

NFPA TECHNICAL COMMITTEE FOR Electrical Inspection Practices

NFPA 78 and NFPA 1078 First Draft Meeting Agenda

February 26 - 28, 2018

Houston, TX

1. Call to order at 8:00am
2. Introductions and attendance
3. Chair's Comments and Agenda Review
4. NFPA Staff Liaison Presentation
5. Approval of recent minutes (Attachment A)
6. First Draft Development Activities for NFPA 1078 (Attachment B)
7. First Draft Development Activities for NFPA 78 (Attachment C)
8. New business
9. Other items
10. Adjourn

MEETING MINUTES

NFPA 78 Guide on Electrical Inspection and NFPA 1078 Standard for Electrical

Embassy Suites, Atlanta, GA

August 8 -9, 2017

Call to order

Ronald Farr, Chairman called the meeting to order – 8:14 AM ET, August 8, 2017

Introductions and Attendance

Members in attendance included:

Ronald Farr, Plainwell Fire Department: Chairman
Justin Bishop, Ph.D., P.E., CFEI, CVFI, Exponent; Principal Member
Donald R. Cook, Shelby County Department of Development Services: Principal Member
Jerry Lee Daniel, Texas Department of Licensing Regulation: Principal Member
Thomas Domitrovich, Eaton Corporation: Principal Member
Bryan P. Holland, National Electrical Manufacturers Association: Principal Member
Keith L. Lofland, International Association of Electrical Inspectors: Principal Member
William E. Peterson: Principal Member
Jay R Prigmore, Exponent Inc: Alternate Member (Bishop)

Members not in attendance included:

Tracie M. Young-Brungard, Pennsylvania State Fire Academy: Principal Member

Guests in attendance included:

Vince Della Croce, Siemens
William M. Burke, NFPA
Barry Chase, NFPA
Tim McClintock, NFPA
Jeffrey Sargent, NFPA
Steven Sawyer, NFPA

Presentations

Chairman Farr general comments and review of the agenda.

Gil Moniz, NFPA Staff Liaison Presentation

William M. Burke, NFPA Division Manager Electrical Engineering, Process Presentation

Action Items

Barry Chase, NFPA assisted the committee in the development of NFPA 78 Guide on Electrical Inspection Draft and NFPA 1078 Standard for Electrical Inspector Professional Qualifications Draft

Next Meeting

TBD

Adjournment

Meeting adjourned by Ronald Farr, Chairman at 3:30 PM (EST), August 9, 2017

Submitted by Gil Moniz



Public Input No. 43-NFPA 1078-2018 [Chapter 1]

Chapter 1 Administration

Global Input

Delete the term "the" before "AHJ requirements" throughout the entire document

Replace the term "ensure" with "verify" throughout the entire document

Use the term "technical or life safety compliance requirement or condition" everywhere the variations of this terminology is used throughout the entire document.

1.1* Scope.

This standard identifies the minimum job performance requirements (JPRs) for electrical inspectors.

1.2 Purpose.

The purpose of this standard is to specify the minimum JPRs for serving as an electrical inspector.

1.2.1

This standard shall define an electrical inspector.

1.2.2

The intent of this standard shall be to ensure that personnel serving as electrical inspectors are qualified.

1.2.3*

This standard shall not address management responsibility.

1.2.4

It is not the intent of this standard to restrict any jurisdiction from exceeding or combining these minimum requirements.

1.2.5

JPRs for the position of electrical inspector are the tasks personnel shall be able to perform to carry out the job duties.

1.2.6*

An electrical inspector shall remain current with the general knowledge, skills, and JPRs addressed for the position of qualification.

1.3 Application.

The application of this standard is to specify which requirements within the document shall apply to an electrical inspector.

1.3.1

The JPRs shall be accomplished in accordance with recognized practices and procedures or as defined by law or by the requirements of the authority having jurisdiction (AHJ) and all applicable NFPA standards.

1.3.2

It shall not be required that the JPRs be mastered in the order in which they appear. The AHJ shall establish instructional priority and the training program content to prepare personnel to meet the JPRs of this standard.

1.3.3*

Performance of each requirement of this standard shall be evaluated by personnel approved by the AHJ.

1.3.4

The JPRs for the position shall be completed in accordance with recognized practices and procedures or as defined by law or by the AHJ.

1.3.5

Personnel assigned the duties of electrical inspector shall meet all the requirements defined in Chapter 4 prior to being qualified as an electrical inspector.

1.3.6

The AHJ shall provide personal protective equipment (PPE) and the equipment necessary to conduct JPR evaluations.

1.3.7

JPRs involving exposure to safety hazards shall be performed in approved PPE.

1.3.8

Prior to training to meet the requirements of this standard, personnel shall meet the following requirements:

- (1) Educational requirements established by the AHJ
- (2) Age requirements established by the AHJ
- (3) Medical requirements established by the AHJ
- (4) Job-related physical performance requirements established by the AHJ

1.3.9

The electrical inspector shall comply with the following code of ethics:

- (1) Above all, preserve the safety, health, and welfare of the public
- (2) Only perform services in their areas of competence
- (3) Disseminate information only in an objective and truthful manner
- (4) Represent each employer or client as an honorable agent or trustee
- (5) Act in an honest and forthright manner
- (6) Promote the honor, reputation, and usefulness of the profession

1.3.10

Wherever in this standard the terms *rules*, *regulations*, *policies*, *procedures*, or *equipment* are used, it is implied that they are those of the AHJ.

1.3.11*

The electrical inspector shall remain current with the origins and limits of their authority, electrical technology, electrical inspection practices and methods, and applicable codes, standards, product certification requirements, and policies.

1.3.12*

The electrical inspector shall be provided with access to AHJ requirements.

1.3.13

The electrical inspector shall complete field inspections, plans reviews, and other related activities in an efficient and effective manner.

Statement of Problem and Substantiation for Public Input

These changes will provide consistency and clarity throughout the document.

Submitter Information Verification

Submitter Full Name: Vince Baclawski
Organization: Nema
Street Address:
City:
State:
Zip:
Submittal Date: Wed Feb 07 10:09:41 EST 2018

**Public Input No. 30-NFPA 1078-2018 [Section No. 1.2.6]****1.2.6***

~~At~~ The electrical inspector shall acquire additional training and continuing education to remain current with the general knowledge, skills, and JPRs addressed for the position ~~of qualification~~ .

Statement of Problem and Substantiation for Public Input

This change adds clarity to the section by indicating how the electrical inspector is to remain current with the general knowledge, skills, and JPRs included in the standard. "Of qualification" is unnecessary and deleted from the section.

Submitter Information Verification

Submitter Full Name: Vince Baclawski
Organization: Nema
Street Address:
City:
State:
Zip:
Submittal Date: Wed Feb 07 09:25:31 EST 2018



Public Input No. 54-NFPA 1078-2018 [Section No. 1.2.6]

1.2.6*

An electrical inspector shall remain current with the general knowledge, skills, and JPRs addressed for the position of qualification.

Informational Note: The committee recognizes the importance of formal, and continuing education, and training programs to maintain and update the necessary skills and knowledge for the level of qualification Continuing Education and Training Program can be developed and administered by local state Province or federal agencies as well as professional associations accredited institutions or higher education. The method of learning should include but are not limited to, areas of Technology, refresher training, skills practices, and knowledge application to standards. The subject matter should relate to the requirements of the standard.

Statement of Problem and Substantiation for Public Input

NATIONAL ELECTRICAL CODE® STYLE MANUAL

3.1.3 Informational Notes. Informational notes contain explanatory information and shall be located directly after the rule they apply to. Informational Notes shall not be written in mandatory language and shall not contain requirements, make interpretations, or make recommendations. If an Informational Note is needed to explain the text of the Code, consideration should be given to rewriting the text of the code to make the rule clear.

Submitter Information Verification

Submitter Full Name: Gary Jones

Organization:

Street Address:

City:

State:

Zip:

Submittal Date: Tue Feb 13 18:21:32 EST 2018



Public Input No. 34-NFPA 1078-2018 [Section No. 1.3]

1.3 Application.

The application of this standard is to specify ~~which~~ the requirements within the document ~~shall~~ that apply to ~~an~~ the electrical inspector.

1.3.1

The JPRs shall be accomplished in accordance with recognized practices and procedures or as defined by law or by the requirements of the authority having jurisdiction (AHJ) and all applicable NFPA standards.

1.3.2

It shall not be required that the JPRs be mastered in the order in which they appear. The AHJ shall establish instructional priority and the training program content to prepare personnel to meet the JPRs of this standard.

1.3.3*

Performance of each requirement of this standard shall be evaluated by personnel approved by the AHJ.

1.3.4

The JPRs for the position shall be completed in accordance with recognized practices and procedures or as defined by law or by the AHJ.

1.3.5

Personnel assigned the duties of electrical inspector shall meet all the requirements defined in Chapter 4 prior to being qualified as an electrical inspector.

1.3.6

The AHJ shall provide personal protective equipment (PPE) and the equipment necessary to conduct JPR evaluations.

1.3.7

JPRs involving exposure to safety hazards shall be performed in approved PPE.

1.3.8

Prior to training to meet the requirements of this standard, personnel shall meet the following requirements:

- (1) Educational requirements established by the AHJ
- (2) Age requirements established by the AHJ
- (3) Medical requirements established by the AHJ
- (4) Job-related physical performance requirements established by the AHJ

1.3.9

The electrical inspector shall comply with the following code of ethics:

- (1) Above all, preserve the safety, health, and welfare of the public
- (2) Only perform services in their areas of competence
- (3) Disseminate information only in an objective and truthful manner
- (4) Represent each employer or client as an honorable agent or trustee
- (5) Act in an honest and forthright manner
- (6) Promote the honor, reputation, and usefulness of the profession

1.3.10

Wherever in this standard the terms *rules, regulations, policies, procedures, or equipment* are used, it is implied that they are those of the AHJ.

1.3.11*

The electrical inspector shall remain current with the origins and limits of their authority, electrical technology, electrical inspection practices and methods, and applicable codes, standards, product certification requirements, and policies.

1.3.12*

The electrical inspector shall be provided with access to AHJ requirements.

1.3.13

The electrical inspector shall complete field inspections, plans reviews, and other related activities in an efficient and effective manner.

Statement of Problem and Substantiation for Public Input

This proposed revised text adds clarity to the statement.

Submitter Information Verification

Submitter Full Name: Vince Baclawski
Organization: Nema
Street Address:
City:
State:
Zip:
Submittal Date: Wed Feb 07 09:37:33 EST 2018



Public Input No. 31-NFPA 1078-2018 [Section No. 1.3.4]

1.3.4 –

The JPRs for the position shall be completed in accordance with recognized practices and procedures or as defined by law or by the AHJ.

-

Statement of Problem and Substantiation for Public Input

This section is not necessary as the statement is covered by 1.3.1 of the document.

Submitter Information Verification

Submitter Full Name: Vince Baclawski
Organization: Nema
Street Address:
City:
State:
Zip:
Submittal Date: Wed Feb 07 09:28:19 EST 2018



Public Input No. 7-NFPA 1078-2018 [Section No. 1.3.6]

1.3.6

The AHJ shall provide personal protective equipment (PPE), safety clothing, footware and the equipment necessary to conduct ~~JPR evaluations~~ inspections or reviews .

Statement of Problem and Substantiation for Public Input

this section is confusing, equipment as nothing to do with Job Performance Requirements only evaluation (inspection) of electrical installations or plan reviews.

