

Standard for Electrical Inspector Professional Qualifications

2020



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NFPA® 1078

Standard for

Electrical Inspector Professional Qualifications

2020 Edition

This edition of NFPA 1078, Standard for Electrical Inspector Professional Qualifications, was prepared by the Technical Committee on Electrical Inspection Practices and released by the Correlating Committee on Professional Qualifications. It was issued by the Standards Council on June 10, 2019, with an effective date of June 30, 2019.

This edition of NFPA 1078 was approved as an American National Standard on June 30, 2019.

Origin and Development of NFPA 1078

The Standards Council approved the development of a project on electrical inspection practices and inspector qualifications in April 2017. The committee completed the initial draft of this document, along with its sister document, NFPA 78, *Guide on Electrical Inspections*, by August 2017, and both documents were approved for public review in December 2017. Two additional drafts were produced, and the document was issued in June 2019.

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Committee Scope: This Committee shall have primary responsibility for documents on the requirements for professional qualifications, professional competence, training, procedures, and equipment for electrical inspections and electrical plans examinations.

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Standard for

Electrical Inspector Professional Qualifications

2020 Edition

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Information on referenced and extracted publications can be found in Chapter 2 and Annex E.

Chapter 1 Administration

- **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*** The electrical inspector shall acquire additional training and continuing education to remain current with the general knowledge, skills, and JPRs addressed for the position.
- **1.3 Application.** The application of this standard is to specify the requirements within the document that apply to 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.
- **1.3.3** The AHJ shall establish instructional priority and the training program content to prepare personnel to meet the JPRs of this standard.
- **1.3.4*** Performance of each requirement of this standard shall be evaluated by personnel approved 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 any other 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 eligibility requirements, as established by the AHJ:
- (1) Educational requirements
- (2) Health and fitness requirements
- (3) Job-related performance requirements
- (4) Other eligibility criteria
- **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,* or *procedures* 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.

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1.3.13* The electrical inspector shall complete electrical inspections and other related activities in accordance with AHJ requirements.

Chapter 2 Referenced Publications

2.1 General. The documents or portions thereof listed in this chapter are referenced within this standard and shall be considered part of the requirements of this document.

2.2 NFPA Publications. (Reserved)

2.3 Other Publications.

Merriam-Webster's Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003.

2.4 References for Extracts in Mandatory Sections.

NFPA 3, Standard for Commissioning of Fire Protection and Life Safety Systems, 2018 edition.

Chapter 3 Definitions

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

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.

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 Documents.** 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 verify that the methods, materials, and equipment used in the installation and maintenance of electrical systems comply with AHJ requirements.
- **3.3.4* Electrical Inspector.** A person who performs 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 verify that the methods, materials, and equipment used in the installation and maintenance of 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 Personal Protective Equipment (PPE).** Equipment for the electrical inspector's personal protection.
- **3.3.9 Plans Review.** A review and assessment of construction documents to verify that the design and layout of electrical systems comply with AHJ requirements.
- **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.

Chapter 4 Electrical Inspector

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.

4.2 Administration.

- **4.2.1*** This duty shall involve administrative operations, permitting, documenting and reporting, and compliance issues.
- **4.2.2** Identify AHJ requirements for an electrical system, given an electrical compliance issue and AHJ requirements, so that AHJ requirements are referenced based on the compliance requirement.
- (A) Requisite Knowledge. AHJ requirements and electrical compliance requirements.
- **(B) Requisite Skills.** The ability to identify electrical compliance issues and AHJ requirements and use interpersonal skills and oral and written communication skills.
- **4.2.3** Propose technical reference material acquisition, given the scope of electrical 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.
- **4.2.4** Evaluate the impact of proposed modifications to AHJ requirements, given draft modifications, AHJ requirements, and possible ramifications based on the modifications, so that the impact of the proposed modification is documented and reported.
- (A) Requisite Knowledge. Process for the development of AHJ requirements, impact of modification on AHJ requirements and stakeholders, process for documenting and reporting information and technical and life safety assistance through the evaluation.
- **(B) Requisite Skills.** The ability to recognize technical or life safety compliance requirements or conditions, use interpersonal skills and oral and written communication skills, and identify risks and benefits through impact analysis.
- **4.2.5** Recommend modifications to AHJ requirements, given a technical or life safety compliance requirement or condition and AHJ requirements, so that the technical or life safety compliance requirement or condition is modified in AHJ requirements.
- (A) Requisite Knowledge. Statutes or ordinances establishing or empowering the entity to adopt, enforce, and revise AHJ requirements; the legal process for establishing AHJ requirements; and the code development and adoption process.
- **(B) Requisite Skills.** The ability to recognize technical or life safety compliance requirements or conditions, collect and develop potential solutions, and identify benefits based on AHJ requirements.

- **4.2.6** Facilitate code adoption and modification processes, given AHJ requirements, so that the issue is resolved to address the identified technical or life safety compliance requirement or condition.
- **(A) Requisite Knowledge.** Development and adoption process for AHJ requirements.
- **(B) Requisite Skills.** The ability to compose modifications to existing AHJ requirements and use interpersonal skills and oral and written communication skills.
- **4.2.7** Identify AHJ requirements for performing electrical inspections, given management objectives, so that the electrical inspections are in accordance with 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 technical or life safety compliance requirements or 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 technical or life safety compliance requirements or conditions.
- **4.2.8** Recommend modifications to AHJ requirements for the delivery of electrical inspection services, given AHJ requirements and management objectives, so that electrical inspections are conducted in accordance with AHJ requirements and due process of the law.
- **(A) Requisite Knowledge.** AHJ requirements and sources of technical information relating to electrical inspection.
- **(B) Requisite Skills.** The ability to identify technical or life safety compliance requirements or conditions, read and interpret electrical plans and specifications, conduct research, make decisions, recognize problems, and resolve technical or life safety compliance requirements or conditions.
- **4.2.9** Create forms, reports, checklists, and other job aids for electrical inspections, given AHJ requirements, so that the forms, reports, checklists, and other job aids developed address compliance and features relative to the type of services provided during electrical inspections per AHJ requirements.
- (A) Requisite Knowledge. Construction document review elements required by AHJ requirements, occupancy use classifications, and building construction type.
- **(B) Requisite Skills.** The ability to analyze the construction document review process to select the type of form, report, checklist, or other job aids based on the permit application request, use interpersonal skills and oral and written communication skills, and produce forms, reports, checklists, and other job aids based on AHJ requirements.
- **4.2.10** Recommend an electrical inspection program budget, given AHJ goals, budget guidelines, and needs, so that electrical inspection program needs are addressed.

