandatory exceptions in accordance with NEC Style Manual 2.6.1. In addition, it is noted that Exception No. 2 does not correlate with the language in 760.41(B) and 760.121. These sections don't permit GFCI protection for these circuits.”

- The First Draft as balloted by the Panel was published on June 28, 2021. The Public Comment period opened on June 28, 2021 and closed on August 19, 2021.
- During the Public Comment period, CMP 2 received 155 Public Comments (“PCs”) and 9 of the PCs were on Section 210.8(A).
  - Public Comments were received from International Association of Electrical Inspectors (IAEI), Schneider Electric, National Electrical Manufacturers Association (NEMA), an individual representing himself, American Circuit Breakers Manufacturers Association (ACBMA), ChargePoint Inc, Association of Home Appliance Manufacturers (AHAM), Arcadis U.S. Inc., and the correlating note from the Correlating Committee.
  - AHAM submitted 2 Public Comments for consideration of the CMP during the second draft stage of development. (Public Comments No. 2201 (re: 210.8(A)) and No. 2204 (re: 210.12(B)) submitted by Matt Williams, AHAM).
- AHAM’s PC on 210.8(A) was as follows:

  **(A) Dwelling Units.**
  All 125-volt through 250-volt receptacles installed in the locations specified in 210.8(A)(1) through (A)(11) and supplied by single-phase branch circuits rated 150 volts or less to ground shall have ground-fault circuit-interrupter protection for personnel.
  1. Bathrooms
  2. Garages and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas, and areas of similar use
  3. Outdoors
  4. Crawl spaces — at or below grade level
  5. Basements
     Informational Note: See 760.41(B) and 760.121(B) for power supply requirements for fire alarm systems. Receptacles installed under the exception to 210.8(A)(5) shall not be considered as meeting the requirements of 210.52(G).
  6. Kitchens — where the receptacles are installed to serve the countertop surfaces
  7. Sinks — where receptacles are installed within 1.8 m (6 ft) from the top inside edge of the bowl of the sink
  8. Boathouses
  9. Bathtubs or shower stalls — where receptacles are installed within 1.8 m (6 ft) of the outside edge of the bathtub or shower stall
  10. Laundry areas
11. Indoor damp and wet locations

Exception No. 1: Receptacles that are not readily accessible and are supplied by a branch circuit dedicated to electric snow-melting, deicing, or pipeline and vessel heating equipment shall be permitted to be installed in accordance with 426.28 or 427.22, as applicable.

Exception No. 2: A receptacle supplying only a permanently installed fire alarm or burglar alarm system shall not be required to have ground-fault circuit-interrupter protection.

Exception No. 3: Listed locking support and mounting receptacles utilized in combination with compatible attachment fittings installed for the purpose of serving a ceiling luminaire or ceiling fan shall not be required to be ground-fault circuit-interrupter protected. If a general-purpose convenience receptacle is integral to the ceiling luminaire or ceiling fan, GFCI protection shall be provided.

AHAM is submitting public comments on NEC 2023.

On behalf of the Association of Home Appliance Manufacturers (AHAM), I would like to provide our comments on 2023 NEC. AHAM continues to be concerned about NFPA’s specifying product level requirements that are beyond the listing requirements yet is not doing anything to assure that the misalignment is addressed.

AHAM represents manufacturers of major, portable and floor care home appliances, and suppliers to the industry. AHAM’s membership includes over 150 companies throughout the world. AHAM members employ tens of thousands of people and produce more than 95% of the household appliances shipped for sale. The appliance industry directly employs over 377,000 workers in the U.S. and AHAM members produce more than 95% of the household appliances shipped for sale domestically. The industry’s total economic impact exceeds $198 billion. The home appliance industry, through its products and innovation, is essential to consumer lifestyle, health, safety and convenience. Through its technology, employees and productivity, the industry contributes significantly to jobs and economic security. Home appliances also are a success story in terms of energy efficiency and environmental impact as new appliances often represent the most effective choice a consumer can make to reduce home energy use and costs.

AHAM supports NFPA and the efforts to have a US National Electric Code. AHAM is a member of CMP-17 and has applied for membership of CMP-2. AHAM is concerned that NFPA continues to establish requirements for AFCIs and GFCIs when there are known nuisance tripping issues between the devices and other products.