Submitter Information Verification

Submitter Full Name: Alfio Torrisi
Organization: Master electrician
Street Address:
City:
State:
Zip:
Submittal Date: Wed Jan 03 21:02:34 EST 2018



Public Input No. 32-NFPA 1078-2018 [Section No. 1.3.8]

1.3.8

Prior to training to meet the requirements of this standard, personnel shall meet the following requirements:

Educational

- (1) Prior educational requirements established by the AHJ ~~Age~~
- (2) Health and fitness requirements established by the AHJ
- (3) ~~Medical requirements established by the AHJ~~
- (4) Job-related ~~physical~~ performance requirements established by the AHJ
- (5) Other eligibility criteria established by law

Statement of Problem and Substantiation for Public Input

The term "eligibility" is added to the charging statement to add clarity. (1) has been modify to clearly indicate "prior" education is needed. (2) has been deleted as age requirements typically outline in state or local law. "Medical" has been changed to "health and fitness" to add clarity. "Physical" has been deleted from required job-related performance to include all required skills and not just physical skills. (4) has been added to cover any potential legal requirements for employment as an electrical inspector.

Submitter Information Verification

Submitter Full Name: Vince Baclawski
Organization: Nema
Street Address:
City:
State:
Zip:
Submittal Date: Wed Feb 07 09:29:57 EST 2018



Public Input No. 27-NFPA 1078-2018 [Section No. 1.3.9]

1.3.9

The electrical inspector shall comply with the following code of ethics:

- (1) Above all, preserve the safety, health, and welfare of the public
- (2) ~~Only perform services in their areas of competence~~
- (3)
- (4) Disseminate information only in an objective and truthful manner
- (5) Represent each employer or client as an honorable agent or trustee
- (6) Act in an honest and forthright manner
- (7) Promote the honor, reputation, and usefulness of the profession

Statement of Problem and Substantiation for Public Input

I feel this is something that is very difficult to ask of a multi-hat inspector. We seem to have this mentality that someone conducting electrical inspections just needs to be a third year college student with no technical training. What is happening in the trades is that many jurisdictions are hiring people and making them multi-hat inspectors. This statement as written would place a build contractor, a plumbing contractor, a mechanical contractor, a third year college student, in a position to where they would be uncomfortable conducting the electrical inspection. An electrician or an electrical inspector should have the necessary training as an electrician in order to review work installed by other electricians. I know I am fighting an uphill battle but sending a licensed electrician to a "seminar" to become a doctor or lawyer would never ever be tolerated. Why is it tolerated for professionals in the electrical trade?

Submitter Information Verification

Submitter Full Name: Joseph Wages

Organization:

Affiliation: Self

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jan 29 14:13:06 EST 2018



Public Input No. 8-NFPA 1078-2018 [Section No. 1.3.11]

1.3.11*

The electrical inspector shall remain current with the origins and limits of their authority, electrical technology, electrical inspection practices and methods, and applicable codes, standards, product certification requirements, and policies. The AHJ shall provide the necessary funding and time required for this level of expertise.

Statement of Problem and Substantiation for Public Input

All too often the AHJ are unwilling to support this crucial requirement of continuing education, denying funding or the time required to remain current. This will make it clear to the AHJ it is their responsibility to foster the development the Electrical inspectors performance.

Submitter Information Verification

Submitter Full Name: Alfio Torrisi

Organization: Master electrician

Street Address:

City:

State:

Zip:

Submittal Date: Wed Jan 03 21:17:39 EST 2018



Public Input No. 33-NFPA 1078-2018 [Section No. 1.3.13]

1.3.13

The electrical inspector shall complete ~~field inspections, plans reviews, and other related activities~~ electrical inspections in an efficient and effective manner.

Statement of Problem and Substantiation for Public Input

This proposed change as defined to the term of the statement that includes all of the proposed deleted text.

Submitter Information Verification

Submitter Full Name: Vince Baclawski
Organization: Nema
Street Address:
City:
State:
Zip:
Submittal Date: Wed Feb 07 09:33:49 EST 2018



Public Input No. 12-NFPA 1078-2018 [Section No. 2.4]

2.4 References for Extracts in Mandatory Sections.

NFPA 3, *Standard for Commissioning of Fire Protection and Life Safety Systems*, 2018 edition, 70, National Electrical Code 2017

Statement of Problem and Substantiation for Public Input

An electrical inspector does not commission an electrical installation or any other system, so the reference to NFPA 3 and bases of this document (1078) which look like it is also supporting NFPA 3 is not correct. NFPA 1078 should be based on inspections which are basically to confirm code, standards and stakeholder requirements on an electrical installation. Preferably prior to energizing the system to reduce exposure to energize parts.

Submitter Information Verification

Submitter Full Name: Alfio Torrisi

Organization: self

Street Address:

City:

State:

Zip:

Submittal Date: Thu Jan 04 12:45:25 EST 2018



Public Input No. 13-NFPA 1078-2018 [Section No. 3.2]

3.2

~~–NFPA Official Definitions~~

~~.~~

~~3.2.~~

1 * _ Approved.

Acceptable to the authority having jurisdiction.

3.2.2 * _ Authority Having Jurisdiction (AHJ).

An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

3.2.3 * _ Code.

A standard that is an extensive compilation of provisions covering broad subject matter or that is suitable for adoption into law independently of other codes and standards.

3.2.4 _ Guide.

A document that is advisory or informative in nature and that contains only nonmandatory provisions. A guide may contain mandatory statements such as when a guide can be used, but the document as a whole is not suitable for adoption into law.

3.2.5 * _ Listed.

Equipment, materials, or services included in a list published by an organization that is acceptable to the authority having jurisdiction and concerned with evaluation of products or services, that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services, and whose listing states that either the equipment, material, or service meets appropriate designated standards or has been tested and found suitable for a specified purpose.

3.2.6 _ Recommended Practice.

A document that is similar in content and structure to a code or standard but that contains only nonmandatory provisions using the word “should” to indicate recommendations in the body of the text.

3.2.7 _ Shall.

Indicates a mandatory requirement.

3.2.8 _ Should.

Indicates a recommendation or that which is advised but not required.

3.2.9 _ Standard.

An NFPA Standard, the main text of which contains only mandatory provisions using the word “shall” to indicate requirements and that is in a form generally suitable for mandatory reference by another standard or code or for adoption into law. Nonmandatory provisions are not to be considered a part of the requirements of a standard and shall be located in an appendix, annex, footnote, informational note, or other means as permitted in the NFPA Manuals of Style. When used in a generic sense, such as in the phrase “standards development process” or “standards development activities,” the term “standards” includes all NFPA Standards, including Codes, Standards, Recommended Practices, and Guides.

Statement of Problem and Substantiation for Public Input

the problem is you have THREE sections on definitions which is confusing please just have one section and re-alphabetize the whole section

Submitter Information Verification

Submitter Full Name: Alfio Torrisi
Organization: self
Street Address:
City:
State:
Zip:
Submittal Date: Thu Jan 04 12:58:44 EST 2018



Public Input No. 9-NFPA 1078-2018 [New Section after 3.2.3]

TITLE OF NEW CONTENT Electrical Installation

Type your content here ...

Electrical installations means the installation, repair, alteration and maintenance of electrical conductors, fittings, equipment, devices and luminaires for heating, lighting, power, signaling, data, video and control purposes, regardless of the voltage.

Statement of Problem and Substantiation for Public Input

An electrical inspector inspects electrical installations and equipment so the question is what constitutes an electrical installation. this definition would provide guidance on the subject

Submitter Information Verification

Submitter Full Name: Alfio Torrisi
Organization: self
Street Address:
City:
State:
Zip:
Submittal Date: Thu Jan 04 11:59:41 EST 2018



Public Input No. 53-NFPA 1078-2018 [New Section after 3.3]

TITLE OF NEW CONTENT

Qualified. has demonstrated skills and knowledge related to the construction and operation of electrical equipment and installations and has completed training from AHJ approved providers.
 Type your content here ...

Statement of Problem and Substantiation for Public Input

Upon comparison of wording in Chapter 4 and section 1.3.5 some opposition maybe present. Many times, in Chapter 4, the statement “the ability to” is used and section 1.3.5 uses a more code like term “prior to be qualified.” What is being recommended is to substitute the text “the ability to” with “shall be qualified to.” Also including the definition of “Qualified Person from NFPA 70E® Standard for Electrical Safety in the Workplace. This would better convey the objectives of current qualifications, proven abilities, and knowhow related to the skill set needed.

As an alternative to the above public input, substitute the text “the ability to” with “shall be qualified to” and a new specific definition added, “Qualified. has demonstrated skills and knowledge related to the construction and operation of electrical equipment and installations and has completed training from AHJ approved providers.”

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
<u>Public Input No. 52-NFPA 1078-2018 [Section No. 4.1]</u>	

Submitter Information Verification

Submitter Full Name: Gary Jones

Organization:

Street Address:

City:

State:

Zip:

Submittal Date: Tue Feb 13 17:47:56 EST 2018



Public Input No. 10-NFPA 1078-2018 [Section No. 3.3]

A large, empty rectangular frame with a thin black border, occupying the central portion of the page. This area is typically used for displaying a document or image related to the public input.

3.3**–General Definitions**

.

3.3.**1 * _ AHJ Requirements.**

The codes and standards, product certification requirements, policies, and procedures that are adopted or approved by the authority having jurisdiction (AHJ).

3.3.2 * _ Construction Document.

The plans, specifications, and other documents that describe the construction project.
[3: 2018]

3.3.3 * _ Electrical Inspection.

A process that includes administration, plans review, and field inspection to ensure that the workmanship and materials used in the installation, construction, and maintenance of electrical systems for an occupancy use comply with AHJ requirements.

3.3.4 _ Electrical Inspector.

A person responsible and qualified to perform one or more functions of an electrical inspection, including administration, plans review, or field inspection.

3.3.5 * _ Electrical Theory.

The concepts of electricity and the relationship among them.

3.3.6 _ Field Inspection.

An onsite review and assessment to ensure the workmanship and materials used in the installation and maintenance of new or existing electrical systems comply with AHJ requirements.

3.3.7 _ Job Performance Requirement (JPR).

A statement that describes a specific job task, lists the items necessary to complete the task, and defines measurable and observable outcomes and evaluation areas for the specific task.

3.3.8 _ Plans Review.

A review and assessment of construction documents to ensure the design and layout of new or existing electrical systems comply with AHJ requirements.

3.3.9 _ Personal Protective Equipment (PPE).

Equipment for the electrical inspector's personal protection.

3.3.10 * _ Product Certification.

A process to verify that a product meets the qualification criteria stipulated in a standard, contract, regulation, or specification.

3.3.11 _ Requisite Knowledge.

Fundamental knowledge one must have in order to perform a specific task.

3.3.12 _ Requisite Skills.

The essential skills one must have in order to perform a specific task.

3.3.13 _ Task.

A specific job behavior or activity.

Statement of Problem and Substantiation for Public Input

terraview would not let me pick just 3.3, however the problem is you have THREE sections on definitions which is confusing please just have one section and re-alphabetize the whole section

Submitter Information Verification

Submitter Full Name: Alfio Torrisi
Organization: self
Street Address:
City:
State:
Zip:
Submittal Date: Thu Jan 04 12:12:56 EST 2018



Public Input No. 14-NFPA 1078-2018 [Section No. 3.3.2]

3.3.2* Construction ~~Document~~ Documents .

