

ARTICLE VI ELECTRICAL CODE

Sec. 5-51. Adoption of the National Electrical Code. *The National Electrical Code (NFPA 70 – ~~2002-2008~~) as copyrighted by the National Fire Protection Association is hereby adopted and incorporated herein by reference, as if fully set out in this Article, with the additions and changes prescribed hereinafter. Article 80 is specifically exempted.*

Sec. 5-52. Effect of State Law. *The adoption of the ~~2002-2008~~ National Electrical Code (NFPA 70 – ~~2002-2008~~) herein pursuant to home rule powers is not intended to negate any state statute on the same subject except insofar as this Article imposes a more stringent requirement or standard than does the state statute.*

Sec. 5-53. Amendments, Deletions, and Modifications. *The following additions, deletions, amendments or substitutions, as defined in Article I, Section 5 of this Ordinance, are hereby made to the National Electrical Code.*

ARTICLE 90 Administration and Enforcement:

Section 90-1. General:

- A. Title:** This Code shall be known as the Electrical Code of the City of Urbana, Illinois, hereinafter referred to as the Electrical Code or "this Code".
- B. Scope:** The design, installation, maintenance, alteration, and inspection of the electrical systems shall comply with the requirements of this Code.
- C. Intent:** This Code shall be construed liberally and justly to insure public health, safety, and welfare insofar as they are affected by the installation and maintenance of electrical systems.
- D. Safety:** This Code contains provisions necessary for safety. Compliance therewith and proper maintenance will result in an installation essentially free from hazard, but not necessarily efficient, convenient, or adequate for good service or future expansion of electrical use.
- E. Non-Instruction:** This Code is not intended as a design specification nor as an instruction manual for untrained persons.
- F. Liability:** This Code shall not be construed to affect the responsibility or liability of any party owner, operating, controlling, or installing any electrical equipment, for damage to persons or property caused by any defect therein, nor shall the City be held as assuming such liability by reason of the inspection or reinspection authorized herein or the certificate of approval issued as herein provided, or by reason of the approval or disapproval of any equipment authorized herein.
- G. Building Safety Code Board of Appeals:** All appeals and variations of the Electrical Code shall be heard by the Building Safety Code Board of Appeals as established in ~~Section 112.1-112.5-~~ 113.1-113.3 of the International Building Code ~~2003-2009~~ as amended.

Section 90-2 Applicability: The provisions of this Code shall apply to the installations and equipment within, on, or around public and private buildings, or other structures, including mobile homes, recreational vehicles, floating buildings, and other premises such as yards, carnival, parking, and other lots and industrial substations.

- A.** Also covered are:

1. Installation of conductors that connect to the supply of electricity.
2. Installation of other outside conductors on the premises.
3. Installation of optical fiber cable.
4. Certain low voltage installations.

B. It is the intent that this Code covers all premises wiring or wiring other than utility owned metering equipment, on the load side of the service point of buildings, structures, or any other premises not owned or leased by the utility. Also, it is the intent that this Code covers installations in buildings used by the utility company for purposes such as office buildings, warehouses, garages, machine shops, and recreational buildings which are not an integral part of a generating plant, substation, or control center.

C. This Code shall not cover:

1. Installations in ships, watercraft other than floating buildings, railway rolling stock, aircraft, or automotive vehicles other than mobile homes and recreational vehicles.
2. Installations underground in mines.
3. Installations of railways for generation, transformation, transmission, or distribution of power used exclusively for operation of rolling stock or installations used exclusively for signaling and communication purposes.
4. Installations of communication equipment under the exclusive control of communication utilities, located outdoors or in building spaces used exclusively for such installations.
5. Installations under the exclusive control of electric utilities for the purpose of communication, or metering, or for the generation, control, transformation, transmission, and distribution of electric energy located in buildings used exclusively by utilities for such purposes or located outdoors on property owned or leased by the utility or on public highways, streets, roads, etc., or outdoors by established rights on private property.

D. Matters Not Provided For: Any requirements essential for the safe operation of any appliance or electrical system not specifically provided for by this Code shall be determined by the Electrical Official.

E. Continuation of Unlawful Use: It shall be unlawful to install, extend, alter, repair, or maintain electrical systems in or adjacent to buildings except in conformity with this Code.

Section 90-3 Existing Electrical Systems:

A. Application: This Code shall apply to existing electrical systems described in this Section.

1. Electrical systems in a building occupied for occupancies or uses other than those for which it was occupied at the time this Code became applicable.
2. Electrical systems in a building moved as specified in Section 90-6.