- (A) Requisite Knowledge. AHJ budget procedures, revenue sources, and funding mechanisms.
- **(B) Requisite Skills.** The ability to recognize problems, measure cost and benefit, identify additional resources, and use interpersonal skills and oral and written communication skills.
- **4.2.11** Identify the type and scope of work for which a permit is required, given the type and scope of work, permitting process and procedures, and AHJ requirements, so that requirements for permits are communicated in accordance with AHJ requirements.
- **(A) Requisite Knowledge.** AHJ permitting policies and the type and scope of work for the permit.
- **(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.
- **4.2.12** Process an electrical permit application, given a specific request, so that the application is evaluated and a permit is issued or denied in accordance with AHJ requirements.
- (A) Requisite Knowledge. Permit application process and AHJ requirements.
- **(B) Requisite Skills.** The ability to describe and explain the permitting application process based on AHJ requirements and use interpersonal skills and oral and written communication skills.
- **4.2.13** Identify type and scope of work for which a plans review is required, given type and scope of work, plans review process and procedures, and AHJ requirements, so that requirements for a plans review are communicated in accordance with AHJ requirements.
- **(A) Requisite Knowledge.** AHJ plans review policies and type and scope of the work for the plans review.
- **(B) Requisite Skills.** The ability to identify the types and scope of work when a plans review is required and use interpersonal skills and oral and written communication skills.
- **4.2.14** Process an electrical plans review application, given a specific request, electrical plans review application, construction documents, and AHJ requirements, so that the application is reviewed and processed in accordance with AHJ requirements.
- **(A) Requisite Knowledge.** Electrical plans review application process and AHJ requirements.
- **(B) Requisite Skills.** The ability to describe and explain the plans review application process based on AHJ requirements and use interpersonal skills and oral and written communication skills.
- **4.2.15** 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 AHJ requirements.
- (A) Requisite Knowledge. AHJ requirements, electrical inspection, and report writing.
- **(B) Requisite Skills.** The ability to conduct an electrical inspection, apply AHJ requirements, and use interpersonal skills and oral and written communication skills.

- **4.2.16** Review electrical inspection reports, forms, checklists, and other job aids, given AHJ requirements, so that the information is determined to be accurate, clear, and concise.
- **(A) Requisite Knowledge.** AHJ requirements, various sources for additional reference materials related to AHJ requirements, and policy enforcement.
- **(B) Requisite Skills.** The ability to compare AHJ requirements with prepared reports, forms, checklists, and other job aids and provide accurate information.
- **4.2.17** Maintain electrical inspection documents and records, given AHJ requirements, record-keeping process and procedures, and electrical inspection activity, so that documents and records are maintained in a secure and effective manner.
- **(A) Requisite Knowledge.** AHJ requirements, electrical inspection record-keeping process and procedures, and laws affecting the security of documents, record retention, and public access.
- **(B) Requisite Skills.** The ability to maintain and account for electrical inspection documents and records in accordance with AHJ requirements for records management.
- **4.2.18** Investigate technical or life safety compliance requirements or conditions, given a technical or life safety compliance requirement or condition, so that technical or life safety compliance requirements or conditions information is recorded, the investigation process is initiated, and the technical or life safety compliance requirements or conditions are resolved in accordance with AHJ requirements.
- **(A) Requisite Knowledge.** AHJ requirements related to technical or life safety compliance requirements or conditions.
- **(B) Requisite Skills.** The ability to interpret and apply AHJ requirements, recognize technical or life safety compliance requirements or conditions, and use interpersonal skills and oral and written communication skills.
- **4.2.19** Enforce electrical permit regulations, given an electrical permit application or report of a technical or life safety compliance requirement and condition and AHJ requirements, so that enforcement actions are in accordance with AHJ requirements and the technical or life safety compliance requirement or condition is mitigated.
- **(A) Requisite Knowledge.** Legal authority for permit issuance and revocation and AHJ requirements.
- **(B) Requisite Skills.** The ability to use interpersonal skills and oral and written communication skills, make decisions, and evaluate consequences.
- **4.2.20** Initiate legal action related to AHJ requirements based on a technical or life safety compliance requirement or condition, given a description or observation of a technical or life safety compliance requirement or condition and legal options, so that the action taken is in accordance with AHJ requirements and due process is followed.
- **(A) Requisite Knowledge.** AHJ requirements, legal procedures, enforcement and authority.
- **(B) Requisite Skills.** The ability to interpret AHJ requirements and legal options in accordance with AHJ requirements and use interpersonal skills and oral and written communication skills.

- **4.2.21** Generate written correspondence related to the filing of appeals, given AHJ requirements, a request for an appeal, and the judgment based on the appeal, so that the correspondence addresses the appeal.
- **(A) Requisite Knowledge.** Appeals procedure, AHJ requirements, and review process.
- **(B) Requisite Skills.** The ability to interpret AHJ requirements, describe the appeals process, use interpersonal skills and oral and written communication skills, interpret reports and plans, and issue written findings based on AHJ requirements.
- **4.2.22** Participate in legal proceedings, including documentation and testimony based on a technical or life safety compliance requirement or condition with direct relation to electrical inspection, given the findings of an electrical inspection, the technical or life safety compliance requirement or condition, and consultation with AHJ legal counsel, so that all information is presented.
- (A) Requisite Knowledge. The requirements pertaining to the types of legal proceedings and AHJ requirements.
- **(B) Requisite Skills.** The ability to testify and provide documentation about the findings of the electrical inspection and the technical or life safety compliance requirement or condition based on AHJ requirements and use interpersonal skills and oral and written communication skills.