The plans, specifications, and other documents that describe the construction project. [3:2018]

Statement of Problem and Substantiation for Public Input

Construction documents are referenced in the plural sense throughout the entire document. This editorial change is only an attempt to have the definition correctly reflect it's use and have "documents" used in the plural sense.

NFPA 78 uses the plural "construction documents".

Submitter Information Verification

Submitter Full Name: Vincent Della Croce
Organization: Siemens
Street Address:
City:
State:
Zip:
Submittal Date: Tue Jan 09 10:25:26 EST 2018



Public Input No. 15-NFPA 1078-2018 [Section No. 3.3.3]

3.3.3* Electrical Inspection.

A process that includes administration, plans review, and field inspection to ensure that the workmanship and materials used in the installation, construction, and maintenance of new or existing electrical systems for an occupancy use comply with AHJ requirements.

Statement of Problem and Substantiation for Public Input

This proposed change is an attempt to correlate the wording in the definitions of electrical inspection, field inspection, and plans review. Field inspection and plans review both contain the phrase "new or existing" while electrical inspection does not.

Submitter Information Verification

Submitter Full Name: Vincent Della Croce

Organization: Siemens

Street Address:

City:

State:

Zip:

Submittal Date: Tue Jan 09 10:38:22 EST 2018



Public Input No. 35-NFPA 1078-2018 [Section No. 3.3.3]

3.3.3* Electrical Inspection.

A process that includes administration, plans review, and field inspection to ~~ensure~~ verify that the ~~workmanship~~ methods and materials used in the installation, ~~construction~~, and maintenance of new or existing electrical systems ~~for an occupancy use~~ comply with AHJ requirements.

Statement of Problem and Substantiation for Public Input

This proposed change is to correlate with the same definition used in NFPA 78 and by deleting unnecessary text.

Submitter Information Verification

Submitter Full Name: Vince Baclawski
Organization: Nema
Street Address:
City:
State:
Zip:
Submittal Date: Wed Feb 07 09:39:49 EST 2018



Public Input No. 44-NFPA 1078-2018 [Section No. 3.3.3]

3.3.3* Electrical Inspection.

A process that includes administration, plans review, and field inspection to ~~ensure~~ verify that the workmanship and materials used in the installation, construction, and maintenance of electrical systems for an occupancy use comply with AHJ requirements.

Statement of Problem and Substantiation for Public Input

The NFPA 3 and 4 technical committees discussed the word ensure and decided to change the word to verify. Verify is a better choice of words for the document. Also after further review of this draft, the word verify is used in numerous sections.

Submitter Information Verification

Submitter Full Name: Paul Dunphy
Organization: Harvard University
Street Address:
City:
State:
Zip:
Submittal Date: Wed Feb 07 18:15:33 EST 2018



Public Input No. 55-NFPA 1078-2018 [Section No. 3.3.3]

3.3.3* Electrical Inspection.

A process that includes administration, plans review, and field inspection to ensure that the workmanship and materials used in the installation, construction, and maintenance of electrical systems for an occupancy use comply with AHJ requirements.

Electrical inspection are based on NFPA 70 National Electrical Code® (NEC). Observations found in an electrical inspection may feature non-conforming items using fundamental principles to guard persons and property from hazards arising from the use of electricity.

The scope of work should be comprehensive but, does not include assessment of conductors/wiring methods concealed by construction in walls, floor/ceiling assemblies, wiring methods not readily accessible or any other latent defect. The scope of work does not include the design or the correction of any deficiencies of a wiring system and neither does the scope of work provide engineering or other design professional services.

Statement of Problem and Substantiation for Public Input

The additional word is to creating realistic expectations of what an electrical inspection is and keep it within established standards. Beyond these parameters starts to intrude on other vocations that are proficient in product standards, testing, and have more resourceful means. This could be related to the medical profession, ; therapist, nurse, paramedic, general practitioner, cardiologist, or neurosurgeon. This not an attempt to lessen the importance of any profession but to illustrate the expectation of tasks involved.

Submitter Information Verification

Submitter Full Name: Gary Jones

Organization:

Street Address:

City:

State:

Zip:

Submittal Date: Tue Feb 13 21:22:11 EST 2018



Public Input No. 36-NFPA 1078-2018 [Section No. 3.3.4]

3.3.4 Electrical Inspector.

A person ~~responsible and~~ who is qualified to perform one or more functions of an electrical inspection, including administration, plans review, or field inspection.

Statement of Problem and Substantiation for Public Input

This proposed change is correlated with the same definition used in NFPA 78 and by deleting unnecessary text.

Submitter Information Verification

Submitter Full Name: Vince Baclawski
Organization: Nema
Street Address:
City:
State:
Zip:
Submittal Date: Wed Feb 07 09:43:28 EST 2018



Public Input No. 50-NFPA 1078-2018 [Section No. 3.3.4]

3.3.4 Electrical Inspector.

A person responsible and qualified to perform one or more functions of an electrical inspection, including administration, plans review, or field inspection.

Note: The Electrical Inspector may also be referred to as the "Wire Inspector" or "Inspector of Wires" depending on local ordinances.

Statement of Problem and Substantiation for Public Input

Not all jurisdictions refer to the AHJ as an Electrical Inspector.

Submitter Information Verification

Submitter Full Name: Peter Diamond

Organization: MEIA

Street Address:

City:

State:

Zip:

Submittal Date: Mon Feb 12 19:25:35 EST 2018



Public Input No. 6-NFPA 1078-2018 [Section No. 3.3.4]

3.3.4 Electrical Inspector.

A person ~~responsible and qualified to perform~~ performing one or more functions of an electrical inspection, including administration, plans review, or field inspection.

Statement of Problem and Substantiation for Public Input

"responsible and qualified" are requirements and do not belong in the definition

Submitter Information Verification

Submitter Full Name: Alfio Torrisi

Organization: Master electrician

Street Address:

City:

State:

Zip:

Submittal Date: Wed Jan 03 20:54:07 EST 2018



Public Input No. 16-NFPA 1078-2018 [Section No. 3.3.6]

3.3.6 Field Inspection.

An onsite review and assessment to ensure the workmanship and materials used in the installation, construction, and maintenance of new or existing electrical systems for an occupancy use comply with AHJ requirements.

Statement of Problem and Substantiation for Public Input

This proposed change is an attempt to correlate the wording in the definitions of electrical inspection and field inspection. Electrical Inspection contains the phrases "construction" and "for an occupancy use" while Field Inspection does not.

Submitter Information Verification

Submitter Full Name: Vincent Della Croce

Organization: Siemens

Street Address:

City:

State:

Zip:

Submittal Date: Tue Jan 09 10:47:18 EST 2018



Public Input No. 37-NFPA 1078-2018 [Section No. 3.3.6]

3.3.6 Field Inspection.

An onsite review and assessment to ~~ensure_~~ verify_ the ~~workmanship_~~ methods_ and materials used in the installation and maintenance of new or existing electrical systems comply with AHJ requirements.

Statement of Problem and Substantiation for Public Input

This proposed change is to correlate with the same definition used in NFPA 78 and by deleting unnecessary text.

Submitter Information Verification

Submitter Full Name: Vince Baclawski

Organization: Nema

Street Address:

City:

State:

Zip:

Submittal Date: Wed Feb 07 09:45:50 EST 2018



Public Input No. 45-NFPA 1078-2018 [Section No. 3.3.6]

3.3.6 Field Inspection.

An onsite review and assessment to ensure the workmanship and materials used in the installation- ~~and maintenance~~ , construction, or maintenance of new or existing electrical systems comply with AHJ requirements.

Statement of Problem and Substantiation for Public Input

Section 3.3.3 includes construction within the scope of the activities of an electrical inspector. For consistency with that section, this section should also include 'construction'. In addition it seems more appropriate given the subject covered in section 3.3.6 to use 'or' as opposed to 'and' as there could be singular inspections for each (e.g. all three are not necessarily addressed in one inspection).

Submitter Information Verification

Submitter Full Name: David Conover
Organization: Pacific Northwest National Lab
Street Address:
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Submittal Date: Fri Feb 09 12:42:08 EST 2018



Public Input No. 17-NFPA 1078-2018 [Section No. 3.3.8]

3.3.8 Plans Review.

A review and assessment of construction documents to ensure the design and layout of new or existing electrical systems for an occupancy use comply with AHJ requirements.

Statement of Problem and Substantiation for Public Input

This proposed change is an attempt to correlate the wording in the definitions of Plans Review and Electrical Inspection. Electrical Inspection contains the phrase "for an occupancy use" while Plans Review does not.

Submitter Information Verification

Submitter Full Name: Vincent Della Croce
Organization: Siemens
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State:
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Submittal Date: Tue Jan 09 10:54:49 EST 2018



Public Input No. 38-NFPA 1078-2018 [Section No. 3.3.8]

3.3.8 Plans Review.

A review and assessment of construction documents to ~~ensure~~ verify the design and layout of new or existing electrical systems comply with AHJ requirements.

Statement of Problem and Substantiation for Public Input

This proposed change is to correlate with the same definition used in NFPA 78.

Submitter Information Verification

Submitter Full Name: Vince Baclawski
Organization: Nema
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City:
State:
Zip:
Submittal Date: Wed Feb 07 09:47:40 EST 2018



Public Input No. 1-NFPA 1078-2018 [Section No. 3.3.9]

3.3.9 Personal Protective Equipment (PPE).

Equipment, clothing and footwear for the electrical inspector's personal protection.

Statement of Problem and Substantiation for Public Input

PPE should include clothing and footwear as these terms are not considered equipment. Shoes/boots provide protection from nails, heavy objects falling on ones foot and electrical insulating qualities. Clothing such as gloves, and FR rated clothing will also be worn for protection from sharp edges and arc flash conditions.

Submitter Information Verification

Submitter Full Name: Alfio Torrisi

Organization: Master electrician

Street Address:

City:

State:

Zip:

Submittal Date: Wed Jan 03 19:44:26 EST 2018



Public Input No. 52-NFPA 1078-2018 [Section No. 4.1]

4.1 General.

For qualification as an electrical inspector, the electrical inspector shall meet the job performance requirements (JPRs) defined in Sections 4.2 through 4.4 of this standard.

4.1.1 General Prerequisite Knowledge.

AHJ requirements for performing an electrical inspection, electrical theory, electrical installation, occupancy use, and building construction classifications.

4.1.2 General Prerequisite Skills.

~~The ability to~~ shall be qualified to use interpersonal skills, oral and written communication skills, and office and managerial organizational skills.

Statement of Problem and Substantiation for Public Input

Upon comparison of wording in Chapter 4 and section 1.3.5 some opposition maybe present. Many times, in Chapter 4, the statement “the ability to” is used and section 1.3.5 uses a more code like term “prior to be qualified.” What is being recommended is to substitute the text “the ability to” with “shall be qualified to.” Also including the definition would be “Qualified Person from NFPA 70E® Standard for Electrical Safety in the Workplace. This would better convey the objectives of current qualifications, proven abilities, and knowhow related to the skill set needed.

As an alternative to the above public input, substitute the text “the ability to” with “shall be qualified to” and a new specific definition added, “Qualified. has demonstrated skills and knowledge related to the construction and operation of electrical equipment and installations and has completed training from AHJ approved providers.”

