

Standards Council Meeting Final Minutes Aventura, Florida

December 7-8, 2022

Members in Attendance:

James E. Golinveaux, Chair	David P. Klein
Kenneth E. Bush	John R. Kovacik
Michael A. Crowley	Jack Poole
Jeffrey J. Foisel	James R. Quiter
Richard A. Gallagher	Rodger Reiswig
Michael J. Johnston	Catherine Stashak

Member Not in Attendance:

Randy Krause

Staff in Attendance:

Dawn Michele Bellis, Secretary
 Christian Dubay, Vice President, Codes and Standards and Chief Engineer
 Suzanne Gallagher, Deputy General Counsel
 Barry Chase, Standards Lead
 Chad Duffy, Standards Lead
 Laura Moreno, Standards Lead

22-12-1	The Council heard the Report of the Committee Membership Task Group (J. Quiter, Chair).
22-12-1-a	<p>The Council voted to approve the Report of the Committee Membership Task Group with amendments as recommended by the Task Group.</p> <p>Changes in committee membership approved by the Council are included as Minutes Attachment 22-12-1-a.</p> <p>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, Dekra and the NFPA Industrial Fire Protection Section applicants; Council Member Richard Gallagher recused himself from deliberations and vote on all Zurich Services, Corp. applicants and applicant representing Nationwide for the Technical Committee on Spaceports; 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.</p>
22-12-1-b	The Council heard an update on the review of the Multi-Representative policy. No action was taken.

22-12-2	The Council heard the Report of the Policy and Procedures Task Group (J. Foisel, Chair).
22-12-3	The Council heard a Report on the August 2022 Minutes (ballot approval of September 2, 2022).
TENTATIVE INTERIM AMENDMENTS	
22-12-4 NFPA 55	The Council voted to issue proposed Tentative Interim Amendment No. 1672 to revise paragraphs 3.3.51.3, 3.3.51.3.1 and 3.3.51.3.2 of the 2023 edition of NFPA 55, <i>Compressed Gases and Cryogenic Fluids Code</i> . 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.
22-12-5 NFPA 70	The Council voted to not issue proposed Tentative Interim Amendment No. 1661 to revise paragraph 680.26(B)(2)(b) of the 2020 and proposed 2023 edition of NFPA 70, <i>National Electrical Code</i> [®] . The TIA failed to achieve the necessary support of the Code-Making Panel on both technical merit and emergency nature, but achieved the necessary support of the Correlating Committee on correlation when balloted prior to submission to the Standards Council. Council members Michael J. Johnston, John R. Kovacik, and Rodger Reiswig recused themselves from deliberations and vote on this tentative interim amendment.
22-12-6 NFPA 70	The Council voted to not issue proposed Tentative Interim Amendment No. 1670 related to Article 100-Artificially Ventilated Room(new), 505.8(R)(new), 505.16(B)(3), 505.16(B)(3) Informational Notes 1 through 3, 505.20(C) Exception No. 2, 505.20(C) Informational Note No. 3, and Chapter 9, Table 13 of the 2023 edition of NFPA 70, <i>National Electrical Code</i> [®] . The TIA failed to achieve the necessary support of the Code-Making Panel on both technical merit and emergency nature, but achieved the necessary support of the Correlating Committee on correlation. Council members Michael J. Johnston, John R. Kovacik, and Rodger Reiswig recused themselves from deliberations and vote on this tentative interim amendment.
22-12-7 NFPA 70	The Council voted to issue proposed Tentative Interim Amendment No. 1678 to revise Table C.18, Table C.19 and Table C.20 of the 2023 edition of NFPA 70, <i>National Electrical Code</i> [®] . The TIA achieved the necessary support of the Code-Making Panel on both technical merit and emergency nature, and the Correlating Committee on correlation when balloted prior to submission to the Standards Council. Council members Michael J. Johnston, John R. Kovacik, and Rodger Reiswig recused themselves from deliberations and vote on this tentative interim amendment.
22-12-8 NFPA 70	The Council voted to not issue proposed Tentative Interim Amendment No. 1679 to add a new Exception to Section 210.52(C)(3) of the 2023 edition of NFPA 70, <i>National Electrical Code</i> [®] . The TIA failed to achieve the necessary support of the Code-Making Panel on both technical merit and emergency nature, but achieved the necessary support of the Correlating Committee on correlation when balloted prior to submission to the Standards Council. Council members Michael J. Johnston, John R. Kovacik, and Rodger Reiswig recused themselves from deliberations and vote on this tentative interim amendment.
22-12-8-d APPEAL DECISION	D#22-15 At its meeting of December 7-8, 2022, the Standards Council considered an appeal from Daniel Buuck of National Association of Home Buildings related to TIA No. 1679, which seeks to add a new exception in section 210.52(C)(3). The appellant clarified that while he did not seek to overturn the results of the standards development process, he did seek the following actions by the Standards Council in relation to the TIA:

	<p>(1) The Council to issue a call to expand CMP-2 membership to add “much-needed representation from the accessibility community, including those who design spaces for people with disabilities, those who require the use of such spaces, and those who enforce accessibility requirements” and (2) To form a Task Group of affected stakeholders, including accessibility experts, installers, code officials, and device manufacturers to address the Appellant’s concern for “a lack of coordination between two important design standards, NFPA 70 and ICC A117.1.”</p> <p>As background, the Appellant submitted this appeal on behalf of the <i>ICC A117.1 Task Group: Electrical Receptacles in Facilities with Accessible, Type A, and Type B Dwelling and Sleeping Units</i>, for which he serves as Chair, with intentions of raising concerns regarding inconsistencies in terminology and allegations of coordination lacking between electrical installation requirements included in the NEC® with other codes such as NFPA 1, NFPA 101, and the International Building Code to the Council’s attention. The TIA was balloted through Panel 2 and the NEC Correlating Committee (CC) in accordance with the <i>Regulations Governing the Development of NFPA Standards (Regs)</i> 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 2 on both technical merit and emergency nature, but did achieve the necessary support of the CC on correlation.</p> <p>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.</p> <p>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 and acknowledges that this was not the result being sought by the Appellant. Accordingly, the Council has voted to deny the appeal. The effect of this action is that the NFPA 70, <i>National Electrical Code</i> will not include the text of TIA No. 1679.</p> <p>The Council asks that the appellant work with NFPA staff to engage with NFPA’s established Disability Access Review and Advisory Committee (DARAC)—a committee charged with identifying existing needs and emerging issues in the disability community pertinent to NFPA’s standards. In response to Appellant’s concerns regarding representation of the accessibility community in the code-making process of the NEC, the Council directs this matter be referred to DARAC for guidance and recommendations to be developed for the next NEC revision cycle or for submission of a Tentative Interim Amendment, if appropriate. Additionally, Council encourages qualified applicants to apply to applicable NEC code-making panels for consideration of appointment.</p> <p>Council members Michael J. Johnston, John R. Kovacik, and Rodger Reiswig recused themselves from deliberations and vote on this appeal.</p> <p>Council members Randy Krause and Jack Poole were not in attendance on December 8, 2022 and therefore did not participate in the deliberations and vote on this appeal.</p>
<p>22-12-9 NFPA 72</p>	<p>The Council voted to not issue proposed Tentative Interim Amendment No. 1642 to revise Section 29.11.3.4 (6) of the 2019 edition of NFPA 72®, <i>National Fire Alarm and Signaling Code</i>®. The TIA failed to achieve the necessary support of the Technical Committee on both technical merit and emergency nature, but achieved the necessary support of the Correlating Committee on correlation when balloted prior to submission to the Standards Council.</p>