4.3 Plans Review.

- 4.3.1* This duty shall involve plans review.
- **4.3.2** Process construction documents for permitting, given a set of construction documents and AHJ requirements, so that required permits are issued in accordance with 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.
- **4.3.3** Verify the occupancy use of a building, given construction documents and a description of a building and occupancy use, so that the occupancy use is in accordance with AHJ requirements.
- **(A) Requisite Knowledge.** Occupancy use, AHJ requirements, and potential electrical hazards presented by various occupancies.
- **(B) Requisite Skills.** The ability to recognize differences in occupancy use as they relate to AHJ requirements and read and comprehend construction documents.
- **4.3.4** Calculate the electrical load based on the intended occupancy use, given AHJ requirements and construction documents, so that the electrical system capacity and occupancy use are in accordance with AHJ requirements.
- **(A) Requisite Knowledge.** Occupancy use, AHJ requirements, operational features, and load calculation methods.

- **(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 construction documents.
- **4.3.5** Verify compliance of the proposed electrical system capacity and equipment ratings, given AHJ requirements and construction documents, so that the electrical system capacity and equipment ratings are in accordance with AHJ requirements.
- **(A) Requisite Knowledge.** AHJ requirements, operational features, and electrical systems calculation methods.
- **(B) Requisite Skills.** The ability to verify electrical systems calculation methods used to verify electrical system capacity and equipment ratings based on AHJ requirements and read and interpret construction documents.
- **4.3.6** Evaluate construction documents for electrical systems compliance, given the occupancy use, building construction type, AHJ requirements, and documenting and reporting procedures for construction documents review, so that construction documents meet AHJ requirements and compliance is identified, documented, and reported.
- **(A) Requisite Knowledge.** AHJ requirements for electrical systems, electrical theory, and hazards associated with electric system operation and implications, installation techniques, acceptance inspection, and testing and reporting of completed installations.
- **(B) Requisite Skills.** The ability to identify technical or life safety compliance requirements or conditions; read and interpret construction documents; conduct research; make decisions; recognize problems and resolve technical or life safety compliance requirements or conditions; use codes, standards, product certification requirements and policies, documenting and reporting procedures, interpersonal skills, and oral and written communication skills.
- **4.3.7** Evaluate construction documents for general requirements for the electrical system, given construction documents and AHJ requirements, so that the general requirements for the electrical system or operation are reviewed for compliance with AHJ requirements and compliance is identified, documented, and reported.
- **(A) Requisite Knowledge.** Electrical and other hazards, AHJ requirements for various electrical systems and operations to be used based on occupancy use requirements, building construction types, electrical theory and technical or life safety compliance requirements or conditions, and reference materials related to electrical and other hazard properties.
- **(B) Requisite Skills.** The ability to read and comprehend construction documents, interpret AHJ requirements, and use interpersonal skills and oral and written communication skills.
- **4.3.8** Evaluate construction documents based on a need or requirement for special occupancies, equipment, and conditions in accordance with AHJ requirements, given construction documents and AHJ requirements, so that the construction documents are reviewed and compliance is identified, documented, and reported.
- (A) Requisite Knowledge. Properties and characteristics of AHJ requirements for special occupancies, equipment, and conditions and electrical theory and electrical systems.

- **(B) Requisite Skills.** The ability to recognize special occupancies, equipment, and conditions; use AHJ requirements to assist in determining electrical compliance; and use interpersonal skills and oral and written communication skills.
- **4.3.9** Document the proposed installation of electrical systems, given construction documents for a process or operations, so that the construction documents are reviewed and compliance is identified, documented, and reported.
- (A) Requisite Knowledge. Proper selection, distribution, and location of electrical systems; methods used to evaluate the operational readiness of electrical systems; and evaluation of electrical systems based on AHJ requirements.
- **(B) Requisite Skills.** The ability to read and comprehend construction documents, identify symbols and terminology used by the design professional, and use interpersonal skills and oral and written communication skills.
- **4.3.10** 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.
- (A) Requisite Knowledge. AHJ requirements and legal requirements for a construction document review report.
- **(B) Requisite Skills.** The ability to conduct a construction document review, reference AHJ requirements, and use interpersonal skills and oral and written communication skills.
- **4.3.11** Deliver the construction document review report for technical or life safety compliance requirements or conditions, given a set of construction documents and AHJ requirements, so that the technical or life safety compliance requirements or conditions are identified, documented, and reported based on the construction documents submitted and submitter's noncompliance is identified, documented, and reported in accordance with AHJ requirements.
- **(A) Requisite Knowledge.** AHJ requirements, construction document review process, documenting and reporting process, and the appeals process.
- **(B) Requisite Skills.** The ability to interpret, report, and identify technical or life safety compliance requirements or conditions; reference AHJ requirements; explain the appeals process; and use interpersonal skills and oral and written communication skills.

4.4 Field Inspection.

- **4.4.1*** This duty shall involve field inspection.
- **4.4.2*** Observe and recognize hazards associated with a job site where a field inspection is required, given the job site, safety hazard, electrical hazards, general construction hazards, and potential hazards based on occupancy use and processes, so that the hazard and potential hazards are recognized and approved PPE is provided and used, or action is taken to mitigate the hazard, including suspending the field inspection until the hazard is resolved.
- **(A) Requisite Knowledge.** Hazards and potential hazards associated with the occupancy use and processes, electrical hazards, and general construction hazards, proper use of PPE, safe work practices, and identifying policies and procedures for accessing or denying entry into a hazardous area.