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
<u>Public Input No. 53-NFPA 1078-2018 [New Section after 3.3]</u>	

Submitter Information Verification

Submitter Full Name: Gary Jones

Organization:

Street Address:

City:

State:

Zip:

Submittal Date: Tue Feb 13 17:40:35 EST 2018



Public Input No. 4-NFPA 1078-2018 [Section No. 4.2.2(B)]

(B) Requisite Skills.

The ability to identify electrical compliance issues- ~~and~~ ,along with AHJ requirements and use interpersonal skills, organizational and ~~oral and written~~ communication skills to perform the task of evaluation .

Statement of Problem and Substantiation for Public Input

Oral and written communication skills, in this day and age? there are more ways to communicate than with pen and paper or orally. Just saying -communication skills- opens the door to all forms of communications. you should be well organized as this lead to efficiency and less errors.

Submitter Information Verification

Submitter Full Name: Alfio Torrisi

Organization: Master electrician

Street Address:

City:

State:

Zip:

Submittal Date: Wed Jan 03 20:30:20 EST 2018



Public Input No. 39-NFPA 1078-2018 [Section No. 4.2.3]

4.2.3

Propose technical reference material acquisition, given ~~a~~ the scope of electrical ~~plans review and field inspection processes responsibility and~~ inspections and AHJ requirements related to compliance, so that reference materials identified are acquired.

(A) Requisite Knowledge.

Types and sources of reference material and publications, including AHJ requirements and technical and life safety references.

(B) Requisite Skills.

The ability to recognize the need for reference materials, identify industry recognized reference materials, calculate budget impact, and make decisions regarding priorities.

Statement of Problem and Substantiation for Public Input

This proposed change adds clarity to the JPR and uses a defined term in place of the list of items in the given section of the statement.

Submitter Information Verification

Submitter Full Name: Vince Baclawski

Organization: Nema

Street Address:

City:

State:

Zip:

Submittal Date: Wed Feb 07 09:49:31 EST 2018



Public Input No. 2-NFPA 1078-2018 [Section No. 4.2.5(B)]

(B) Requisite Skills.

The ability to recognize electrical technical and life safety compliance requirements or conditions, ~~collect~~ _ and ~~develop potential solutions~~, and identify benefits based on AHJ requirements.

Statement of Problem and Substantiation for Public Input

It should not be within the scope of an inspector to provide design solutions to non-compliant installation. Only to inspect for compliance, period. they can give advise if a proposed solution is compliant but should not make the recommendation.

Submitter Information Verification

Submitter Full Name: Alfio Torrisi

Organization: Master electrician

Street Address:

City:

State:

Zip:

Submittal Date: Wed Jan 03 20:09:08 EST 2018



Public Input No. 5-NFPA 1078-2018 [Section No. 4.2.6(B)]

(B) Requisite Skills.

The ability to ~~compose~~ recommend modifications to existing AHJ requirements- ~~and use interpersonal skills and oral and written communication skills~~ , have interpersonal, organizational and communication skill sets .

Statement of Problem and Substantiation for Public Input

this makes it clear the inspector can use their skill set to make recommendation to the AHJs process, expand on skill sets

Submitter Information Verification

Submitter Full Name: Alfio Torrisi

Organization: Master electrician

Street Address:

City:

State:

Zip:

Submittal Date: Wed Jan 03 20:36:21 EST 2018



Public Input No. 40-NFPA 1078-2018 [Section No. 4.2.7]

4.2.7

Identify the AHJ ~~adopted policies and procedures~~ requirements for performing electrical inspections, given management objectives, so that the ~~AHJ adopted policies and procedures~~ electrical inspections are in accordance with the AHJ requirements.

(A) Requisite Knowledge.

Legal precedence and the various systems of government that affect the performance of the electrical inspector's duties and responsibilities, AHJ requirements for electrical plans review and the electrical field inspection process, and sources of detailed and technical and life safety information relative to electrical plans and specifications and field inspections.

(B) Requisite Skills.

The ability to identify building construction types, occupancy use classifications, and electrical technical and life safety compliance requirements and conditions; read and interpret a set of electrical and construction plans and specifications; use interpersonal skills and oral and written communication skills; conduct research; make decisions; and recognize and resolve electrical technical and life safety compliance requirements and conditions.

Statement of Problem and Substantiation for Public Input

This proposed change replaces the undefined "AHJ-adopted policies and procedures" to the defined "AHJ requirements" and "electrical inspections" to add clarity and consistency to the document.

Submitter Information Verification

Submitter Full Name: Vince Baclawski
Organization: Nema
Street Address:
City:
State:
Zip:
Submittal Date: Wed Feb 07 09:53:02 EST 2018



Public Input No. 3-NFPA 1078-2018 [Section No. 4.2.7(B)]

(B) Requisite Skills.

The ability to identify ~~building construction types, occupancy use classifications, and~~ electrical technical and ~~life safety~~ compliance requirements ~~and conditions~~; read and interpret a set of electrical ~~and~~ construction plans and specifications; use interpersonal skills and ~~oral and written~~ communication skills; conduct research; make decisions; and recognize and resolve electrical ~~technical and life safety~~ compliance requirements ~~and conditions~~.

Statement of Problem and Substantiation for Public Input

I am and electrical inspector not a structural engineer or a building inspector. Life safety issues (NFPA 101) and occupancy uses can involve hazards locations and are better left to an electrical or fire protection engineer. Oral and written communication skills, there are more ways to communicate than with pen and paper or orally. leaving this to only requiring ~~communication skills~~ opens the door to all forms of communications.

Submitter Information Verification

Submitter Full Name: Alfio Torrisi

Organization: Master electrician

Street Address:

City:

State:

Zip:

Submittal Date: Wed Jan 03 20:20:39 EST 2018



Public Input No. 11-NFPA 1078-2018 [Section No. 4.2.11(B)]

(B) Requisite Skills.

The ability to identify the types and scope of work when a permit is required and use interpersonal skills and ~~oral and written~~ communication skills.

Statement of Problem and Substantiation for Public Input

just like the previous comment on written and oral communications

Submitter Information Verification

Submitter Full Name: Alfio Torrisi

Organization: self

Street Address:

City:

State:

Zip:

Submittal Date: Thu Jan 04 12:41:54 EST 2018



Public Input No. 18-NFPA 1078-2018 [Section No. 4.2.15 [Excluding any Sub-Sections]]

Prepare electrical inspection reports, given AHJ requirements and observations from an electrical inspection, so that the report is accurate, clear, and concise and reflects the findings of the electrical inspection in accordance with the AHJ requirements.

Statement of Problem and Substantiation for Public Input

This proposed change is an attempt to correlate the wording in 4.2.15 with 4.2.16. The word "accurate" is used in 4.2.16 preceding "clear and concise" but it is not used in 4.2.15 to precede "clear and concise".

Submitter Information Verification

Submitter Full Name: Vincent Della Croce

Organization: Siemens

Street Address:

City:

State:

Zip:

Submittal Date: Tue Jan 09 11:10:08 EST 2018



Public Input No. 19-NFPA 1078-2018 [Section No. 4.2.17(B)]

(B) Requisite Skills.

The ability to maintain and account for electrical inspection documents and records using an AHJ ~~adopted means~~ requirements for records management.

Statement of Problem and Substantiation for Public Input

"AHJ adopted means" is not a defined term. "AHJ requirements" is a defined term and is used throughout the entire document. The definition includes "policies and procedures", which pertains to records management.

Submitter Information Verification

Submitter Full Name: Vincent Della Croce

Organization: Siemens

Street Address:

City:

State:

Zip:

Submittal Date: Tue Jan 09 13:09:43 EST 2018



Public Input No. 41-NFPA 1078-2018 [Section No. 4.3.4]

4.3.4

Process construction documents for permitting, given a set of construction documents, ~~permitting policies, procedures, and process,~~ and AHJ requirements so that required permits are issued in accordance with the AHJ requirements.

(A) Requisite Knowledge.

Construction document review and AHJ requirements.

(B) Requisite Skills.

The ability to review construction documents for the permitting application process and use interpersonal skills and oral and written communication skills when conducting a construction document review during the permitting application process.

Statement of Problem and Substantiation for Public Input

This proposed change replaces the undefined list items and replaces them with the defined term "AHJ requirements" to add clarity and consistency to the document

Submitter Information Verification

Submitter Full Name: Vince Baclawski

Organization: Nema

Street Address:

City:

State:

Zip:

Submittal Date: Wed Feb 07 09:56:16 EST 2018



Public Input No. 20-NFPA 1078-2018 [Section No. 4.3.5(B)]

(B) Requisite Skills.

The ability to recognize differences in occupancy use as they relate to the AHJ requirements and read and comprehend ~~a set of electrical plans~~ construction documents .

Statement of Problem and Substantiation for Public Input

This proposed change is an attempt to correlate the wording of 4.3.5 parent text and 4.3.5 (B) Requisite Skills. The 4.3.5 parent text references "construction documents", but the 4.3.5 (B) Requisite Skills text references "a set of electrical plans".

Submitter Information Verification

Submitter Full Name: Vincent Della Croce

Organization: Siemens

Street Address:

City:

State:

Zip:

Submittal Date: Tue Jan 09 13:17:03 EST 2018



Public Input No. 22-NFPA 1078-2018 [Section No. 4.3.6 [Excluding any Sub-Sections]]

Calculate the electrical load based on the intended occupancy use, given AHJ requirements and ~~a set of~~ construction documents, so that the electrical system capacity and occupancy use are in accordance with AHJ requirements.

Statement of Problem and Substantiation for Public Input

This proposal is an attempt to correlate the use of the defined term "construction documents". In no other location in the document is the term "construction documents" preceded by "a set of".

Submitter Information Verification

Submitter Full Name: Vincent Della Croce

Organization: Siemens

Street Address:

City:

State:

Zip:

Submittal Date: Tue Jan 09 13:27:26 EST 2018



Public Input No. 21-NFPA 1078-2018 [Section No. 4.3.6(B)]

(B) Requisite Skills.

The ability to apply load calculation methods to determine electrical system capacity based on occupancy use and AHJ requirements and read and comprehend ~~a set of electrical plans~~ construction documents .

Statement of Problem and Substantiation for Public Input

This proposed change is an attempt to correlate the wording of 4.3.6 parent text and 4.3.6 (B) Requisite Skills. The 4.3.6 parent text references "construction documents", but the 4.3.6 (B) Requisite Skills text references "a set of electrical plans".

Submitter Information Verification

Submitter Full Name: Vincent Della Croce

Organization: Siemens

Street Address:

City:

State:

Zip:

Submittal Date: Tue Jan 09 13:25:20 EST 2018



Public Input No. 23-NFPA 1078-2018 [Section No. 4.3.12 [Excluding any Sub-Sections]]

Prepare a report on the construction document review, given a construction document review and AHJ requirements, so that the report is accurate, clear, and concise and reflects the findings of the construction document review in accordance with AHJ requirements.

Statement of Problem and Substantiation for Public Input

This proposed change is an attempt to correlate the wording in 4.3.12 with 4.2.16. The word "accurate" is used in 4.2.16 preceding "clear and concise" but it is not used in 4.3.12 to precede "clear and concise".

Submitter Information Verification

Submitter Full Name: Vincent Della Croce
Organization: Siemens
Street Address:
City:
State:
Zip:
Submittal Date: Tue Jan 09 13:37:29 EST 2018



Public Input No. 29-NFPA 1078-2018 [New Section after 4.4.2]

TITLE OF NEW CONTENT

Add a removable tear out page to the NEC book that contains a full Check list for a basic electrical inspection. this page may be copies and re used over and over. This check list shall cover basic installation NEC codes and checked off as pass/ fail then signed by Electrical insptectore and given to AJH.

