
ICC ELECTRICAL CODE

EL2-03/04

Entire Code

Proposed Change as Submitted:

Proponent: H. Brooke Stauffer, National Electrical Contractors Association, representing Electrical Code Coalition

1. Delete without substitution:

~~CHAPTER 1 SCOPE
CHAPTER 2 DEFINITIONS
CHAPTER 3 ORGANIZATION AND ENFORCEMENT
CHAPTER 4 PERMITS AND FEES
CHAPTER 5 CONSTRUCTION DOCUMENTS
CHAPTER 6 APPROVAL
CHAPTER 7 INSPECTIONS AND TESTING
CHAPTER 8 SERVICE UTILITIES
CHAPTER 9 UNSAFE SYSTEMS AND EQUIPMENT
CHAPTER 10 VIOLATIONS
CHAPTER 11 MEANS OF APPEAL
CHAPTER 12 ELECTRICAL PROVISIONS
CHAPTER 13 REFERENCED STANDARDS~~

The following sections serve as examples of the intent of this proposal which is intended to revise all sections that reference the ICC EC in all ICC Codes in the manner shown by such examples.

2. Revise as follows:

IBC 101.4.1 Electrical. The provisions of ~~the ICC Electrical Code~~ NFPA 70 shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

IBC 2701.1 Scope. This chapter governs the electrical components equipment and systems used in buildings and structures covered by this code. Electrical components, equipment and systems shall be designed and constructed in accordance with the provision of ~~the ICC Electrical Code~~ NFPA 70.

IBC 3401.3 Compliance with other codes. Alterations, repairs, additions and changes of occupancy to existing structures shall comply with the provisions for alterations, repairs, additions and changes of occupancy in the *International Fire Code, International Fuel Gas Code, International Plumbing Code, International Property Maintenance Code, International Private Sewage Disposal Code, International Mechanical Code, International Residential Code* and ~~ICC Electrical Code~~ NFPA 70.

IFC 605.1 Abatement of electrical hazards. Identified electrical hazards shall be abated. Identified hazardous electrical conditions in permanent wiring shall be

brought to the attention of the code official responsible for enforcement of ~~the ICC Electrical Code~~ NFPA 70. Electrical wiring, devices, appliances and other equipment that is modified or damaged and constitutes an electrical shock or fire hazard shall not be used.

IFGC 201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in ~~the ICC Electrical Code~~ NFPA 70, International Building Code, International Fire Code, International Mechanical Code or International Plumbing Code, such terms shall have meanings ascribed to them as in those codes.

IPC 201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the *International Building Code, International Fire Code, ICC Electrical Code NFPA 70, International Fuel Gas Code* or the *International Mechanical Code*, such terms shall have meanings ascribed to them as in those codes.

IMC 201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the *International Building Code, ICC Electrical Code NFPA 70, International Fire Code, International Fuel Gas Code* or the *International Plumbing Code*, such terms shall have meanings ascribed to them as in those codes.

IRC G2402.3 (201.3) Terms defined in other codes. Where terms are not defined in this code and are defined in ~~the ICC Electrical Code~~ NFPA 70, International Building Code, International Fire Code, International Mechanical Code or International Plumbing Code, such terms shall have meanings ascribed to them as in those codes.

IPMC 201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the *International Building Code, ICC Electrical Code NFPA 70, International Fire Code, International Fuel Gas Code* or the *International Plumbing Code*, such terms shall have meanings ascribed to them as in those codes.

IECC 201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the *International Building Code, International Fire Code, International Zoning Code, International Plumbing Code, International Mechanical Code, International Existing Building Code* or the ~~ICC Electrical Code~~ NFPA 70, such terms shall have meanings ascribed to them as in those codes.

Staff note: It is the intent of this proposal to substitute a reference to the "NFPA 70" for the current reference to the "ICC Electrical Code" in all text locations in all ICC Codes.

Reason: The Electrical Code Coalition is proposing the deletion of the ICC *Electrical Code* without substitution. The Coalition is comprised of major electrical organizations that represent the vast majority of those who use, and are impacted by, electrical codes and

standards. These organizations include, the National Electrical Manufacturers Association (NEMA), the International Association of Electrical Inspectors (IAEI), the National Electrical Contractors Association (NECA), the Independent Electrical Contractors (IEC), the Edison Electrical Institute (EEI), and the International Brotherhood of Electrical Workers (IBEW) and others. This coalition is single-minded in its goal, to promote safe electrical installations through direct adoption of the *National Electrical Code®*, an internationally recognized standard that has over a one-hundred year track record of providing for safe electrical installations.