- The addition of the GFCI requirement on 240 volt circuits has created a product requirement for HVAC equipment as noted in TIA 1564 that is beyond the listing requirements for the HVAC equipment. This is similar to the issues AHAM brought up in TIA’s 1537 and 1563. A transition period was not provided, thus multiple states have resorted to amending the 2020 NEC, removing or delaying the recent changes. The TIA requests from both AHAM and AHRI was to provide short term relief from incompatibility tripping of mandated GFCI receptacles, while robust technological solutions are developed and deployed by manufacturers. This extension of the effectivity date on GFCI clauses has been a common theme of TIA requests in the last 12 months. NFPA needs to look at their effectivity date setting process. NFPA is not talking, not listening, nor proactively working with parallel SDOs before implementing their own product requirement that is beyond the product listing requirement. AHAM recommends NFPA review processes at other standards development organizations, specifically how effectivity dates are set and the subsequent communications to announce them.
CMP 2’s response to AHAM was:

Committee Statement

Committee Action: Rejected

Resolution: The public comment does not meet the requirements of Section 4.4.4.3(c) of the Regulations Governing the Development of NFPA Standards, as it does not include proposed text.

- The Second Draft Meeting was held remotely over Microsoft Teams on October 18-21, 2021.
- The Second draft meeting notice was published on June 29, 2021 and the agenda was posted on October 1, 2021. The agenda was developed by NFPA staff using a standard agenda template (See Attachment 4).
- Second Draft Meeting minutes were publicly posted on January 24, 2022 and show that there were 48 guests who attended all or part of the meeting, and 7 guests made presentations to CMP 2, including Greg Woyczynski, who represented AHAM. Based on the minutes, Mr. Woyczynski spoke about 210.8(A) and 210.12. The other presenters spoke about 210.12 and 210.8(F). The minutes reflect that all presenters were offered equal presentation time of 10 minutes. (See Attachment 5)
  - The other presenters included: Leading Builders of America, AHRI, the American Circuit Breaker Manufacturers Association, the National Association of Home Builders, two manufacturers, and an individual representing himself.
  - The minutes also reflect that the guests in attendance represented a range of interests, including but not limited to, consulting companies, utilities, manufacturers, labor, associations, enforcers, contractors, etc. (See page 4-5 of Attachment 5).
- After the Second Draft Meeting, the Panel was balloted on the proposed Second Revisions on December 7, 2021 with a closing date of December 21, 2021 with a closing date of January 5, 2022.
  - There were three second revisions balloted on Section 210.8(A) by CMP 2: SR Nos. 7944 (detail), 7950, and 7956 (detail). The Second Revisions were as follows:

(A) Dwelling Units.

All 125-volt through 250-volt receptacles installed in the following locations specified in 210.8(A)(1) through (A)(11) and supplied by single-phase branch circuits rated 150 volts or less to ground shall have ground-fault circuit-interrupter protection for personnel:

1. Bathrooms
2. Garages and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas, and areas of similar use
3. Outdoors
4. Crawl spaces — at or below grade level
5. Basements

| Informational Note: See 760.41(B) and 760.121(B) for power supply requirements for fire alarm systems. Receptacles installed under the exception to 210.8(A)(5) shall not be considered as meeting the requirements of 210.52(G). |

| Informational Note: See 760.41(B) and 760.121(B) for power supply requirements for fire alarm systems. |

6. Kitchens — where the receptacles are installed to serve the countertop surfaces
7. Areas with sinks and permanent provisions for food preparation, beverage preparation, or cooking
8. Sinks — where receptacles are installed within 1.8 m (6 ft) from the top inside edge of the bowl of the sink
9. Boathouses
10. Bathtubs or shower stalls — where receptacles are installed within 1.8 m (6 ft) of the outside edge of the bathtub or shower stall
11. Laundry areas
12. Indoor damp and wet locations

**Exception No. 1:** Receptacles that are not readily accessible and are supplied by a branch circuit dedicated to electric snow-melting, deicing, or pipeline and vessel heating equipment shall be permitted to be installed in accordance with 426.28 or 427.22, as applicable.

**Exception No. 2:** A receptacle supplying only a permanently installed fire alarm or burglar alarm premises security system shall not be required to have ground-fault circuit-interrupter protection.