<p>22-12-10 NFPA 86</p>	<p>The Council voted to not issue proposed Tentative Interim Amendment No. 1674 to revise 5.3.1 by adding a new item (1) and renumbering subsequent items including Annex A numbering and Figure A.5.3.1(4) numbering of the 2023 edition of NFPA 86, <i>Standard for Ovens and Furnaces</i>. 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.</p> <p>Standards Council Richard A. Gallagher recused himself from deliberations and vote on this TIA.</p>
<p>22-12-11 NFPA 750</p>	<p>The Council voted to issue proposed Tentative Interim Amendment No.1673 to revise paragraph 12.5.4.4 of the 2023 edition of NFPA 750, <i>Standard on Water Mist Fire Protection Systems</i>. 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.</p>
<p>22-12-12 NFPA 855</p>	<p>The Council voted to not issue proposed Tentative Interim Amendment No.1677 to add a new paragraph 9.1.5.2.3 and associated Annex A.9.1.5.2.3 to the 2023 edition of NFPA 855, <i>Standard for the Installation of Stationary Energy Storage Systems</i>. The TIA failed to achieve the necessary support of the Technical Committee on technical merit, but achieved the necessary support on emergency nature when balloted prior to submission to the Standards Council.</p>
<p>22-12-13 NFPA 1977</p>	<p>The Council voted to issue proposed Tentative Interim Amendment No.1676 to revise section 7.5.14 of the 2022 edition of NFPA 1977, <i>Standard on Protective Clothing and Equipment for Wildland Fire Fighting and Urban Interface Fire Fighting</i>. 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.</p>
<p>22-12-14 NFPA 1990</p>	<p>The Council voted to issue proposed Tentative Interim Amendment No.1665 to revise section 8.3.1.3 through 8.3.1.3.6 of the 2022 edition of NFPA 1990, <i>Standard for Protective Ensembles for Hazardous Materials and CBRN Operations</i>. 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.</p>
<p>22-12-15 NFPA 1990</p>	<p>The Council voted to issue proposed Tentative Interim Amendment No.1666 to revise various sections of the 2022 edition of NFPA 1990, <i>Standard for Protective Ensembles for Hazardous Materials and CBRN Operations</i>. 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.</p>
<p>GENERAL BUSINESS</p>	
<p>22-12-16 NFPA 900</p>	<p>The Council voted to approve the request of the Technical Committee on Building Systems to withdraw NFPA 900, <i>Building Energy Code</i>, as an ANS standard, thereby discontinuing standards development.</p> <p>Note: The Technical Committee on Building Systems shall maintain scope for standards development as established by Council within NFPA 5000[®], <i>Building and Construction Safety Code</i>[®].</p>
<p>22-12-17 NFPA 1859</p>	<p>The Council voted to approve the request of the Technical Committee on Tactical Operations for Video Equipment and Cameras to discontinue standards development of NFPA 1859, <i>Standard on the Selection, Care, and Maintenance of Tactical Operations Video Equipment</i>. Having discontinued standards development, the Council additionally disbanded the Technical Committee on Tactical Operations for Video Equipment and Cameras, responsible for the development of NFPA 1859. The Council wishes to extend its sincerest thanks and appreciation to the committee members for the commitment and dedication contributed to the NFPA standards development process.</p>

REVISION CYCLES

22-12-18

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

Doc No.	Current Edition	Next Applicable Deadline
NFPA 18	2021	PI Closing: 7 January 2025
NFPA 555	2021	PI Closing: 7 January 2025
NFPA 556	2020	PI Closing: 7 January 2025
NFPA 557	2023	PI Closing: 7 January 2025
NFPA 1006	2021	PI Closing: 6 September 2024
NFPA 1891	2022	PI Closing: TBD (A'2028 cycle)

REPORTS BACK TO COUNCIL

22-12-19

NFPA 72

The Council voted to deny the request of the Correlating Committee on Signaling Systems for the Protection of Life and Property (SIG-AAC) to establish a new technical committee addressing cybersecurity under the purview of NFPA 72[®], *National Fire Alarm and Signaling Code*[®] at this time. However, Council requested staff to publish a special call for interested stakeholders with cybersecurity expertise should a standing committee on cybersecurity be established.