- **(B) Requisite Skills.** The ability to observe and adjust or stop the field inspection until the job site is rendered safe or approved PPE is donned and use interpersonal skills and oral and written communication skills.
- **4.4.3** Recognize hazards and potential hazards associated with electrical equipment, given an occupancy or conditions associated with the occupancy and the electrical system, so that the electrical system is installed and operated in a manner and environment in accordance with AHJ requirements and hazards are identified, documented, and reported.
- **(A) Requisite Knowledge.** Methods and techniques of code compliance inspections, AHJ requirements, occupancy-related hazard conditions, electrical theory, recognition of hazards and potential hazard sources, and hazardous materials awareness and identification.
- **(B) Requisite Skills.** The ability to inspect, document, and report on electrical systems hazards using AHJ requirements.
- **4.4.4** Review approved construction documents, given approved construction documents and AHJ requirements, so that the electrical installation is in compliance with the approved construction documents and AHJ requirements.
- **(A) Requisite Knowledge.** Proper selection, distribution, and location of electrical systems, methods used to evaluate the operational readiness of electrical systems, and AHJ requirements.
- **(B) Requisite Skills.** The ability to read and interpret construction documents, read and interpret symbols and terminology used by the design professional, and use interpersonal skills and oral and written communication skills.
- **4.4.5** Inspect general electrical system installations, given approved construction documents and AHJ requirements, so that the electrical system is installed in compliance with AHJ requirements and compliance is identified, documented, and reported.
- **(A) Requisite Knowledge.** AHJ requirements, proper use of PPE, and safe work practices.
- **(B) Requisite Skills.** The ability to read and interpret construction documents and symbols and terminology used by the design professional; recognize, document, and report compliance based on AHJ requirements; and use interpersonal skills and oral and written communication skills.
- **4.4.6** Inspect special occupancies, equipment, and conditions for the electrical system installation, given approved construction documents and AHJ requirements, so that the electrical system is installed in compliance with AHJ requirements and compliance is identified, documented, and reported.
- **(A) Requisite Knowledge.** AHJ requirements, proper use of PPE, and safe work practices.
- **(B) Requisite Skills.** The ability to read and interpret construction documents and symbols and terminology used by the design professional; recognize, document, and report compliance based on AHJ requirements; and use interpersonal skills and oral and written communication skills.
- **4.4.7** Compare an approved construction document to the installed electrical system, given an occupancy, an electrical system, approved construction documents, and AHJ requirements, so that installation of the electrical system correlates

with the approved construction document and any field modifications are documented and reported in accordance with AHJ requirements.

- **(A) Requisite Knowledge.** Construction documents, symbols, and terminology, AHJ requirements, and report procedures for as-built plans and modifications.
- **(B) Requisite Skills.** The ability to compare construction documents to the electrical system installation, determine the need for the associated as-built and for modifications to a modified electrical system by observation, document and report findings based on AHJ requirements, and use interpersonal skills and oral and written communication skills.

Annex A Explanatory Material

Annex A is not a part of the requirements of this NFPA document but is included for informational purposes only. This annex contains explanatory material, numbered to correspond with the applicable text paragraphs.

- **A.1.1** In developing this standard, the technical committee considered the various roles and duties of local, county, state, provincial, federal, and private sector electrical inspectors and plans reviewers. The committee was also aware that many times the electrical inspector is the only person in the organization and might be performing the specific requirements held by others in larger organizations.
- **A.1.2.3** Management responsibilities should be addressed by the agency or organization that the electrical inspector represents.
- **A.1.2.6** 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 programs can be developed or administered by local, state, provincial, or federal agencies as well as by professional associations and accredited institutions of higher education. The methods of learning would 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 this standard.
- **A.1.3.4** It is recommended, where practical, that evaluators be individuals who were not directly involved as instructors for the requirement being evaluated.
- **A.1.3.8** Prior to qualification as an electrical inspector, the electrical inspector should have knowledge of AHJ requirements for performing an electrical inspection, electrical theory, electrical installation, occupancy use, and building construction classifications.

Prior to qualification as an electrical inspector, the electrical inspector should have the ability to use interpersonal skills; communication skills, including oral and written; and office and managerial organizational skills.

A.1.3.11 Continuing education is necessary to ensure that electrical inspectors maintain and update their knowledge and skills in the evolving field of electrical safety. Attending or participating in workshops and seminars and in local, state, and national code development or professional organizations; achieving certification; and accessing professional publications,

journals, and web sites are just a few of the many avenues available to increase electrical inspector competency.

- A.1.3.12 In order for electrical inspectors to perform their jobs or to be evaluated on their performance of the job requirements of this standard, basic resource materials must be available for reference. These materials include those codes and standards applicable to that jurisdiction where the inspector is working or being evaluated. Policies and procedures that define and regulate the electrical inspector's job should also be provided. This is of particular importance where electrical inspectors are being evaluated by an agency other than their employer. It is the intent of this standard to measure the electrical inspector's ability to use AHJ-adopted codes and standards within the guidelines set by the policies and procedures of the AHJ. These skills should be transferable, regardless of the specific codes or standards or the editions being used.
- **A.1.3.13** Some AHJs establish performance metrics for electrical inspections and other related activities, such as the number of inspections per day or the maximum time allotted for an inspection. There are industry guidelines on establishing such metrics.
- **A.3.1** Action verbs used in the job performance requirements in this document are based on the first definition of the verb found in *Merriam-Webster's Collegiate Dictionary*, 11th edition.
- **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. 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.
- A.3.2.2 Authority Having Jurisdiction (AHJ). The phrase "authority having jurisdiction," or its acronym AHJ, is used in NFPA documents in a broad manner, since jurisdictions and approval agencies vary, as do their responsibilities. Where public safety is primary, the authority having jurisdiction may be a federal, state, local, or other regional department or individual such as a fire chief; fire marshal; chief of a fire prevention bureau, labor department, or health department; building official; electrical inspector; or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representative may be the authority having jurisdiction. In many circumstances, the property owner or his or her designated agent assumes the role of the authority having jurisdiction; at government installations, the commanding officer or departmental official may be the authority having jurisdiction.
- **A.3.2.3 Code.** The decision to designate a standard as a "code" is based on such factors as the size and scope of the document, its intended use and form of adoption, and whether it contains substantial enforcement and administrative provisions.
- **A.3.2.5 Listed.** The means for identifying listed equipment may vary for each organization concerned with product evalua-

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tion; some organizations do not recognize equipment as listed unless it is also labeled. The authority having jurisdiction should utilize the system employed by the listing organization to identify a listed product.