**Exception No. 3:** Listed locking support and mounting weight-supporting ceiling receptacles (WSCR) utilized in combination with compatible weight-supporting attachment fittings (WSAF) installed for the purpose of supporting a ceiling luminaire or ceiling-suspended fan shall not be required to have ground-fault circuit-interrupter protection. If a general-purpose convenience receptacle is integral to the ceiling luminaire or ceiling-suspended fan, GFCI protection shall be provided.

**Exception No. 4:** Factory-installed receptacles that are not readily accessible and are mounted internally to bathroom exhaust fan assemblies shall not require GFCI protection unless required by the installation instructions or listing.

The reference to single phase was not removed. The language in this section only applies to 120 V through 240 V receptacles that are supplied by branch circuits 150 V or less to ground.

The renumbering of the exceptions is not accepted as the numbering scheme is required by the Style Manual, 2.6.2. In addition, the exceptions were not associated only with a specific section, as the language is clear and driven by the load served, rather than just in a specific location.

Exception 2 was modified, removing “fire alarm” because the structure of the Code under 90.3 already addresses this in fire alarm branch circuit requirements found 760.41 and 760.121. “Burglar alarm systems” was modified to align with the phrase “premises security systems” which is taken from NFPA 731 and NFPA 730. “Shall not be required to have” was modified to
align with the Style Manual.

Exception 3 was modified for clarity. The word “Paddle” was not added to ensure that all ceiling fans are addressed. Exception 3 was also modified to make the language permissive per the Style Manual.

The informational note was relocated to the end of 210.8(A) for clarity and usability.

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Revisions to item (6) and the addition of new item (7) are balloted separately on SR-7956.

New Exception No. 4 is balloted separately on SR-7944.

- The ballot results on SR No. 7944 (new exception No. 4) were: 12 affirmative (as affirmative all votes); 3 affirmative with comment; 0 against; 0 abstained; and 0 not returned.
- The ballot results of SR. No. 7950 were: 13 affirmative (as affirmative all votes); 2 affirmative with comment; 0 against; 0 abstained; and 0 not returned.
- The ballot results of SR. No. 7956 were: 11 affirmative (as affirmative all votes); 4 negative with comment; 0 abstained; and 0 not returned. (See Attachment 6)
  - SR 7956 related to (6) and (7) in 210.8(B). The Committee statement was:

  “GFCI protection was expanded to address any cord and plug appliance in the kitchen, regardless of whether the receptacle serves the countertop. The CPSC database demonstrates 104 electrocutions from 2011-2020, of which 81 percent were working on an appliance or other type of appliance or equipment. GFCI protection can be provided to provide protection for those who are working on cord-and-plug appliances and/or cord and-plug-connected equipment. Electrical hazards are not just due to the proximity of the appliance to water. These appliances and equipment have both the power supply and the grounded frame to complete the current path, creating the hazard to the individual.”

- The 11 affirmative votes were from: 2 Users, 3 Manufacturers, 2 Installer/Maintainers, 1 Enforcer, 1 Special Expert, 1 Labor and 1 Research/Testing classifications.
- The four negative with comment were from an Enforcer, a User, an Installer/Maintainer and a Utility classification and they offered the following comments:

**Negative with Comment**

Abbassi, Mathher: TR no. 7956 has introduced an overreaching requirement for spaces and areas where receptacles or equipment are not subject to for water splashing or liquid spillage. Additionally, it is not the intent of the code to protect unqualified people who lack basic electrical safety training or equipment being installed or serviced illegally. Lastly, the language presents confusion for enforcement.

Buuck, Daniel: There has been a dramatic decrease in electrocutions since the introduction of GFCI devices, despite an increase in the number of dwellings. GFCI protection makes sense in a kitchen where wet or damp conditions are common, such as near a sink or on a countertop for food preparation. This protection is already in place and is working. This SR goes well beyond that by requiring all kitchen receptacles to comply, even those that are not near wet areas. The
new number (7) has a similar problem, since an "area" is undefined and may be determined to apply to the entire room. There is also no exception for critical appliances, such as refrigerators and freezers. If these are on a GFCI circuit that trips, it could lead to the costly loss of food and refrigerated medications.

Neubauer, Fred: GFCI devises have reduced electrocutions since their introduction. GFCI protection has been typically required in wet and damp locations. This SR extends the protection beyond that. Currently most dwellings have freezers and refrigerators that plug into non-counter top plugs that are NOT GFCI protected. Homeowners potentially could lose a unit full of food if a GFCI trips and it goes unnoticed.