The basis for the proposal is due to the fact that the subject document, the ICC *Electrical Code*, only serves to confuse local jurisdictions during the code adoption process. The document serves no purpose since the technical requirements covering electrical installations continue to reside in the *National Electrical Code®* (by reference) and the administrative requirements are seldom used or adopted directly.

Local jurisdictions have made it clear to the electrical industry that when they adopt an electrical code their preferred method is the direct adoption of the *National Electrical Code®* with the development of administrative procedures specific to the electrical code. The NEC contains necessary administrative material (NEC Article 80) to apply the document effectively. That administrative information can either be adopted directly or incorporated into a specific local administrative rule.

There is no dispute that the NEC is the document of choice for electrical requirements in the United States (as well as other regions of the world). The ICC EC does not change that present technical landscape and as such no hardship is created through its elimination.

The coalition is aware that the Committee has, in the past, stated that the elimination of the ICC EC rests with the ICC Board of Directors. However, the Board of Directors continues to note that the document is a choice of the ICC membership. A favorable recommendation from the committee will give the ICC Board clear direction relative to the future of the ICC EC.

In addition, the Coalition has made companion proposals to all of the ICC family of codes to make reference to the NEC in lieu of the ICC *Electrical Code*. This will ensure that the appropriate electrical references exist throughout the ICC family of codes.

Analysis: This proposal intends to eliminate the ICC EC by deleting its entire content of provisions. The ICC Board of Directors will determine the future of the ICC EC based upon input from the Code Development Committees and the ICC Membership.

Absent the adoption of the administrative provisions of the ICC EC, the government entity will need to provide for the administration of an electrical code in one of the following manners:

1. Creation of their own administrative law for the adopted electrical code.
2. Enacting law making the administrative provisions of the ICC Codes applicable to the adopted electrical code.
3. Adoption of the administrative provisions (Article 80) of NFPA 70 modified as necessary to make such provisions consistent with the administrative provision of the ICC Codes.
4. Adoption of article 80 of NFPA 70 without modification.

If Part 2 of this proposal is approved by the membership, staff will editorially revise all ICC Codes in accordance with the stated intent of this proposal. (i.e., all references to the ICC EC in all ICC Codes will be replaced with references to NFPA 70.)

Note that the following sections were published with this proposal because staff believes that, unlike the other ICC Code sections that reference the ICC EC, the revisions to these sections should be specifically acted upon by the committee because of the context in which NFPA 70 would be referenced.

1. IBC 3401.3
2. IFC 605.1
3. IFGC 201.3
4. IPC 201.3
5. IMC 201.3
6. IRC G2402.3
7. IPMC 201.3
8. IECC 201.3

Cost Impact: None.

Committee Action: **Disapproved**

Committee Reason: Important administrative and inspection provisions would be lost if the proposal is approved as submitted.

The administrative provisions of NFPA 70 are not consistent with those of the ICC Electrical Code. The ICC Electrical Code was created to compensate for the lack of ICC compatible administrative provisions in NFPA 70. This proposal seeks to undo the work of the IBC General committee performed over the past 3 years relative to the development of the ICC Electrical Code. The ICC Electrical Code already references NFPA 70. The administrative provisions of the ICC Electrical Code serve to provide uniform and consistent code enforcement. The proposal does not provide a point-by-point accounting of what effect this proposal will have relative to code coverage or loss thereof.

Assembly Action: **None**

Staff Note: EL2-03/04 was mistakenly reported in the Report of the Public Hearing as having a successful assembly action for Approved as Submitted. There was an assembly motion made for Approved as Submitted, but that motion failed.

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment 1:

H. Brooke Stauffer, National Electrical Contractors Association, representing Electrical Code Coalition; Dave Saunders/John Neff, County of Yakima, Washington/City of Lacey, Washington, request Approval as Modified by Approving only Item 2.

Commenter's Reason: This replaces "ICC Electrical Code" with NFPA 70" in all locations throughout the ICC Codes. It is more user-friendly to provide direct reference to the National Electrical Code rather than through a circuitous path that is not clearly defined.

Public Comment 2:

Dave Saunders/John Neff, County of Yakima, Washington/City of Lacey, Washington, request Approval as Modified by this Public Comment.

Modify Item 1 of proposal by including the following revisions and additions to current IBC text:

1. Revise current IBC text as follows:

105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

Electrical:

Repairs and maintenance. Minor repair work including: the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles; reinstallation of attachment plug receptacles, but not the outlets therefore; repair or replacement of branch circuit overcurrent devices of the required capacity in the same location;

Temporary decorative lighting. Listed cord and plug connected temporary decorative lighting.