A.3.3.1 AHJ Requirements. Examples of AHJ requirements include, but are not limited to, the following:

- Codes that are suitable for adoption into law independently of other codes and standards, such as NFPA 70
- (2) Standards that contain mandatory provisions in a form generally suitable for mandatory reference by another standard or code or for adoption into law
- Recommended practices that contain only nonmandatory provisions
- (4) Standard operating procedures

A.3.3.2 Construction Documents. Construction documents could include, but are not limited to, the following:

- (1) Cover letter
- (2) Load calculations
- (3) Short-circuit, selective coordination, and arc-flash studies
- (4) Manufacturer's applicable documents
- (5) Commissioning documents
- (6) Operation and maintenance manuals
- (7) Complete set of drawings, which could include the following:
 - (a) Floor layout, including equipment
 - (b) Service or feeder riser diagram
 - (c) Fixture schedule and luminaire layout
 - (d) Location of emergency systems
 - (e) Architectural drawings
 - (f) Mechanical drawings
 - (g) Structural drawings
 - (h) Site drawings
 - (i) Wiring methods and material

A.3.3.3 Electrical Inspection. Codes, standards, product certification requirements, policies, and procedures are used when determining whether a certain electrical installation is acceptable. An electrical inspection, or multiple inspections, could be included with an electrical permit required by the AHJ.

A.3.3.4 Electrical Inspector. Chapter 4 contains the JPRs for a person to be considered as qualified to be an electrical inspector.

A.3.3.5 Electrical Theory. The concepts of electricity include, but are not limited to, voltage, current, resistance, power, and frequency.

A.3.3.10 Product Certification. Qualified personnel could be required to perform evaluation, testing, and certification of products to ensure that they meet the requirements of both construction and general industry electrical standards. A listing mark signifies that the tested and certified product complies with the requirements of one or more appropriate product safety test standards. Product certification could include, but is not limited to, testing by a nationally recognized testing laboratory, analysis by a qualified engineer, self-declaration by the manufacturer, or assessment by an energy auditor.

A.4.2.1 The tasks could include, but are not limited to, the following:

- (1) Identify the type and scope of an electrical permit application
- (2) Process an electrical permit application

(3) Identify the need for an electrical plans review

- (4) Process electrical plans review for approval
- (5) Enforce electrical permit regulations
- (6) Prepare electrical reports reflective of field inspection observations, investigating, and recording
- (7) Resolve technical or life safety compliance requirements and conditions
- (8) Recommend modifications of regulations on compliance issues
- (9) Generate written correspondence related to appeals
- (10) Initiate legal action
- (11) Recommend modifications to regulations for code modifications
- (12) Facilitate and evaluate code modifications
- (13) Develop policies and procedures for administering plans review and field inspections
- (14) Propose technical reference material acquisition
- (15) Recommend and evaluate a department budget
- (16) Demonstrate knowledge of AHJ requirements

A.4.3.1 The tasks could 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
- 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 analysis (FMEA)
- (18) Evaluate hazard mitigation analysis (HMA)

A.4.4.1 The tasks could include, but are not limited to, the following:

- Identify the occupancy and building construction classification
- (2) Inspect the electrical system based on occupancy use
- 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 electrical system commissioning activities

A.4.4.2 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.

Annex B Explanation of the Professional Qualifications Standards and Concepts of JPRs

This annex is not a part of the requirements of this NFPA document but is included for informational purposes only.

B.1 Explanation of the Professional Qualifications Standards and Concepts of Job Performance Requirements (JPRs). The primary benefit of establishing national professional qualifications standards is to provide both public and private sectors with a framework of the job requirements for those performing electrical inspections. Other benefits include enhancement of the profession, individual as well as organizational growth and development, and standardization of practices.

NFPA professional qualifications standards identify the minimum job performance requirements (JPRs) for electrical inspections. The standards can be used for training design and evaluation, certification, measuring and critiquing on-the-job performance, defining hiring practices, and setting organizational policies, procedures, and goals.

Professional qualifications standards for specific jobs are organized by major areas of responsibility defined as duties. For example, the fire fighter's duties might include fire department communications, fireground operations, and preparedness, and maintenance, whereas the fire educator's duties might include education, and implementation, planning and development, and evaluation. Duties are major functional areas of responsibility within a specific job.

The professional qualifications standards are written as JPRs. JPRs describe the performance required for a specific job and are grouped according to the duties of the job. The complete list of JPRs for each duty defines what an individual must be able to do in order to perform and achieve that duty.

B.2 The Parts of a JPR.

- **B.2.1 Critical Components.** The JPR comprises three critical components, which are as follows:
- (1) Task to be performed, partial description using an action verb
- (2) Tools, equipment, or materials that are to be provided to complete the task
- (3) Evaluation parameters and performance outcomes

Table B.2.1 gives an example of the critical components of a JPR.

- **B.2.1.1** The Task to Be Performed. The first component is a concise statement of what the individual is required to do. A significant aspect of that phrase is the use of an action verb, which sets the expectation for what is to be accomplished.
- **B.2.1.2** Tools, Equipment, or Materials That Must Be Provided for Successful Completion of the Task. This component ensures that all individuals completing the task are given the same tools, equipment, or materials when they are being evaluated. Both the individual and the evaluator will know what will be provided in order for the individual to complete the task.
- **B.2.1.3 Evaluation Parameters and Performance Outcomes.** This component defines for both the performer and the evaluator how well the individual must perform each task. The JPR guides performance toward successful completion by identifying evaluation parameters and performance outcomes. This portion of the JPR promotes consistency in evaluation by reducing the variables used to gauge performance.
- **B.2.2 Requisite Knowledge and Skills.** In addition to these three components, the JPRs contain requisite knowledge and skills. Just as the term *requisite* suggests, these are the necessary knowledge and skills the individual must have prior to being able to perform the task. Requisite knowledge and skills are the foundation for task performance.
- **B.2.3 Examples.** With the components and requisites combined, a JPR might read similar to the following two examples.
- **B.2.3.1 Example: Fire Fighter I.** Perform overhaul at a fire scene, given approved PPE, attack line, hand tools, flashlight, and an assignment, so that structural integrity is not compromised, all hidden fires are discovered, fire cause evidence is preserved, and the fire is extinguished.
- (A) Requisite Knowledge. Knowledge of types of fire attack lines and water application devices for overhaul, water application methods for extinguishment that limit water damage, types of tools and methods used to expose hidden fire, dangers associated with overhaul, signs of area of origin or signs of arson, and reasons for protection of fire scene.
- **(B) Requisite Skills.** The ability to deploy and operate an attack line; remove flooring, ceiling, and wall components to expose void spaces without compromising structural integrity; apply water for maximum effectiveness; expose and extinguish hidden fires in walls, ceilings, and subfloor spaces; recognize and preserve signs of area of origin and arson; and evaluate for complete extinguishment.
- **B.2.3.2 Example: Fire and Life Safety Educator II.** Prepare a written budget proposal for a specific program or activity, given budgetary guidelines, program needs, and delivery expense