Bill Schell. inspector

Statement of Problem and Substantiation for Public Input

It would standardize most electrical inspections and assign responsibility

Submitter Information Verification

Submitter Full Name: William Schell

Organization: Commonwealth Elect Insp Ser

Street Address:

City:

State:

Zip:

Submittal Date: Wed Feb 07 08:13:31 EST 2018



Public Input No. 24-NFPA 1078-2018 [Section No. 4.4.2]

4.4.2 General Prerequisite Knowledge.

~~Acceptance~~ General knowledge of codes, standards, policies, and procedures for conducting an electrical inspection, electrical theory, electrical installation, occupancy use, and building construction classifications.

Statement of Problem and Substantiation for Public Input

This proposal is an attempt to correlate the language used in 4.3.2 and 4.4.2. Both sections reference the General Prerequisite Knowledge required but are not consistent in the language used. "Acceptance" does not signify or require an understanding of the items shown in 4.4.2.

Submitter Information Verification

Submitter Full Name: Vincent Della Croce

Organization: Siemens

Street Address:

City:

State:

Zip:

Submittal Date: Tue Jan 09 13:47:18 EST 2018



Public Input No. 25-NFPA 1078-2018 [Section No. 4.4.4(B)]

(B) Requisite Skills.

The ability to observe and adjust or stop the field inspection until the ~~scene~~ building or area is rendered safe or approved PPE is donned and use interpersonal skills and oral and written communication skills.

Statement of Problem and Substantiation for Public Input

This proposal is an attempt to correlate the parent text in 4.4.4 with the text in 4.4.4(B) Requisite Skills. The parent text uses the terms "building or area", but the text in (B) Requisite Skills uses the term "scene".

Submitter Information Verification

Submitter Full Name: Vincent Della Croce

Organization: Siemens

Street Address:

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Submittal Date: Tue Jan 09 14:59:36 EST 2018



Public Input No. 51-NFPA 1078-2018 [New Section after 4.4.9]

TITLE OF NEW CONTENT

4.5 Compensation.

4.5.1 Electrical Inspector's meeting this standard shall be reasonably compensated for their performance by their employer.

(A) Compensation shall be salary or wages equivalent to that of local IBEW salaries for journeymen electricians.

(B) Benefits should include health insurance, retirement, vacation and holiday pay.

Statement of Problem and Substantiation for Public Input

This added section will provide guidance to employers on compensation for Electrical Inspectors.

Submitter Information Verification

Submitter Full Name: Peter Diamond

Organization: MEIA

Street Address:

City:

State:

Zip:

Submittal Date: Mon Feb 12 19:36:40 EST 2018



Public Input No. 46-NFPA 1078-2018 [Section No. A.3.2.1]

A.3.2.1 Approved.

The National Fire Protection Association does not approve, inspect, or certify any installations, procedures, equipment, or materials; nor does it approve or evaluate testing laboratories or listing agencies . In determining the acceptability of installations, procedures, equipment, or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure, or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization that is concerned with product evaluations and is thus in a position to determine compliance with appropriate standards for the current production of listed items.

Statement of Problem and Substantiation for Public Input

The review and approval of testing laboratories is one important aspect of conformity assessment and is mentioned in the current standard. That covers the acceptability of a testing laboratory to conduct a test in accordance with a referenced standard to determine if a particular product meets the standard. The other aspect of conformity assessment is to ensure continued production of a product is consistent with that tested and found to comply with a particular standard. As such it seems appropriate to include listing entities in the text.

Submitter Information Verification

Submitter Full Name: David Conover
Organization: Pacific Northwest National Lab
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Submittal Date: Fri Feb 09 12:59:54 EST 2018



Public Input No. 42-NFPA 1078-2018 [Section No. A.3.3.2]

A.3.3.2 Construction Document.

Construction documents could include, but are not limited to, the following:

- (1) Cover letter
- (2) Load calculations
- (3) Short-circuit current analysis
- (4) Manufacturer's applicable documents
- (5) Complete set of drawings, which could include the following:
 - (6) Floor layout, including equipment
 - (7) Service or feeder riser diagram
 - (8) Fixture schedule and luminaire layout
 - (9) Location of emergency systems
 - (10) Architectural drawings
 - (11) Mechanical drawings
 - (12) Structural drawings
 - (13) Site drawings
 - (14) Wiring methods and material

Statement of Problem and Substantiation for Public Input

This Public Input simply adds "current" to short-circuit to provide an industry recognized use of the term.

Submitter Information Verification

Submitter Full Name: Vince Baclawski
Organization: Nema
Street Address:
City:
State:
Zip:
Submittal Date: Wed Feb 07 10:03:41 EST 2018



Public Input No. 47-NFPA 1078-2018 [Section No. A.3.3.2]

A.3.3.2 Construction Document.

Construction documents could include, but are not limited to, the following:

- (1) Cover letter
- (2) Load calculations
- (3) Short-circuit analysis
- (4) Manufacturer's applicable documents
- (5) Complete set of drawings, which could include the following:
 - (6) Floor layout, including equipment
 - (7) Service or feeder riser diagram
 - (8) Fixture schedule and luminaire layout
 - (9) Location of emergency systems
 - (10) Architectural drawings
 - (11) Mechanical drawings
 - (12) Structural drawings
 - (13) Site drawings
 - (14) Wiring methods and material
- (15) Commissioning and Operation and Maintenance Manuals

Statement of Problem and Substantiation for Public Input

Construction documents can include commissioning manuals as well as operations and maintenance manuals. As an example NFPA 855 covering energy storage systems recognizes the importance of both commissioning and O&M to energy storage systems and has a requirement that such manuals be prepared and included as a component of the construction documents. Given that the charging language in this section is 'could' it seems reasonable to include this new item in the standard.

Submitter Information Verification

Submitter Full Name: David Conover
Organization: Pacific Northwest National Lab
Street Address:
City:
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Zip:
Submittal Date: Fri Feb 09 13:06:10 EST 2018



Public Input No. 48-NFPA 1078-2018 [Section No. A.4.3.1]

A.4.3.1

The tasks include, but are not limited to, the following:

- (1) Prepare plans review reports
- (2) Initiate a plans review to determine compliance
- (3) Process a plans review for permitting
- (4) Create a plans review report, form, checklist, or other job aid
- (5) Develop AHJ-adopted policies and procedures for administering the plans review process
- (6) Classify and verify occupancy use classification
- (7) Calculate and verify allowable electrical loads
- (8) Review proposed installation of electrical systems
- (9) Recommend modifications to AHJ requirements for plans review
- (10) Participate in legal proceedings
- (11) Evaluate construction documents for compliance
- (12) Evaluate construction documents for process or operation requiring electricity
- (13) Evaluate construction documents for hazardous materials and other hazards
- (14) Evaluate construction documents for the installation of electrical systems
- (15) Evaluate proposed electrical modifications for compliance
- (16) Demonstrate knowledge of AHJ requirements
- (17) Evaluate failure modes and effects or haard mitigation analyses

Statement of Problem and Substantiation for Public Input

There is an increasing reliance on failure modes and effects analysis (FMEA) and hazard mitigation analysis (HMA) with some new electrical technologies such as energy storage systems. When the adopted codes and standards have not 'caught up' to technology it is acceptable for a project proponent to use FMEA and HMA to document why what they are proposing is safe and meets the intent of adopted codes and standards. In review of the definition of construction documents in section 3.3.2 it is unclear if "other documents" would include an FMEA or HMA since they are not necessarily part of plans and specifications but instead documentation of compliance. Also section 4.3.1 covers plans review, which should include a review of the documentation of compliance. In other words mentioning FMEA and HMA as suggested seems the most appropriate place to do so given the current language in the standard, although sections 3.3.2 and 4.3.1 could be further enhanced to make sure that 'other documents' associated with plans and specifications and their review included documentation of compliance.

Submitter Information Verification

Submitter Full Name: David Conover

Organization: Pacific Northwest National Lab

Street Address:

City:

State:

Zip:**Submittal Date:** Fri Feb 09 13:19:04 EST 2018**Public Input No. 49-NFPA 1078-2018 [Section No. A.4.4.1]****A.4.4.1** 

The tasks include, but are not limited to, the following:

- (1) Identify the occupancy and building construction classification
- (2) Inspect the electrical system based on occupancy use
- (3) Recognize hazardous conditions associated with electrical equipment
- (4) Compare an approved electrical plans review
- (5) Calculate the allowable electrical load
- (6) Evaluate electrical systems
- (7) Verify compliance of the electrical system
- (8) Evaluate the electrical system modifications
- (9) Recommend criteria for developing an electrical inspection and plans review procedure
- (10) Observe and evaluate an electrical field inspection
- (11) Observe any required electrical system commissioning activities

Statement of Problem and Substantiation for Public Input

Commissioning of equipment associated with the electrical system is being required in codes and standards. Section 4.4.1 covers field inspection and during field inspection it is possible, given the nature of the electrical installation, that the electrical inspector will be on site during commissioning activities. Also if commissioning is a key component part of validating code compliance of the electrical system as installed they would need to be there to observe commissioning and determine that it was done as required and the outcomes were acceptable per code.

Submitter Information Verification**Submitter Full Name:** David Conover**Organization:** Pacific Northwest National Lab**Street Address:****City:****State:****Zip:****Submittal Date:** Fri Feb 09 13:33:55 EST 2018



Public Input No. 26-NFPA 1078-2018 [Section No. A.4.4.4]

A.4.4.4

Hazards and potential hazards include those that are observable by sound, sight, or touch. Concerns include, but are not limited to, fire hazards, biohazards, hazardous materials storage or processing, confined spaces, and laboratories.

Statement of Problem and Substantiation for Public Input

This proposed change is for grammatical purposes only, and adds the word "and".

Submitter Information Verification

Submitter Full Name: Vincent Della Croce

Organization: Siemens

Street Address:

City:

State:

Zip:

Submittal Date: Tue Jan 09 15:08:58 EST 2018



Public Input No. 28-NFPA 1078-2018 [Section No. E.2]

E.2 Informational References. (Reserved)

[Becoming The Electrical Inspector](#)

[International Association of Electrical Inspectors](#)

[901 Waterfall Way, Suite 602](#)

[Richardson, Texas 75080](#)

Statement of Problem and Substantiation for Public Input

This material includes beneficial to anyone wanting to become an electrical inspector. Referencing this material at this location would be beneficial to the user of this document.

Submitter Information Verification

Submitter Full Name: Joseph Wages

Organization:

Affiliation: Self

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jan 29 14:31:02 EST 2018



Public Input No. 22-NFPA 78-2018 [Section No. 1.2.3]

1.2.3

This document is intended to be used by authorities having jurisdiction, inspectors, designers, insurance inspectors, architects, installers, project managers, safety officers, and others who are involved with electrical inspections.

Statement of Problem and Substantiation for Public Input

It would seem that this document would be serving the needs of the inspection community. If this is the case the language needs to include the authority having jurisdiction and inspectors for clarity.

Submitter Information Verification

Submitter Full Name: Joseph Wages

Organization:

Affiliation: Self

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jan 29 10:12:57 EST 2018



Public Input No. 33-NFPA 78-2018 [Section No. 1.2.3]

1.2.3

This document is intended to be used by ~~designers,~~ design professionals, insurance inspectors, ~~architects, installers,~~ project managers, safety officers, ~~and others-~~ authorities having jurisdiction and other electrical professionals who are involved with electrical inspections.