22-12-20

D#22-13

The Council heard the report from staff on the activities of the balanced Task Group established at the direction of Council at the August 2022 meeting. The report follows:

At the direction of the Standards Council in their decisions D#22-3 and D#22-13, NFPA staff formed a task group “to review the new and/or additional data cited by the Appellant: namely 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 the recent (and related) TIA No. 1661 and any other new and existing reports reference on this topic.” The task group was chaired by Scott Harding (chair of NEC Code-Making Panel 5) and consisted of the following members:

Member	Representing/CMP if applicable
1. Harding, Scott – Chair	Independent Electrical Contractors, Inc/Chair CMP 5
2. Dorr, Douglas	EPRI
3. Hamilton, E.P.	CMP 17/Pool & Hot Tub Alliance
4. Hartwell, Fred	Hartwell Electrical Services – Appellant on CAM 70-117
5. Miller, Einstein	CMP 17/CPSC (Nonvoting)
6. Jackson, Pete	NEC CC
7. Colston, Jacob	CMP 17/EEI

8. Kuscsik, Stephen	CMP 17/UL
9. Query, Dennis Michael	CMP 17/ IEC
10. Norwalk, Matthew	Chair-IEEE Stray and Contact Voltage Working Group
11. Jiang, Hai	UL Solutions

The task group first met on October 4, 2022. Prior to the meeting a shared folder was provided to the task group, which contained all publicly available documents referenced, shared or submitted to CMP 17. The task group chair discussed the Standards Council direction and created two sub-task groups with the same charge of reviewing all the relevant information in the shared folder and develop recommendations for the full task group. Daniel Dorr and Michael Query each chaired a sub task group. Prior to formation of the task groups, the chair provided each member with an opportunity to share their current position on the topic and used this feedback to ensure that there was a balance of interests and positions represented on each sub-task group. Each of the sub task groups met several times and discussed all information provided in the shared folder. It became evident in these discussions there was a clear difference of opinion on the efficacy of the perimeter bonding means currently permitted in 680.26(B).

The full task group reconvened on October 28, 2022. The recommendations of the two sub task groups were presented and discussed. The full task group agreed to move forward with two TIAs.

The full task group met two more times to finalize TIAs and at their meeting on 11/11/2022 agreed to a recommended tentative interim amendment and accompanying substantiation.

Staff informed Council that a TIA has been submitted for processing by the Task Group and anticipates such being on the March 20-21, 2023 agenda for Council consideration and action.

22-12-21
D#22-4

The Council received a report back on the activities of the Bimetallic Task Group, which was reconvened at the direction of Council at the August 2022 meeting. The report follows:
At the direction of the Standards Council in their decision D#22-4, NFPA staff reconvened the Bimetallic Task Group with the following direction:

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 direct 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.

David Hittinger chairs the Bimetallic Task Group, (member of NEC Code-Making Panel 1 and the NEC Correlating Committee) and consists of the following members:

Member	Representing/CMP if applicable
1. Hittinger, David	Independent Electrical Contractors, Inc/NEC CMP 1, NEC AAC
2. Crisman, Todd	IBEW/NEC CMP 6
3. Deacy, Brian	Atkore International (Copper Development Association)/NEC CMP 6
4. Deike, Roland	Edison Electric Institute/NEC CMP 1
5. Domitrovich, Thomas	Eaton Electric (NEMA)/NEC CMPs 2 & 10
6. Graser, Peter	Copperweld (American Bimetallic Association)/NEC CMP 6
7. Hunter, Christel	Cerro Wire (Aluminum Association)/NEC CMP 6
8. Mello, Chuck	Consultant to Copperweld
9. Scarce, Susan Newman	US DoD-Fort Campbell (IAEI)/Chair NEC CMP 6
10. Stene, Susan	Underwriters Laboratories/NEC CMP 6
11. Rock, Brian	Hubbell, Inc (NEMA)/NEC CMPs 2 & 15
12. Tse, Frank	Leviton (NEMA)/NEC CMP 18

The task group first met on September 27, 2022. Prior to the meeting, a shared folder was created for the task group, which contained all test documentation and reports submitted to CMP 6 in connection with the 2023 NEC revision process. The task group chair discussed the Standards Council direction and created two sub-task groups with the following charges:

Sub Task Group #1 (STG #1) – Review all documents submitted to CMP 6 in connection with the 2023 NEC revision process to determine if a tentative interim amendment(s) may be appropriate based on the materials.

Sub Task Group #2 (STG #2) – Review all documents submitted to CMP 6 in connection with the 2023 NEC revision process for the purposes of developing a scope for a possible project for the Fire Protection Research Foundation that could be used by CMP 6 in their considerations of adding new minimum branch circuit conductor sizes in the NEC

Thomas Domitrovich and Todd Crisman chaired Sub Task Groups #1 and #2 respectively.