Pavese, Christopher J. This Second Revision seeks to add “areas with sinks and permanent provisions for food preparation, beverage preparation or cooking” and remove the clause “where the receptacles are installed to serve the countertop surfaces” to and from the list of areas requiring GFCI protection in 210.8(A). There is no substantiation of any fatalities from the recent Consumer Product Safety Commission (CPSC) database that involved contact of an appliance or piece of electrical equipment and the sink. There were 104 fatalities shown in the recent CPSC database. Some were involving kitchen appliances, however the major cause for the loss of life (approximately 81%) occurred when the victim attempted to repair, modify or install the appliance and contact occurred with the grounded elements within the particular appliance. These fatalities could have been resolved if the product standard would have required a Leakage-Current Detector-Interrupter (LCDI) in the cord.

The Second Draft published on March 21, 2022, it was open for NITMAMs through April 11, 2022. Section 210.8(A) received 2 NITMAMs, which were both certified as Certified Amending Motions (CAMs) eligible to be pursued at the 2022 Technical Meeting. The CAMs were submitted by Kevin Cheong representing ChargePoint Inc. and Greg Woyczynski representing AHAM. AHAM presented 2 CAMs for debate at the Technical Meeting (70-94 and 70-95). Neither of the AHAM CAMs passed the vote of the NFPA membership present and participating in the Technical Meeting (votes for 70-94 were 69-492; votes for 70-95 were 134-424). NFPA also made available a dedicated site where interested members of the public could submit statements or positions related to the CAMs under consideration at the Technical Meeting. There were no online position statements submitted related to AHAM’s CAMs.

V. **AHAM claims the NFPA’s association membership must be balanced when it votes on CAMs at the annual Technical Meeting; however, it is not a consensus body within NFPA’s standards development process**

NFPA is a membership organization, which means that any member of the public may purchase a membership. Membership comes with a number of benefits (e.g. access to NFPA’s Xchange forum, Technical Questions Service, discount on NFPA products and services, subscription to NFPA’s Journal, etc.), including voting privileges at the NFPA Technical Meeting after 180 consecutive days of membership.
Each year, NFPA holds an annual Technical Meeting, which allows an eligible person who is not satisfied with the work of the Committee after the Second Draft to make an authorized motion for the NFPA membership’s consideration and vote. Eligibility to make a motion and the types of authorized motion are limited by the Regs and the Technical Meeting Convention Rules. Only Certified Amending Motions (CAMs), (those certified in accordance with the Regs by the Motions Committee) and posted in advance on the publicly available agenda may be presented at the Technical Meeting.

The purpose of making a CAM is to get the NFPA membership’s support for a position. Only NFPA Members in good standing for at least 180 consecutive days prior to NFPA’s Technical Meeting and in attendance are eligible to vote on CAMs. CAMs need simple majority vote of the NFPA membership to pass.

The NFPA membership body is not balanced, and therefore, a successful CAM must be confirmed by the Technical Committee as outlined in the Regs. The NFPA membership vote at the Technical Meeting is a voice in NFPA’s standards development process, but is not a substitute for the Technical Committee or Panel, which is the consensus body. If the NFPA membership does not support a CAM, the Technical Committee’s balloted position at Second Draft remains as the recommendation submitted to NFPA’s Standards Council for issuance.

**VI. No undue financial barriers in NFPA’s development process**

AHAM’s appeal includes a statement that there are financial barriers to participate in NFPA’s standards development process. The NFPA process is fully transparent and open to anyone’s participation—free of charge.

- Submissions of public input, public comments, notices of intent to file a motion, and tentative interim amendments may be filed by anyone through the NFPA website.
- Participation in the standards development process does not require NFPA membership.
- Participation on committees (consensus bodies) does not require NFPA membership nor fees for appointment.
- Technical Meeting participation can be remote through submission of online position statements, without restrictions.
- Live debate participation at Technical Meeting is available without charge of registration fee.

Standards Council appeals process accommodate requests for remote participation for hearings/appeals.

Anyone can appeal to the Standards Council; there is no fee or requirement that an appellant be a member of NFPA. If an appellant requests a hearing, such hearings are open to the public.
Attachments: ANSI essential requirements, ANSI guidance, FD Meeting Notice, FD Meeting Agenda, FD Meeting Minutes, SD Meeting Notice, SD Meeting Minutes, SR 7956