B. Additions or Alterations: Any addition or alteration, regardless of cost, made to an electrical system shall be made in conformity with applicable regulations of this Code. Where additions or alterations subject parts of existing systems to loads exceeding those permitted herein, such parts shall be made to comply with this Code.

C. Existing Use Continued: Except as otherwise provided in this Code a provision in this Code shall not require the removal, alteration, or abandonment of, nor prevent continued use of, an existing electrical system; provided the system conforms with the codes in existence at the time of its installation.

Section 90-4 Repairs and Maintenance:

A. Maintenance: All electrical systems, both existing and new, and all parts thereof shall be maintained in a safe condition. All devices or safeguards which are required by this Code shall be maintained in good working order.

B. Owner Responsibility: The owner or the owner's designated agent shall be responsible for the maintenance of electrical systems.

Section 90-5 Demolition: No building or structure shall be demolished until the electrical service has been properly terminated by the utility company. The Electrical Official may require notification of termination, in writing from the utility company.

Section 90-6 Moved Structures: The electrical systems in a building or structure which is to be moved or relocated must comply with the minimum requirements for rewiring existing construction before such building may be occupied, (See Section 120.2 B, C, D, & E).

Section 90-7 Approval:

A. It shall be unlawful for any person to use any electrical device, apparatus, wiring material, or current limiting device of any kind that does not meet the Standards of Underwriters Laboratories or other approved testing laboratories, listed in Chapter 35 of the 2003-2009 International Building Code, Entitled: Referenced Standards, as to safety and adequacy.

B. The Electrical Official may waive specific requirements in this Code or permit alternate methods, where it is assured that equivalent objectives can be achieved by establishing and maintaining effective safety.

This Code may require new products, constructions, or materials which may not yet be available at the time the Code is adopted. In such event, the authority having jurisdiction may permit the use of the products, construction, or materials which comply with the most recent previous edition of this Code adopted by this jurisdiction.

C. Research and Investigations: The Electrical Official shall require that sufficient technical data be submitted to substantiate the proposed use of any material or assembly, and if it is determined that the evidence submitted is satisfactory proof of performance for the use intended, its use may be approved subject to the requirements of this Code. The costs of all tests, reports, and investigations required under these provisions shall be paid by the applicant.

D. Special Permission: The authority having jurisdiction for enforcing this Code may grant exception for the installation of conductors and equipment not under the exclusive control of the electric utilities and used to connect the electric utility supply system to the service-entrance conductors of the premises served, provided such installations are outside a building or terminate immediately inside a building wall.

E. Accepted Industry Practice: In the absence of provisions not specifically contained in this Code or approved rules, accepted industry practice in respect to material, equipment, or method of installation will serve as the standard for enforcement by the Electrical Official governing electrical installations.

Section 90-8 Electrical Official:

A. General: The Electrical Inspector of the Building Safety Division of the Department of Community Development Services of the City of Urbana shall be designated the Electrical Official for the purposes of this Code.

B. Relief from Personal Responsibility: The Electrical Official, officer or employee charged with the enforcement of this Code, while acting for the jurisdiction, shall not thereby be rendered liable personally, and is hereby relieved from all personal liability for any damage that may accrue to persons or property as a result of any act required or permitted in the discharge of Official duties. Any suit instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this Code shall be defended by the legal representative of the jurisdiction until the final termination of the proceedings. The Official or any subordinate shall not be

liable for costs in any action, suit, or proceeding that may be instituted in pursuance of the provisions of this Code; and any officer of the Office of Electrical Inspection, acting in good faith and without malice, shall be free from liability for acts performed under any of its provisions or by reason of any act or omission in the performance of official duties in connection therewith.

Section 90-9 Duties and Powers:

A. General: The Electrical Official shall enforce all the provisions of this Code relative to the installation, alteration, repair, maintenance, or operation of all electrical systems, devices, and equipment, except as may otherwise be specifically provided for by other requirements or as provided in the following sections.

1. The provisions of this Code may be modified or waived by special permission, by the Electrical Official where such permission is allowed by a section in this Code.

B. Application and Permits:

1. The Electrical Official shall receive applications and issue permits for the installation and alteration of electrical systems and equipment.
2. The Electrical Official shall have the authority to deny issuance of an electrical permit to an applicant who is delinquent in obtaining inspections as required in Section 90-16 or delinquent in compliance with notices and orders.