Statement of Problem and Substantiation for Public Input

The public input deletes redundant terms and adds clarity to the purpose of the document and who is intended to use it.

Submitter Information Verification

Submitter Full Name: Vince Baclawski

Organization: Nema

Street Address:

City:

State:

Zip:

Submittal Date: Wed Feb 07 08:21:21 EST 2018



Public Input No. 3-NFPA 78-2018 [Section No. 2.2]

2.2 NFPA Publications.

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 1078, *Standard for Electrical Inspector Professional Qualifications*, 20XX edition.

[NFPA 70 National Electrical Code current addition](#)

Statement of Problem and Substantiation for Public Input

NFPA 70 is the benchmark standard in which the installation should start from

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Submittal Date: Sun Jan 07 14:21:02 EST 2018



Public Input No. 4-NFPA 78-2018 [Chapter 3]

Chapter 3 Definitions

3.1 General.

The definitions contained in this chapter apply to the terms used in this document. Where terms are not defined in this chapter or within another chapter, they should be defined using their ordinarily accepted meanings within the context in which they are used. *Merriam-Webster's Collegiate Dictionary*, 11th edition, is the source for the ordinarily accepted meaning.

3.2

NFPA Official Definitions

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3.2-

1 * _ Approved.

Acceptable to the authority having jurisdiction.

3.2.2 * _ Authority Having Jurisdiction (AHJ).

An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

3.2.3 * _ Code.

A standard that is an extensive compilation of provisions covering broad subject matter or that is suitable for adoption into law independently of other codes and standards.

3.2.4 _ Guide.

A document that is advisory or informative in nature and that contains only nonmandatory provisions. A guide may contain mandatory statements such as when a guide can be used, but the document as a whole is not suitable for adoption into law.

3.2.5 * _ Listed.

Equipment, materials, or services included in a list published by an organization that is acceptable to the AHJ and concerned with evaluation of products or services, that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services, and whose listing states that either the equipment, material, or service meets appropriate designated standards or has been tested and found suitable for a specified purpose.

3.2.6 _ Recommended Practice.

A document that is similar in content and structure to a code or standard but that contains only nonmandatory provisions using the word “should” to indicate recommendations in the body of the text.

3.2.7 _ Shall.

Indicates a mandatory requirement.

3.2.8 _ Should.

Indicates a recommendation or that which is advised but not required.

3.2.9 _ Standard.

An NFPA Standard, the main text of which contains only mandatory provisions using the word “shall” to indicate requirements and that is in a form generally suitable for mandatory reference by another standard or code or for adoption into law. Nonmandatory provisions are not to be considered a part of the requirements of a standard and shall be located in an appendix, annex, footnote, informational note, or other means as permitted in the NFPA Manuals of Style. When used in a generic sense, such as in the phrase “standards development process” or “standards development activities,” the term “standards” includes all NFPA Standards, including Codes, Standards, Recommended Practices, and Guides.

3.3**–General Definitions**

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3.3.**1 _ Administration.**

The practice of managing the electrical inspection processes or activities.

3.3.2 * _ AHJ Requirements.

The codes and standards, product certification requirements, policies, and procedures that are adopted or approved by the authority having jurisdiction (AHJ). [1078:20XX]

3.3.3 * _ Construction Document.

The plans, specifications, and other documents that describe the construction project. [3:2018]

3.3.4 _ Deficiency.**3.3.4.1 * _ Administrative Deficiency.**

A procedural condition that prevents the completion of the electrical inspection process.

3.3.4.2 * _ Critical Deficiency.

A condition that does not conform to AHJ requirements and presents an imminent hazard to persons or property.

3.3.4.3 * _ Noncritical Deficiency.

A condition that does not conform to AHJ requirements and does not present an imminent hazard to persons or property.

3.3.5 * _ Electrical Inspection.

A process that includes administration, plans review, and field inspection to ensure that the workmanship and materials used in the installation, construction, and maintenance of electrical systems for an occupancy use comply with AHJ requirements. [1078:20XX]

3.3.6 * _ Electrical Inspector.

A person responsible and qualified to perform one or more functions of an electrical inspection, including administration, plans review, or field inspection. [1078:20XX]

3.3.7 _ Field Inspection.

An onsite review and assessment to ensure the workmanship and materials used in the installation and maintenance of new or existing electrical systems comply with AHJ requirements. [1078:20XX]

3.3.8 _ Plans Review.

A review and assessment of construction documents to ensure the design and layout of new or existing electrical systems comply with AHJ requirements. [1078:20XX]

3.3.9 * _ Product Certification.

A process to verify that a product meets the qualification criteria stipulated in a standard, contract, regulation, or specification. [1078:20XX]

Statement of Problem and Substantiation for Public Input

time to consolidate have one title for definitions not three and re-alphabetize the whole section

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Public Input No. 27-NFPA 78-2018 [Section No. 3.3.4.1]

3.3.4.1* Administrative Deficiency.

A procedural condition that prevents the completion of the electrical inspection process.

Informational Note: (Note: ask the committee to state examples of what is considered an administrative deficiency).

Upon further review of this document I see that there is information in Annex A concerning this item. Maybe the informational note should reference this Annex Location instead of including the material in this informational note.

Statement of Problem and Substantiation for Public Input

It would be beneficial to the user of this document to have guidance on what the committee considers an administrative deficiency. Please consider adding an informational note and include some items that may fall under this deficiency.

Submitter Information Verification

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City:
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Zip:
Submittal Date: Mon Jan 29 10:28:43 EST 2018



Public Input No. 23-NFPA 78-2018 [Section No. 3.3.4.2]

3.3.4.2* Critical Deficiency.

A condition that does not conform to AHJ requirements and presents an imminent hazard to persons or property.

Informational Note: (Note: ask the committee to state examples of what is considered a critical deficiency)

Upon further review of this document I see that there is information in Annex A concerning this item. Maybe the informational note should reference this Annex Location instead of including the material in this informational note.

Statement of Problem and Substantiation for Public Input

It would be beneficial to the user of this document to have guidance on what the committee considers a critical deficiency. Please consider adding an informational note and include some items that may fall under this deficiency.

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Public Input No. 26-NFPA 78-2018 [Section No. 3.3.4.3]

3.3.4.3* Noncritical Deficiency.

A condition that does not conform to AHJ requirements and does not present an imminent hazard to persons or property.

Informational Note: (Committee: please give examples of what is considered to be a noncritical deficiency)

Upon further review of this document I see that there is information in Annex A concerning this item. Maybe the informational note should reference this Annex Location instead of including the material in this informational note.

Statement of Problem and Substantiation for Public Input

It would be beneficial to the user of this document to have guidance on what the committee considers a non critical deficiency. Please consider adding an informational note and include some items that may fall under this deficiency.

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Public Input No. 10-NFPA 78-2018 [Section No. 3.3.5]

3.3.5* Electrical Inspection.

A process that includes administration, plans review, and field inspection to ensure that the workmanship and materials used in the installation, construction, and maintenance of new or existing electrical systems for an occupancy use comply with AHJ requirements. [1078:20XX]

Statement of Problem and Substantiation for Public Input

This proposed change is an attempt to correlate the wording in the definitions of electrical inspection, field inspection, and plans review. Field inspection and plans review both contain the phrase "new or existing" while electrical inspection does not.

Submitter Information Verification

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Submittal Date: Wed Jan 10 08:29:11 EST 2018



Public Input No. 48-NFPA 78-2018 [Section No. 3.3.5]

3.3.5* Electrical Inspection.

A process that includes administration, plans review, and field inspection to ~~ensure~~ verify that the workmanship and materials used in the installation, construction, and maintenance of electrical systems for an occupancy use comply with AHJ requirements. [1078:20XX]

Statement of Problem and Substantiation for Public Input

The NFPA 3 and 4 technical committees discussed the meaning of the word ensure at length. The committee decided the word verify would be better suited to the to the document. Also upon further review of this draft, I noticed the word verify is used in numerous sections.

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Submittal Date: Wed Feb 07 18:04:43 EST 2018



Public Input No. 9-NFPA 78-2018 [New Section after 3.3.6]

TITLE OF NEW CONTENT Electrical installation

Type your content here ...

Electrical installations means the installation, repair, alteration and maintenance of electrical conductors, fittings, equipment, devices and luminaires for heating, lighting, power, signaling, data, video and control purposes, regardless of the voltage.

Statement of Problem and Substantiation for Public Input

An electrical inspector inspects electrical installations and equipment so the question is what constitutes an electrical installation. this definition would provide guidance on the subject

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Public Input No. 34-NFPA 78-2018 [Section No. 3.3.6]

3.3.6* Electrical Inspector.

A person ~~responsible and~~ who is qualified to perform one or more functions of an electrical inspection, including administration, plans review, or field inspection. [1078:20XX]

Statement of Problem and Substantiation for Public Input

This public input deletes unnecessary terms and clarifies electrical inspectors are required to be qualified. The proposed definition more closely matches those used in other recognized standards.

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Public Input No. 56-NFPA 78-2018 [Section No. 3.3.6]

3.3.6* Electrical Inspector.

A person responsible and qualified to perform one or more functions of an electrical inspection, including administration, plans review, or field inspection. [1078:20XX]

Note: The Electrical Inspector may also be referred to as the "Wire Inspector" or "Inspector of Wires" depending on local ordinances.

Statement of Problem and Substantiation for Public Input

Not all jurisdictions refer to the AHJ as an Electrical Inspector.

Submitter Information Verification

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Public Input No. 11-NFPA 78-2018 [Section No. 3.3.7]

3.3.7 Field Inspection.

An onsite review and assessment to ensure the workmanship and materials used in the installation, construction, and maintenance of new or existing electrical systems for an occupancy use comply with AHJ requirements. [1078:20XX]

Statement of Problem and Substantiation for Public Input

This proposed change is an attempt to correlate the wording in the definitions of electrical inspection and field inspection. Electrical Inspection contains the phrases "construction" and "for an occupancy use" while Field Inspection does not.

Submitter Information Verification

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Submittal Date: Wed Jan 10 08:31:50 EST 2018



Public Input No. 35-NFPA 78-2018 [Section No. 3.3.7]

3.3.7 Field Inspection.

An onsite review and assessment to ~~ensure~~ verify the ~~workmanship~~ methods and materials used in the installation and maintenance of new or existing electrical systems comply with AHJ requirements. [1078:20XX]

Statement of Problem and Substantiation for Public Input

The term “verify” is used extensively throughout the document and is a better descriptor to the term “ensure”. The term “methods” is being inserted to replace “workmanship” which is rather subjective and is not well defined.

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Public Input No. 46-NFPA 78-2018 [Chapter 4]

Chapter 4 General Recommendations

4.1 Scope.

This chapter establishes general recommendations for conducting an electrical inspection.

4.2 Qualifications.

Before conducting an electrical inspection, the electrical inspector should meet the job performance requirements of NFPA 1078.

4.3* Ethics.

The electrical inspection should be conducted in a fair, impartial, and professional manner.

4.4 Inspection Objective.

The objective of the electrical inspection should be to verify compliance of the installation to AHJ requirements.

4.4.1*

Electrical inspections should be conducted when the need is identified in accordance with AHJ requirements.

4.4.2

The fundamental concern of an electrical inspection should be the protection of persons and property from the hazards arising from electrical installations.