Table B.2.1 Example of a JPR

Component	Example
(1) Task to be performed	(1) Prepare electrical inspection reports
(2) Tools, equipment, or materials	(2) given AHJ requirements and observations from an electrical inspection
(3) Evaluation parameters and performance outcomes	(3) so that the report is clear and concise and reflects the findings of the inspection in accordance with AHJ accepted requirements

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projections, so that all guidelines are followed and the budget identifies all program needs.

- **(A) Requisite Knowledge.** Knowledge of budgetary process; governmental accounting procedures; federal, tribal, state, and local laws; organizational bidding process; and organization purchase requests.
- **(B) Requisite Skills.** The ability to estimate project costs; complete budget forms; requisition/purchase orders; collect, organize, and format budgetary information; complete program budget proposal; and complete purchase requests.

B.3 Potential Uses for JPRs.

B.3.1 Certification. JPRs can be used to establish the evaluation criteria for certification at a specific job level. When used for certification, evaluation should be based on the successful completion of JPRs.

The evaluator would verify the attainment of requisite knowledge and skills prior to JPRs evaluation. Verification could be through documentation review or testing.

The individual seeking certification would be evaluated on completion of the JPRs. The individual would perform the task and be evaluated based on the evaluation parameters and/or performance outcomes. This performance-based evaluation is based on practical exercises for psychomotor skills and written examinations for cognitive skills.

Psychomotor skills are those physical skills that can be demonstrated or observed. Cognitive skills cannot be observed but rather are evaluated on how an individual completes the task (process-oriented) or the task outcome (product-oriented).

Performance evaluation requires that individuals be given the tools, equipment, or materials listed in the JPR in order to complete the task.

B.3.2 Curriculum Development and Training Design and Evaluation. The statements contained in this document that refer to job performance were designed and written as JPRs. Although a resemblance to instructional objectives might be present, these statements should not be used in a teaching situation until after they have been modified for instructional use.

JPRs state the behaviors required to perform specific skills on the job, as opposed to a learning situation. These statements should be converted into instructional objectives with behaviors, conditions, and degree to be measured within the educational environment.

While the differences between JPRs and instructional objectives are subtle in appearance, their purposes differ. JPRs state what is necessary to perform the job in practical and actual experience. Instructional objectives, on the other hand, are used to identify what students must do at the end of a training session and are stated in behavioral terms that are measurable in the training environment.

By converting JPRs into instructional objectives, instructors would be able to clarify performance expectations and avoid confusion caused by the use of statements designed for purposes other than teaching. Instructors would be able to add jurisdictional elements of performance into the learning objectives as intended by the developers.

Requisite skills and knowledge could be converted into enabling objectives that would help to define the course content. The course content would include each item of the requisite knowledge and skills ensuring that the course content supports the terminal objective.

B.3.2.1 Example: Converting a Fire Fighter I JPR into an Instructional Objective. The instructional objectives are just two of several instructional objectives that would be written to support the terminal objective based on the JPR.

JPR: Perform overhaul at a fire scene, given approved PPE, attack line, hand tools, flashlight, and an assignment, so that structural integrity is not compromised, all hidden fires are discovered, fire cause evidence is preserved, and the fire is extinguished.

Instructional Objective (Cognitive): The Fire Fighter I will identify and describe five safety considerations associated with structural integrity compromise during overhaul as part of a written examination.

Instructional Objective (Psychomotor): The Fire Fighter I will demonstrate the designed use of tools and equipment during overhaul to locate and extinguish hidden fires without compromising structural integrity.

B.3.2.2 Example: Converting a Fire and Life Safety Educator II JPR into an Instructional Objective. The instructional objectives are just two of several instructional objectives that would be written to support the terminal objective based on the JPR.

JPR: Prepare a written budget proposal for a specific program or activity, or given budgetary guidelines, program needs, and delivery expense projections, so that all guidelines are followed and the budget identifies all program needs.

Instructional Objective (Cognitive): The Fire and Life Safety Educator II will list and describe the bidding process for the purchase of a published program using budgetary guidelines, program needs, and the guidelines established by local organizational procedures as part of a written examination.

Instructional Objective (Psychomotor): The Fire and Life Safety Educator II will lead in the purchase of a specific fire and life safety educational program by following the bidding process to completion, using local organizational guidelines, including budgetary procedures, program needs, and delivery expense projections.

B.4 Other Uses for JPRs. While the professional qualifications standards are used to establish minimum JPRs for qualification, they have been recognized as guides for the development of training and certification programs, as well as a number of other potential uses.

These areas might include the following:

- (1) Employee Evaluation/Performance Critiquing. The professional qualifications standards can be used as a guide by both the supervisor and the employee during an evaluation. The JPRs for a specific job define tasks that are essential to perform on the job, as well as the evaluation criteria to measure completion of the tasks.
- (2) Establishing Hiring Criteria. The professional qualifications standards can be helpful in a number of ways to further the establishment of hiring criteria. The authority having jurisdiction (AHJ) could simply require certification at a

- specific job level for example, Fire Fighter I. The JPRs could also be used as the basis for pre-employment screening to establish essential minimal tasks and the related evaluation criteria. An added benefit is that individuals interested in employment can work toward the minimal hiring criteria at local colleges.
- (3) Employee Development. The professional qualifications standards can be practical for both the employee and the employer in developing a plan for the employee's growth within the organization. The JPRs and the associated requisite knowledge and skills can be used as a guide to determine additional training and education required for the employee to master the job or profession.
- (4) Succession Planning. Succession planning addresses the efficient placement of individuals into jobs in response to current and anticipated future needs. A career development path can be established for targeted employees to prepare them for growth within the organization. The JPRs and requisite knowledge and skills could then be used to develop an educational path to aid in the employee's advancement within the organization or profession.
- (5) Establishing Organizational Policies, Procedures, and Goals. The professional qualifications standards can be functional for incorporating policies, procedures, and goals into the organization or agency.