Radio and Television systems. The provisions of this code shall not apply to electrical equipment used for radio and television transmission, but do apply to equipment and wiring for power supply, the installations of towers and antennas.

Temporary wiring. Temporary wiring for experimental purposes in suitable experimental laboratories;

Temporary testing systems. A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

Power and voltage limited systems. Electrical wiring, devices, appliances, apparatus and equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.

2701.1 Scope. This chapter governs the electrical components, equipment and systems used in buildings and structures covered by this code. Electrical components, equipment and systems shall be designed and constructed in accordance with the provisions of the ~~ICC Electrical Code~~ this code, and NFPA 70.

2. Add new IBC text as follows:

102.6 Existing electrical installations. Except as otherwise provided for in this code, a provision in this code shall not require the removal, alteration or abandonment of, nor prevent the continued utilization and maintenance of, existing electrical systems and equipment lawfully in existence at the time of the adoption of this code.

109.3.5 Electrical inspection. Electrical inspections shall be made in accordance with Sections 109.3.5.1 through 109.3.5.4.3.

109.3.5.1 Concealed electrical work. Electrical work shall remain accessible and exposed for inspection purposes until approved. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Wherever any installation subject to inspection prior to use is covered or concealed without having first been inspected, the building official shall have the authority to require that such electrical work be exposed for inspection. Neither the building official nor the jurisdiction shall be liable for expenses entailed in the removal or replacement of any materials required to allow inspection.

109.3.5.2 Underground electrical wiring. Underground wiring shall be inspected after trenches or ditches are excavated and bedded, piping and conductors installed, and before backfill is put in place. Where excavated soil contains rocks, broken concrete, frozen chunks and other rubble that would damage or break the raceway, cable or conductors, or where corrosive action will occur, protection shall be provided in the form of granular or select material, approved running boards, sleeves or other means.

109.3.5.3 Electrical rough in. The electrical rough-in inspection shall be made after the roof, framing, fireblocking and bracing are in place and all wiring and other components to be concealed are complete, and prior to the installation of wall or ceiling membranes.

109.3.5.4 Prefabricated construction. Prior to the approval of a prefabricated construction assembly having concealed electrical work and the issuance of an electrical permit, the building official shall require the submittal of an evaluation report on each prefabricated construction assembly, indicating the complete details of the electrical system, including a description of the system and its components, the basis upon which the system is being evaluated, test results and similar information, and other data as necessary for the building official to determine conformance to this code.

109.3.5.4.1 Electrical evaluation service. The building official shall designate the evaluation service of an approved agency as the evaluation agency, and review such agency's evaluation report for adequacy and conformance to this code.

109.3.5.4.2 Electrical follow-up inspection. Except where ready access is provided to electrical systems, service equipment and accessories for complete inspection at the site without disassembly or dismantling, the building official shall conduct the in-plant inspections as frequently as necessary to ensure conformance to the approved evaluation report or shall designate an independent, approved inspection agency to conduct such inspections. The inspection agency shall furnish the building official with the follow-up inspection manual and a report of inspections upon request, and the electrical system shall have an identifying label permanently affixed to the system indicating that factory inspections have been performed.

109.3.5.4.3 Electrical testing and inspection records. Required test and inspection records shall be available to the building official at all times during the fabrication of the electrical system and the erection of the building; or such records as the building official designates shall be filed.

111.4 Connection after order to disconnect. A person shall not make utility service or energy source connections to systems regulated by this code, which have been disconnected or ordered to be disconnected by the building official, or the use of which has been ordered to be discontinued by the building official until the building official authorizes the reconnection and use of such systems.

113.5 Unauthorized tampering. Signs, tags or seals posted or affixed by the building official shall not be mutilated, destroyed or tampered with or removed without authorization from the building official.

113.6 Abatement of violation. The imposition of the penalties herein described shall not prevent the legal officer of the jurisdiction from instituting appropriate action to prevent unlawful construction or to restrain, correct or abate a violation; or to prevent illegal occupation of a structure or premises; or to stop an illegal act, conduct of business or occupancy of a structure on or about any premises.

115.6 Unsafe electrical systems. An electrical system that is unsafe, constitutes a fire or health hazard, or is otherwise dangerous to human life, as regulated by this code, is hereby declared as an unsafe electrical system. Use of an electrical system regulated by this code constituting a hazard to health, safety or welfare by reason of inadequate maintenance, dilapidation, fire hazard, disaster, damage or abandonment is hereby declared an unsafe use. Such unsafe equipment and appliances are hereby declared to be a public nuisance and shall be abated by repair, rehabilitation, demolition, or removal.