4.5* Enabling Authority.

The basis for an electrical inspector to conduct electrical inspections should be established by the AHJ.

Global Input:

Delete the term "the" before "AHJ requirements throughout the entire document.

Replace the term "ensure" with "verify" throughout the entire document.

Replace the term "procure" with "acquire" throughout the entire document.

Statement of Problem and Substantiation for Public Input

These changes will provide consistency and clarity throughout the document.

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Submittal Date: Wed Feb 07 09:02:50 EST 2018



Public Input No. 36-NFPA 78-2018 [Section No. 4.4]

4.4 Inspection Objective.

The objective of the electrical inspection should be to verify ~~compliance of the installation to the~~ administration, plans review or field inspection is in compliance with AHJ requirements.

4.4.1*

Electrical inspections should be conducted when the need is identified in accordance with AHJ requirements.

4.4.2

The fundamental concern of an electrical inspection should be the protection of persons and property from the hazards arising from electrical installations.

Statement of Problem and Substantiation for Public Input

As defined in Chapter 3, the electrical inspection is more than just “installation compliance” and includes the administration, plans review, and field inspection. This Public Input provides clarity and consistency to the section.

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Public Input No. 55-NFPA 78-2018 [Chapter 5]

Chapter 5 Electrical Inspection Administration

5.1 Scope.

This chapter provides a framework to assist those with the administrative responsibility of electrical inspections in establishing and managing AHJ requirements.

5.2 AHJ Requirements.

5.2.1 Adopted Codes and Standards.

Locally adopted codes and standards applicable to electrical installations should be identified, acquired, and provided to the electrical inspector.

5.2.2 Guides, Recommended Practices, and Other Technical References.

Technical reference materials necessary to perform plans reviews and field inspections should be identified, acquired, and provided to the electrical inspector.

5.2.3* Maintenance of AHJ Requirements.

AHJ requirements should be periodically reviewed and updated as needed.

5.2.4 Staffing Levels

5.2.4.1 The AHJ should develop and limit the volume of electrical inspection daily to ensure a competent and quality inspection.

5.2.4.2 Staffing levels considerations should including; vacation and other time off, travel time, office time, number of single family dwelling, multiple family dwelling, other than dwellings, specific classified locations and equipment inspections.

5.3 Policies and Procedures.

5.3.1 Permitting Procedures.

5.3.1.1

The AHJ should communicate to the public the type and scope of electrical installation or electrical modification work that requires an electrical permit.

5.3.1.2

The AHJ should process an electrical permit application by evaluating the proposed electrical installation or electrical system modification for compliance with AHJ requirements.

5.3.1.3

The AHJ should identify the need for an electrical plans review based on the submitted electrical permit application.

5.3.1.4

The AHJ should enforce electrical permitting requirements based on a report of an electrical, life safety, or other compliance concern.

5.3.1.5

Where compliance with AHJ requirements is not attained, the AHJ should initiate administrative action based on the laws and rules governing the jurisdiction.

5.3.1.6*

The AHJ should periodically update the permitting procedures.

5.3.2 Plans Review Submittal Procedures.

The AHJ should process a plans review in accordance with AHJ requirements. *(See Chapter 6 for submittal documentation requirements.)*

5.3.3* Field Inspection Request Procedures.

The AHJ should establish and make readily available to the public a procedure for requesting a field inspection. *(See Chapter 7 for field inspection procedure details.)*

5.3.4 Records Management Policy.

5.3.4.1*

The AHJ should retain all electrical inspection documentation in a secure manner for a time period designated by the AHJ requirements.

5.3.4.2

The AHJ should make electrical inspection documentation readily available to the public in accordance with AHJ requirements.

5.4 Electrical Inspection Equipment.

5.4.1 Forms, Reports, Checklists, and Other Job Aids.

5.4.1.1*

The AHJ should develop and use forms, reports, checklists, and other job aids that support consistent, accurate, and thorough performance of electrical inspections.

5.4.1.2

Forms, reports, checklists, and other job aids should be updated, as necessary, to improve the performance of electrical inspections and to ensure accuracy, clarity, and consistency with AHJ requirements.

5.4.2* Personal Protective Equipment (PPE).

The AHJ should identify, procure, provide, and implement procedures for the use of personal protective equipment necessary to conduct electrical inspections.

5.4.3* Plans Review Equipment.

The AHJ should identify, procure, and provide the equipment necessary to conduct plans reviews.

5.4.4 Field Inspection Equipment.

5.4.4.1*

The AHJ should identify, procure, and provide the equipment necessary to conduct field inspections.

5.4.4.2*

Equipment supplied by others should be used in accordance with AHJ policies and procedures.

5.4.5 Care and Maintenance of Electrical Inspection Equipment.

5.4.5.1

All equipment used to conduct electrical inspections should be maintained in accordance with applicable standards, policies, and manufacturer's instructions.

5.4.5.2

Defective or damaged equipment should not be used to conduct electrical inspections.

5.5 Appeals.

The AHJ should establish and make available to the public the procedures for appealing AHJ decisions.

Statement of Problem and Substantiation for Public Input

The difficulty is that this sometime electrical inspection staffing levels is not considered as fire prevention and are driven by local expectations and capabilities, and that electrical inspection may provide a more cost-effective strategy for reducing fire losses with the context of maximizing the ISO Public Protection Classification (PPC) ratings.

When considering staffing levels, the number of electrical permits and the percentage of permit fee should also be reflected.

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Public Input No. 37-NFPA 78-2018 [Section No. 5.2.1]

5.2.1 Adopted Codes and Standards.

~~Locally~~ Federal, State and locally adopted codes and standards applicable to electrical installations- inspection should be identified, acquired, and provided to the electrical inspector.

Statement of Problem and Substantiation for Public Input

Electrical inspectors are typically required to enforce federal, state, and locally adopted codes and standards. The addition of "federal" and "state" provides that clarification. The term "installations" has been replaced with "inspection" to provide a defined term and include all the functions of the electrical inspection and not just the installations.

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Public Input No. 50-NFPA 78-2018 [Section No. 5.2.2]

5.2.2 Guides, Recommended Practices, and Other Technical References.

Technical reference materials necessary to perform plans reviews and field inspections should be identified, ~~acquired,~~ and provided to the electrical inspector.

Statement of Problem and Substantiation for Public Input

Using the word “acquired” would indicate that the electrical inspector is responsible for obtaining the reference material. Should the electrical inspector be mandated to obtain or “acquire” the reference material, this could cause over burdening number of standards. Would the AHJ need to purchase all the UL and ANSI/NECA standards and have an NFPA subscription service?

Submitter Information Verification

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Public Input No. 38-NFPA 78-2018 [Section No. 5.3.1.3]

5.3.1.3

The AHJ should identify the need for ~~an electrical~~ plans review based on the submitted electrical permit application.

Statement of Problem and Substantiation for Public Input

The term "electrical" is not needed ahead of plans review. "Plans review" is a defined term and Chapter 3.

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Public Input No. 12-NFPA 78-2018 [Section No. 5.4.1.1]

5.4.1.1*

The AHJ should develop and use forms, reports, checklists, and other job aids that support ~~consistent,~~ accurate, clear, and ~~thorough~~ concise performance of electrical inspections.

Statement of Problem and Substantiation for Public Input

This proposed change is an attempt to correlate the wording in 5.4.1.1 with 5.4.1.2. The terms "accuracy", "clarity", and "consistency" are used in 5.4.1.2, but "consistent" and "thorough" are used in 5.4.1.1.

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Submittal Date: Wed Jan 10 08:41:14 EST 2018



Public Input No. 5-NFPA 78-2018 [Section No. 5.4.2]

5.4.2* Personal Protective Equipment (PPE).

The AHJ should identify, procure, provide, and implement procedures for the use of personal protective equipment, clothing and footwear necessary to conduct electrical inspections.

Statement of Problem and Substantiation for Public Input

clothing and footwear may not be coincided equipment but are necessary in the safety of the inspection. work boots for nails and heavy objects clothes/gloves for shape edges ect.

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Public Input No. 51-NFPA 78-2018 [Section No. 5.4.2]

5.4.2* Personal Protective Equipment (PPE).

The AHJ should identify, procure, provide, and implement procedures for the use of personal protective equipment necessary to conduct electrical inspections.

The electrical inspector is considered an unqualified person and should not be provided with personal protective equipment without first receiving the appropriate safety-related training and work practices. The electrical inspector shall not cross the arc flash boundary. Documentation of the arc flash boundary shall be made available to the electrical inspector.

Statement of Problem and Substantiation for Public Input

The AHJ should be given the information concerning the type of safety training needed for PPE and electrical inspectors.

Bring the wording out of Annex A and include it in the code language.

Of immediate concern is administrators need to recognize that until training has been completed the employee is unqualified.

Due to the lengthy safety training process, this requirement as written, does not provide the electrical inspector with the utmost in safety.

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Public Input No. 39-NFPA 78-2018 [Section No. 5.4.4.2]

5.4.4.2*

Equipment supplied by others should be used in accordance with AHJ ~~policies and procedures~~ requirements .

Statement of Problem and Substantiation for Public Input

The term "AHJ requirements" is defined in Chapter 3 and includes policies and procedures. This change adds consistency and clarity to the document.

Submitter Information Verification

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Submittal Date: Wed Feb 07 08:46:02 EST 2018



Public Input No. 40-NFPA 78-2018 [Section No. 6.4.2]

6.4.2

The electrical inspector should identify the ~~codes, standards, and other technical references~~ AHJ requirements that are applicable to the project.

Statement of Problem and Substantiation for Public Input

The term "AHJ requirements" is defined in Chapter 3 and includes codes, standards, and other technical references. This change adds consistency and clarity to the document.

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Submittal Date: Wed Feb 07 08:47:44 EST 2018



Public Input No. 53-NFPA 78-2018 [Section No. 6.4.5]

6.4.5*

The electrical inspector should be provided with information to identify the occupancy use and building construction classification.

Statement of Problem and Substantiation for Public Input

The current wording puts the responsibility on an electrical inspector to identify the occupancy and use of each building construction or classification.

Submitter Information Verification

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Submittal Date: Sun Feb 11 18:22:35 EST 2018



Public Input No. 6-NFPA 78-2018 [Section No. 6.4.5]

6.4.5*

The electrical inspector should ~~identify~~ verify the occupancy use and building construction classification.

Statement of Problem and Substantiation for Public Input

It is not the electrical inspectors responsibility to classify any area, such as hazardous location, place of assembly or construction type this is better left to a fire protection / electrical engineer, fire chief or building inspector

Submitter Information Verification

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Submittal Date: Sun Jan 07 14:39:18 EST 2018



Public Input No. 7-NFPA 78-2018 [Section No. 6.6]

6.6 Plans Review Procedures.

6.6.1

The electrical inspector should verify that the construction documents indicate the construction type and occupancy use.

6.6.2*

The electrical inspector should verify that the construction documents comply with the AHJ requirements for the construction type and occupancy use.

6.6.3

–

~~The electrical inspector should verify the load calculations in the submitted construction documents.~~

6.6.4

* –

The electrical inspector should verify compliance with general installation requirements.

6.6.

5

4* –

The electrical inspector should verify compliance with the requirements for special occupancies, where applicable.