B.5 Bibliography.

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Annex C An Overview of JPRs for Electrical Inspector

This annex is not a part of the requirements of this NFPA document but is included for informational purposes only.

C.1 Electrical Inspector. Table C.1 provides the user of the standard with an overview of the JPRs and the progression of the various levels found in the document. The table is intended to assist the user with the implementation of the requirements and the development of training programs using the JPRs.

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Table C.1 Overview of JPRs for Electrical Inspector

JPR	Administration	Plans Review	Field Inspection
AHJ requirements	4.2.2 Identify AHJ requirements for an electrical system, given an electrical compliance issue and AHJ requirements are referenced based on the compliance requirement. 4.2.3 Propose technical reference material acquisition, given the scope of electrical inspections and AHJ requirements related to compliance, so that reference materials identified are acquired. 4.2.4 Evaluate the impact of proposed modifications to AHJ requirements, given draft modifications, AHJ requirements, and possible ramifications based on the modifications based on the modifications, so that the impact of the proposed modification is documented and reported. 4.2.5 Recommend modifications to AHJ requirements, given a technical or life safety compliance requirement or condition and AHJ requirements, so that the technical or safety requirement or condition is modified in AHJ requirements. 4.2.6 Facilitate code adoption and modification processes, given AHJ requirements, so that the issue is resolved to address the identified technical or life safety compliance requirement or condition. 4.2.7 Identify AHJ requirements for performing electrical inspections, given management objectives, so that the electrical inspections are in accordance with AHJ requirements. 4.2.8 Recommend modifications to AHJ requirements for the delivery of electrical inspection services, given AHJ requirements and management objectives, so that electrical inspections are conducted in accordance with AHJ requirements and management objectives, so that electrical inspections are conducted in accordance with AHJ requirements and management objectives, so that electrical inspections are conducted in accordance with AHJ requirements and management objectives, so that electrical inspections are conducted in accordance with AHJ requirements and due process of the law.		
Reports, forms, checklists, and documentation	 4.2.9 Create forms, reports, checklists, and other job aids for electrical inspections, given AHJ requirements, so that the forms, reports, checklists, and other job aids developed address compliance and features relative to the type of services provided during electrical inspections per AHJ requirements. 4.2.15 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 AHJ requirements. 4.2.16 Review electrical inspection reports, forms, and checklists, and other job aids, given AHJ requirements, so that the information is determined to be accurate, clear, and concise. 		

(continues)

Table C.1 Continued

JPR	Administration	Plans Review	Field Inspection	
	4.2.17 Maintain electrical inspection documents and records, given AHJ requirements, record-keeping process and procedures, and electrical inspection activity, so that documents and records are maintained in a secure and effective manner.			
Permits	 4.2.11 Identify the type and scope of work for which a permit is required, given the type and scope of work, permitting process and procedures, and AHJ requirements, so that requirements for permits are communicated in accordance with AHJ requirements. 4.2.12 Process an electrical permit application, given a specific request, so that the application is evaluated and a permit is issued or denied in accordance with AHJ requirements. 	4.3.2 Process construction documents for permitting, given a set of construction documents and AHJ requirements, so that required permits are issued in accordance with AHJ requirements.		
Plans review process	 4.2.13 Identify type and scope of work for which a plans review is required, given type and scope of work, plans review process and procedures, and AHJ requirements, so that requirements for a plans review are communicated in accordance with AHJ requirements. 4.2.14 Process an electrical plans review application, given a specific request, electrical plans review application, construction documents, and AHJ requirements, so that the application is reviewed and, processed in accordance with AHJ requirements. 			
Plans review		 4.3.3 Verify the occupancy use of a building, given construction documents and a description of a building and occupancy use, so that the occupancy use is in accordance with AHJ requirements. 4.3.4 Calculate the electrical load based on the intended occupancy use, given AHJ requirements and construction documents, so that the electrical system capacity and occupancy use are in accordance with AHJ requirements. 4.3.5 Verify compliance of the proposed electrical system capacity and equipment ratings, given AHJ requirements and construction documents, so that the electrical system capacity and equipment ratings are in accordance with AHJ requirements. 		
Compliance	4.2.18 Investigate technical or life safety compliance requirements or conditions, given a technical or life safety compliance requirement or condition, so that technical or life safety compliance requirements or conditions information is recorded, the investigation process is initiated, and the technical or life safety compliance requirements or conditions are resolved in accordance with AHI requirements.	4.3.6 Evaluate construction documents for electrical systems compliance, given the occupancy use, building construction type, AHJ requirements, and documenting and reporting procedures for construction documents review, so that construction documents meet AHJ requirements and compliance is identified, documented, and reported.	4.4.3 Recognize hazards and potential hazards associated with electrical equipment, given an occupancy or conditions associated with the occupancy and the electrical system, so that the electrical system is installed and operated in a manner and environment in accordance with AHJ requirements and hazards are identified, documented, and reported.	