Each of the sub task groups met several times and thoroughly discussed all information provided in the shared folder. STG #1 concentrated on developing TIAs to provide an ampacity for 14 AWG copper-clad aluminum where used as a signaling or control conductor. The permission to use it as a signaling and

	<p><i>control conductor was added to the 2020 NEC, but the task group agreed clarity was needed. The sub task group is proposing two tentative interim amendments to provide a usable approach to this gap in the 2020 and 2023 editions of the NEC. These proposed TIAs will be submitted to CMPs 3 and 6.</i></p> <p><i>The focus of STG #2 was to review the entire record from the 2023 NEC revision cycle for the purposes of developing a scope for a Fire Protection Research Foundation project to resolve the technical issues discussed in the Standards Council decision D#22-4. The sub task group met several times and agreed on a proposed scope for research for consideration by the full task group.</i></p> <p><i>The full task group reconvened on November 18, 2022. The recommendations of the two sub task groups were presented and discussed. Some modifications were made to the recommended TIAs and to the FPRF project scope. The full task group voted to proceed with both sub task groups' recommendations, as amended, including the following project scope for a Fire Protection Research Foundation Report:</i></p> <p><i>Concerns have been raised that thermal insulation required by modern building and energy codes can impact the performance of electrical conductor insulation. To ascertain if a problem exists or could exist with small branch circuit conductors, 16 AWG copper and 14 AWG copper-clad aluminum along with presently identified small conductors in 240.4(D)(2) through (D)(7), a research project is requested that includes the following:</i></p> <ol style="list-style-type: none"> <i>1) Literature review of fire data involving electrical conductors, and other relevant industry data.</i> <i>2) A review of all testing protocols and results performed for the 2023 NEC revision cycle.</i> <i>3) Conduct any additional testing/modeling needed to determine what current will result in the temperatures in Table 310.16 for representative wiring methods installed in thermal insulation.</i> <p><i>The full task group will reconvene on December 8 to review the substantiation for the TIAs and to address minor NEC Style Manual issues. It is anticipated that the TIAs will be submitted by December 9, the deadline for them to be on the March 2023 Standards Council agenda.</i></p> <p>Standards Council voted to forward the proposed research project to the Fire Protection Research Foundation, as requested by the Bimetallic Task Group. The Council seeks ongoing reporting on the status of this project at its next meeting.</p>
<p>22-12-22</p>	<p>Dates of upcoming Council meetings:</p> <p>March 20-21, 2023 Tempe, Arizona</p> <p>August 23-25, 2023 Quincy, Massachusetts</p> <p>December 6-7, 2023 Dates and location to be determined</p>
<p>22-12-23</p>	<p>The Council heard updates from the Council Secretary.</p>
<p>22-12-23-a</p>	<p>The Council voted to approve the next revision cycle schedule for NFPA 70, National Electrical Code, with a Public Input Closing Date of September 7, 2023. Additionally, Council was advised that the standard will open for submission of Public Inputs once Tentative Interim Amendments issued at this meeting are incorporated into the text within the submission platform (anticipated to be the first week of January 2023).</p>

22-12-23-b	The Council heard an update on the Technical Committee on Portable Fire Extinguishers (PFE-AAA).
22-12-23-c	The Council considered information that there may be inconsistency in NFPA 780, <i>Standard for the Installation of Lightning Protection Systems</i> regarding certain non-metallic tank requirements in NFPA 77, <i>Recommended Practice on Static Electricity</i> and NFPA 30, <i>Flammable and Combustible Liquids Code</i>). Therefore, the Council directed the formation of a joint task group comprised of committee members from the NFPA 30, NFPA 77, and NFPA 780 projects respectively, as well as identified interested stakeholders. The joint task group is to be chaired by Council member Jeffrey Foisel. The Joint Task Group is to meet and report back to Council at the March 20-21, 2023 meeting with findings and recommendations.

Respectfully Submitted,
[Dawn Michele Bellis](#)
Dawn Michele Bellis,
Secretary, Standards Council