6.6.6* –

~~The electrical inspector should verify compliance with the requirements for special equipment, where applicable.~~

6.6.7* –

~~The electrical inspector should verify compliance with the requirements for special conditions, where applicable.~~

6.6.8* –

~~The electrical inspector should verify compliance with the requirements for communications systems, where applicable.~~

6.6.9* –

~~The electrical inspector should verify compliance with the requirements for equipment locations and clearances.~~

6.6.10* –

~~The electrical inspector should verify compliance with the requirements for wiring and protection.~~

6.6.11 * –

~~The electrical inspector should verify compliance with the requirements for grounding and bonding.~~

6.6.

12

5 * _

~~The electrical inspector should verify compliance with the requirements for wiring methods and materials.~~

6.6.

13 * –

~~The electrical inspector should verify compliance with the requirements for equipment ratings.~~

6

~~The plan set shall be designed and stamped by a licensed Electrician engineer of other AHJ approved entity.~~

Statement of Problem and Substantiation for Public Input

it sounds like the inspector is re doing the entire plan set. this is not the case.. yes you should spot check conduit, conductor sizing and some calculations but to ask to redo everything is impractical especially if it is done by an engineer. the electrical inspector is not infallible the design engineer is ultimately responsible for any plan deficiency

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Public Input No. 47-NFPA 78-2018 [Section No. 6.6.3]

6.6.3

The electrical inspector should verify the ~~load~~ calculations required by the AHJ requirements are included in the submitted construction documents.

Statement of Problem and Substantiation for Public Input

There are many “calculations” required by AHJ requirements in addition to “load calculations”. This public input clarifies that all required calculations should be verified by the electrical inspector.

Submitter Information Verification

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Submittal Date: Wed Feb 07 09:07:25 EST 2018



Public Input No. 28-NFPA 78-2018 [Section No. 6.8.1]

6.8.1

Where corrective action is needed, the electrical inspector should require revisions and resubmittal of the construction documents. This information should also be included as part of the field inspection document to alert the electrical inspector conducting the field inspection of the deficiencies found during the plan review.

Statement of Problem and Substantiation for Public Input

Too many times the plan review is conducted by plan review staff and this information does not make it to the electrical inspector(s) who are doing the electrical field inspection. It is crucial that this information be available to the electrical inspector as the inspector(s) conduct the inspection. I guess in layman's terms it would be the right hand knowing what the left hand is doing.

Submitter Information Verification

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Zip:

Submittal Date: Mon Jan 29 11:07:13 EST 2018



Public Input No. 41-NFPA 78-2018 [Section No. 7.4.2]

7.4.2

The electrical inspector should identify the ~~codes, standards, and other technical references~~ AHJ requirements that are applicable to the project.

Statement of Problem and Substantiation for Public Input

The term "AHJ requirements" is defined in Chapter 3 and includes codes, standards, and other technical references. This change adds consistency and clarity to the document.

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Public Input No. 8-NFPA 78-2018 [Section No. 7.4.8]

7.4.8*

The electrical inspector should assemble the required PPE, clothing, footwear and field inspection equipment.

Statement of Problem and Substantiation for Public Input

don't forget your work boots and gloves

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Public Input No. 42-NFPA 78-2018 [Section No. 7.6.1.1]

7.6.1.1

The electrical inspector should review the approved construction documents.

Statement of Problem and Substantiation for Public Input

Editorial change for readability and proper use of grammar.

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Public Input No. 13-NFPA 78-2018 [Section No. 7.6.2.3]

7.6.2.3

The electrical inspector should verify that the electrical systems are installed and tested to perform as described in the engineering documents, the operations and maintenance manual, ~~and the~~ manufacturer's installation instructions, and construction documents .

Statement of Problem and Substantiation for Public Input

The term "construction documents" is a defined term and further clarified in Annex A 3.3.3. In most instances the construction documents will include the testing and performance requirements required by 7.6.2.3.

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Public Input No. 54-NFPA 78-2018 [Section No. 7.6.2.3]

7.6.2.3

The electrical inspector should verify that the electrical systems are installed and tested to perform as described in the ~~engineering documents, the operations and maintenance manual, and the manufacturer's installation instructions~~ NFPA 70 National Electrical Code, and with any instructions included in the listing or labeling of equipment .

Statement of Problem and Substantiation for Public Input

The electrical inspector should not be required or have the liability to verify performance designs of engineering documents, operation manuals, or manufacturer's instructions but, should be limited to the test recognized in the National Electric Code and section 110.3(B).

Manufacturer's installation are flawed, remember treadmills documentation that stated not to GFCI or AFCI protect their equipment, CSST etc.

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Public Input No. 43-NFPA 78-2018 [Section No. 7.6.4.7]

7.6.4.7

The electrical inspector should verify compliance with the requirements for grounding and bonding- requirements . (See 7.6.5.)

Statement of Problem and Substantiation for Public Input

The second "requirements" at the end of the statement is not necessary. The deletion of the second use of term adds consistency to the document.

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Submittal Date: Wed Feb 07 08:53:04 EST 2018



Public Input No. 44-NFPA 78-2018 [Section No. 7.6.4.8]

7.6.4.8

The electrical inspector should verify compliance with the requirements for installation of surge- protective devices, where required.

Statement of Problem and Substantiation for Public Input

This Public Input simply adds a hyphen between surge and protective to accurately reflect the recognized use of the term.

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Public Input No. 29-NFPA 78-2018 [Section No. 7.7.1]

7.7.1

Where corrective action is needed, the electrical inspector should require an additional inspection, in accordance with the AHJ requirements. __ (See Section 7.2.).

Statement of Problem and Substantiation for Public Input

It seems like this proposed language "(See Section 7.2.)" would be beneficial to the user of the Code at this location similar to the exact language at 7.7.2.

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Public Input No. 45-NFPA 78-2018 [Section No. A.3.3.3]

A.3.3.3 Construction Document.

Construction documents could include, but are not limited to, the following:

- (1) Cover letter
- (2) Load calculations
- (3) Short-circuit current analysis
- (4) Manufacturer's applicable documents
- (5) Complete set of drawings, which could include the following:
 - (6) Floor layout, including equipment
 - (7) Service or feeder riser diagram
 - (8) Fixture schedule and luminaire layout
 - (9) Location of emergency systems
 - (10) Architectural drawings
 - (11) Mechanical drawings
 - (12) Structural drawings
 - (13) Site drawings
 - (14) Wiring methods and material

[1078:20XX]

Statement of Problem and Substantiation for Public Input

This Public Input simply adds "current" to short-circuit to provide an industry recognized use of the term.

Submitter Information Verification

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Public Input No. 31-NFPA 78-2018 [Section No. A.3.3.6]

A.3.3.6 Electrical Inspector. [🔗](#)

This person should have knowledge (i.e.- electrical apprenticeship training, possession of an electrical license, possession of diploma of electrical engineering) of electrical system design and electrical material and uses, AHJ-adopted codes, standards, product certification requirements, policies, and procedures, installation and maintenance of electrical systems, occupancy uses and construction type classifications applicable to electrical construction, and safety hazards. This person should be able to read and interpret construction documents, work with the public and contractors, coordinate and prioritize work assignments, research and obtain necessary information based on recognized reference sources, evaluate site conditions that require code enforcement, use effective oral and written communication skills, and leverage technology to create documents, reports, and record-keeping inventories.

Statement of Problem and Substantiation for Public Input

The term "knowledge" is too broad as it can be used to hire the dog catcher who claims to have "knowledge" of the electrical trade, or a 3rd years college student who claims to have "knowledge" of the electrical trade. There seems to need to be relevant knowledge through electrical work in the trade in order to inspect another electricians electrical installation. The electrical inspector as we know it is being absorbed into a "multi-hat inspector role" due to the mindset that we can train a monkey or a third year college student to do this work.

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Submittal Date: Tue Jan 30 11:23:15 EST 2018



Public Input No. 15-NFPA 78-2018 [Section No. A.5.4.1.1]

A.5.4.1.1

The goal in documenting an electrical inspection is to make an accurate, clear, and ~~consistent~~ concise recording of the inspection using media that will allow the inspector to recall and communicate their observations at a later date. Common methods of accomplishing this goal include, but are not limited to, the use of photographs, videos, diagrams, maps, overlays, audio recordings, laser surveys, notes, sketches, and reports. ~~Thorough and consistent accurate~~ Accurate, clear, and concise documentation is critical, because compilation of factual data is necessary to support and verify compliant installations and cited deficiencies. There are a number of resources to assist the inspector in documenting the inspection.

Statement of Problem and Substantiation for Public Input

This proposal is an attempt to correlate the use of the term "accurate, clear, and concise" throughout this document and NFPA 1078.

See NFPA 1078 Section 4.2.16 parent text where "accurate, clear, and concise" is used.

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Submittal Date: Wed Jan 10 13:59:14 EST 2018



Public Input No. 52-NFPA 78-2018 [Section No. A.5.4.4.1]

A.5.4.4.1

Recommended equipment for field inspections includes, but is not limited to, the following:

- (1) Calculator
- (2) Camera
- (3) Computer
- (4) Drafting scale
- (5) First-aid kit
- (6) Flashlight
- (7) Magnifying glass
- (8) Mirror
- (9) Tape measure
- (10) Test instruments - after receiving the appropriate safety training and personal protection equipment.

Statement of Problem and Substantiation for Public Input

This should be relocated or included with 5.4.4.1 for field inspection equipment. Additional guidance is needed in the use of electrical test instruments and equipment. Note: NFPA 70E standard for electrical safety in the workplace 110.4. Consideration should also be given as to the type of test equipment. The technical committee may recall receptacle analyzers for AFCI and those issues. Also what does the electrical inspector per the National Electric Code actually required to test, or is it verify. Does the electrical inspector need to verify polarity or test for it? Does the electrical inspector need to verify or test a single rod electrode having 25 ohms of resistance to earth or less? Is the technical committee requiring "clamp on earth resistance tester" for every electrical inspector?

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Public Input No. 17-NFPA 78-2018 [Section No. A.7.6.4.9]

A.7.6.4.9

This inspection could include, but is not limited to, – the following:

- (1)_ identification of installed raceway, cable assembly, and/or conductor types;
- (2)_ installation of cabinets and cutout boxes;
- (3)_ installation of outlet, device, pull, junction boxes, conduit bodies, fittings, and handholes installed;
- (4)_ terminations and connections;
- (5)_ means for connection of raceways, conductors, or cable assemblies- or
- (6)_ other wiring methods and material requirements of the AHJ requirements and Chapter 3 of *NFPA 70*.

Statement of Problem and Substantiation for Public Input

This proposal is an attempt to restructure A 7.6.4.9, with no technical changes, so that it is structured in a list format like many other sections of the annex. See Annex A existing list format examples 5.4.2, 5.4.3, 7.6.3.7, and 7.6.5.4

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Public Input No. 19-NFPA 78-2018 [Section No. A.7.6.7.10]

A.7.6.7.10

The electrical inspector should consider whether it is appropriate to operate the inspected devices. Verification could be performed by the owner or the ~~installing contractor~~ installer .

Statement of Problem and Substantiation for Public Input

The term "installer" is much broader than "installing contractor" and would better reflect common job site and field conditions.

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Public Input No. 30-NFPA 78-2018 [Section No. C.2]

C.2 Informational References. (Reserved)

Becoming the Electrical Inspector

International Association of Electrical Inspector

901 Waterfall Way, Suite 602

Richardson, Texas 75080

Statement of Problem and Substantiation for Public Input

The reference material is information that would be beneficial to anyone that is considering becoming an electrical inspector. This book has numerous amounts of information that coincide with this information found in NFPA 78.

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