115.6.1 Abatement of electrical hazards. All identified electrical hazards shall be abated. All identified hazardous electrical conditions in permanent wiring shall be brought to the attention of the building official responsible for enforcement of this code. Electrical wiring, devices, appliances and other equipment which is modified or damaged and constitutes an electrical shock or fire hazard shall not be used.

115.7 Authority to condemn electrical systems. Wherever the building official determines that any electrical system, or portion thereof, regulated by this code has become hazardous to life, health or property, the building official shall order in writing that such electrical system either be removed or restored to a safe condition. A time for compliance with such electrical system either be removed or restored to a safe condition. A time limit for compliance with such order shall be specified in the written notice. A person shall not use or maintain a defective electrical system or equipment after receiving such notice.

Where such electrical system is to be disconnected, written notice as prescribed in this code shall be given. In cases of immediate danger to life or property, such disconnection shall be made immediately without such notice.

2701.2 Electrical load calculations. Where an additional or alteration is made to an existing electrical system, an electrical load calculation shall be prepared to determine if the existing electrical service has the capacity to serve the added load.

2701.3 Appliance and fixture listing. Electrical appliances and fixtures shall be tested and listed in published reports of inspected electrical equipment by an approved agency and installed in accordance with all instruction included as part of such listing.

Item 2 of proposal is unchanged.

Commenter's Reason: This replaces "ICC Electrical Code" with NFPA 70" in all locations throughout the ICC Codes. It is more user-

friendly to provide direct reference to the National Electrical Code rather than through a circuitous path that is not clearly defined.

Further it resolves the concerns of the committee by placing the appropriate administrative provisions into the IBC.

Public Comment 3:

H. Brooke Stauffer, National Electrical Contractors Association, representing Electrical Code Coalition, requests Approval as Modified by this Public Comment.

Modify Item 1 of proposal as follows:

Delete only current Chapter 12 of the 2003 ICC Electrical Code™ - Administrative Provisions. Retain Chapters 1-11 and Chapter 13. Renumber current Chapter 13 as Chapter 12.

Revise current Section 101.1 as follows:

101.1 Title. These regulations shall be known as the *Electrical Code—Administrative Provisions* ICC Electrical Administrative Provisions [NAME OF JURISDICTION] and shall be cited as such and will be referred to herein as “this ~~code~~ document.”

Revise current Section 101.2 as follows:

101.2 Purpose. The purpose of this ~~code~~ document is to provide ~~minimum standards~~ administrative provisions for the adoption and enforcement of electrical installation requirements to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation, and maintenance or use of electrical systems and equipment.

Add a new Section 101.4 to read as follows:

101.4 Technical requirements. Electrical systems and equipment shall be installed in accordance with NFPA 70.

Revise current Section 301.1 as follows:

301.1 Creation of enforcement agency. The department of electrical inspection is hereby created and the official in charge thereof shall be known as the code official. The function of the department shall be to assist the code official in the administration and enforcement of the provisions of this ~~code~~ NFPA 70.

Revise current text as follows:

Throughout the ICC Electrical Code, replace the words “this code” with “this document” wherever they occur.

Item 2 of proposal is unchanged.

Commenter’s Reason: The first modification responds to the committee’s disapproval statement that important administrative and inspection provisions would be lost if the proposal were to be approved as originally submitted. The deletion of Chapter 12 removes the technical requirements from the document making it exclusively an administrative document. The addition of new paragraph 101.4 provides the necessary reference to NFPA 70 for the technical electrical installation requirements.

With regard to the second modification, the proposed modification correlates the title of the document with the proposed revision to Paragraph 101.2 Purpose; and with the proposed deletion of Chapter 12 from the document. With the deletion of all technical requirements in the document, it is not accurate or necessary to refer to it as a code.

With regard to the third modification, the proposed modification revises the purpose of the document to correlate with the proposed deletion of Chapter 12 and the proposed addition of Section 101.4 that directly references the NEC.

With regard to the fourth modification, the proposed modification to delete Chapter 12 in Item #1 removes all technical requirements from the ICC Electrical Code. This proposed modification provides a direct reference to NFPA 70 for the technical electrical installation requirements.

The fifth modification makes it clear that the enforcement of NFPA 70 can be accomplished through the administrative provisions of this document.

With regard to the sixth modification, the global substitution of “this document” for “this code” is necessary to correlate with the proposed change to the document title and reinforces that the provisions contained therein are administrative only and that there are no technical requirements.

Analysis: As stated in the preface of the 1st edition of the *ICC Electrical Code*, this code was intended to be a comprehensive set of regulations for administering NFPA 70. As such, it became a member of the complete ICC family of codes and was not intended to be titled or referred to as a “document.”