(continues)

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Table C.1 Continued

JPR Administration Plans Review Field Inspection

- 4.2.19 Enforce electrical permit regulations, given an electrical permit application or report of a technical or life safety compliance requirement or condition and AHJ requirements, so that enforcement actions are in accordance with AHJ requirements and the technical or life safety compliance requirement or condition is mitigated.
- 4.3.7 Evaluate construction documents for general requirements for the electrical system, given construction documents and AHJ requirements, so that the general requirements for the electrical system or operation are reviewed for compliance with AHJ requirements and compliance is identified, documented, and reported.
- 4.3.8 Evaluate construction documents based on a need or requirement for special occupancies, equipment, and conditions in accordance with AHJ requirements, given construction documents and AHJ requirements, so that the construction documents are reviewed and compliance is identified, documented, and reported.
- 4.3.9 Document the proposed installation of electrical systems, given construction documents for a process or operations, so that the construction documents are reviewed and compliance is identified, documented, and reported.
- 4.3.10 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.
- 4.3.11 Deliver the construction document review report for technical or life safety compliance requirements or conditions, given a set of construction documents and AHJ requirements, so that the technical or life safety compliance requirements or conditions are identified, documented, and reported based on the construction documents submitted and submitter's noncompliance is identified, documented, and reported in accordance with AHJ requirements.

- 4.4.4 Review approved construction documents, given approved construction documents and AHJ requirements, so that the electrical installation is in compliance with the approved construction documents and AHJ requirements.
- 4.4.5 Inspect general electrical system installations, given approved construction documents and AHJ requirements, so that the electrical system is installed in compliance with AHJ requirements and compliance is identified, documented, and reported.
- 4.4.6 Inspect special occupancies, equipment, and conditions for the electrical system installation, given approved construction documents and AHJ requirements, so that the electrical system is installed in compliance with AHJ requirements and compliance is identified, documented, and reported.
- 4.4.7 Compare an approved construction document to the installed electrical system, given an occupancy, an electrical system, approved construction documents, and AHJ requirements, so that installation of the electrical system correlates with the approved construction document and any field modifications are documented and reported in accordance with AHJ requirements.

Legal

- 4.2.20 Initiate legal action related to AHJ requirements based on a technical or life safety compliance requirement or condition, given a description or observation of a technical or life safety compliance requirement or condition and legal options, so that the action taken is in accordance with AHJ requirements and due process is followed.
- 4.2.21 Generate written correspondence related to the filing of appeals, given AHJ requirements, a request for an appeal, and the judgment based on the appeal, so that the correspondence addresses the appeal.

(continues)

Table C.1 Continued

JPR	Administration	Plans Review	Field Inspection
	4.2.22 Participate in legal proceedings, including documentation and testimony based on a technical or life safety compliance requirement or condition with direct relation to electrical inspection, given the findings of an electrical inspection, the technical or life safety compliance requirement or condition, and consultation with AHJ legal counsel, so that all information is presented.		
Budget	4.2.10 Recommend an electrical inspection program budget, given AHJ goals, budget guidelines, and needs, so that electrical inspection program needs are addressed.		
Hazard recognition			4.4.2 Observe and recognize hazards associated with a job site where a field inspection is required, given the job site, safety hazard, electrical hazards, general construction hazards, and potential hazards based on occupancy use and processes, so that the hazard and potential hazards are recognized and approved PPE is provided and used, or action is taken to mitigate the hazard, including suspending the field inspection until the hazard is resolved.

ANNEX E 1078-21

Annex D Sample Job Description for Electrical Inspector

This annex is not a part of the requirements of this NFPA document but is included for informational purposes only.

D.1 Introduction. The sample job description in Section D.2 can be used to recruit qualified candidates for the position of electrical inspector. It might not be applicable to all organizations employing electrical inspectors, and the AHJ should modify the text to suit the requirements of their organization.

D.2 Sample Job Description.

JOB SUMMARY. Work involves the inspection of electrical installations in the course of construction, modification, and repair to ensure that the plans, workmanship, and materials conform with existing code requirements.

ESSENTIAL FUNCTIONS. Perform plans review and field inspections of electrical systems in various occupancies. Communicate with contractors, engineers, architects, and others regarding interpretation of codes. Communicate with other inspectors to share information and expertise. Maintain records and documents relating to inspection results, code violations, and corrections. Review field changes on plans for code compliance at construction sites. Investigate complaints related to electrical code requirements. Attend meetings and classes to stay up-to-date with changes in the field and code revisions. Assist building, plumbing, gas, and mechanical inspectors with inspections and re-inspections.

SUPERVISION EXERCISED. None.

WORKING CONDITIONS. Work is performed in equal amounts indoors and outdoors. Subject to extreme weather conditions.

PHYSICAL REQUIREMENTS. Work is essentially light in nature and consists of walking, standing, bending, climbing, crawling, and carrying up to 25 pounds.

KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED. Knowledge of National Electrical Code and locally adopted codes and standards. Knowledge of plumbing, gas, mechanical, and building inspection requirements and procedures. Able to communicate effectively with coworkers, builders, and the general public. Writing skills to prepare reports and correspondence. Math and reading skills. Ability to climb, crawl, and walk to inspect required structures.

MINIMUM REQUIREMENTS. High school diploma or equivalent. Five years of experience in building inspection, construction, engineering, architecture, or related work. Must possess master electrician certification. Must obtain inspector's certification within one year of employment. Must be willing to work outdoors.

PREFERRED REQUIREMENTS. Valid driver's license.

Annex E Informational References

- **E.1 Referenced Publications.** The documents or portions thereof listed in this annex are referenced within the informational sections of this standard and are not part of the requirements of this document unless also listed in Chapter 2 for other reasons.
- **E.1.1 NFPA Publications.** National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 70[®], National Electrical Code[®], 2020 edition.

E.1.2 Other Publications.

Merriam-Webster's Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003.

E.2 Informational References. The following documents or portions thereof are listed here as informational resources only. They are not a part of the requirements of this document.

NFPA 70B, Recommended Practice for Electrical Equipment Maintenance, 2019 edition.

NFPA 70E[®], Standard for Electrical Safety in the Workplace[®], 2018 edition.

NFPA 73, Standard for Electrical Inspections for Existing Dwellings, 2016 edition.

NFPA 78, Guide on Electrical Inspections, 2020 edition.

Welkin, Arthur, *Becoming the Electrical Inspector*, International Association of Electrical Inspectors, 901 Waterfall Way, Suite 602, Richardson, Texas 75080, 1st edition, 2017.

E.3 References for Extracts in Informational Sections. (Reserved)