C. Notices and Orders: The Electrical Official shall issue all necessary notices or orders to remove illegal or unsafe equipment or require repairs or replacement of such equipment.

D. Inspections: The Electrical Official shall make all the required inspections, or may accept reports of inspection by approved services or individuals.

E. Rule Making Authority: The Electrical Official shall have power as may be necessary in the interest of public safety, health, and general welfare to adopt and promulgate rules and regulations to interpret and implement the provisions of this Code to secure the intent thereof and to designate requirements applicable because of local climatic or other conditions. Such rules shall not have the effect of waiving working stresses or fire protection requirements specifically provided in this Code, or of violating approved engineering practice involving public safety.

F. The Electrical Official is hereby empowered to attach to electrical cabinets and equipment, any Official notice or seal to prevent or permit use of electricity and it shall be unlawful for any other person to put or attach such seal or notice, or to break, change, destroy, tear, mutilate, cover, relocate, or otherwise deface or injure any such official notice or seal posted or duly signed by the Electrical Official.

Section 90-10 Permits:

A. The Electrical Official shall examine or cause to be examined all applications for permits and amendments thereto within a reasonable time after filing. If the application or the plans do not conform to the requirements of all pertinent laws, such application shall be rejected. If the Electrical Official is satisfied that the proposed work conforms to the requirements of this Code and all laws and ordinances applicable thereto, a permit shall be issued as soon as practical.

1. No electrical equipment or system shall be altered or installed without first obtaining an electrical permit.

EXCEPTION: A permit shall not be required for minor electrical repairs (involving no new work, alterations, or change whatever) that are necessary and incident to the maintenance only in good condition of an established plant, installation or system of wiring. However, this exception does not permit the installation of any new circuits or the extension of any circuits already installed.

B. Application for Permits: Application for an electrical permit shall be made on forms prepared and provided by the Electrical Official.

C. Persons Applying: Applications for electrical permits shall be made only by those persons qualified, as defined by this Code, to perform electrical work.

In no case shall anyone apply for a permit to do work which they are not authorized by the owner or owner's agent to perform.

D. Plans and Specifications: The application for the permit shall be accompanied by specifications and plans drawn to scale, with sufficient clarity and detail dimension to show the nature and character of the work to be performed. When quality of materials is essential for conformity to this Code, specific information shall be essential for conformity to this Code, specific information shall be given to establish such quality; and this Code shall not be cited, or the term "legal" or its equivalent to be used, as a substitute for specific information. The Electrical Official may waive the requirement for filing plans when the work involved is of a minor nature.

E. Revocation: The Electrical Official may revoke a permit or approval issued under the provisions of this Code in case of any false statement or misrepresentation of fact in the application or on the plans on which the permit or approval was based.

F. Suspension: Any permit issued shall become invalid if the authorized work is not commenced within six months after issuance of the permit or if the authorized work is suspended or abandoned for a period of six months after the time of commencing the work.

Section 90-11 Conditions of Permit:

A. Qualifications of Contractors: Except as indicated in Section 90-12 herein, electrical permits shall be issued only to contractors licensed by the City of Urbana to perform such work.

B. Payment of Fees: A permit shall not be issued until the fees prescribed in Chapter 14 (licenses and permits) of the Urbana Code of Ordinances are submitted.

C. Code Compliance: The permit shall be authorization to proceed with the work and shall not be construed as authority to violate, cancel, or set aside any of the provisions of this Code, except as specifically stipulated by approved modification as described in the application.

D. Permit Compliance: All work shall conform to the approved application and plans for which the permit has been issued, and any approved amendments thereto. Modifications or changes in the work shall not be made without first obtaining approval from the Electrical Official and paying any additional required fees.

E. Not Transferable: Permits are not transferable. A permit shall be valid only to the party authorized to do the work as indicated on the application and any bona fide employees, as allowed by this Code.

F. Annual Permits: The Electrical Official may issue annual permits under the following conditions:

1. Application shall be made annually in a form approved by the Electrical Official
2. No permits shall be issued until the proper fees have been paid.
3. The application for an annual permit shall include the name of the supervising electrician that is to be responsible for the work. The electrical inspector shall be notified prior to any change in the supervising electrician. The supervising electrician shall be licensed as required in this Code.

4. Work performed under the annual permit shall be limited to minor installations or alterations. Separate electrical permits shall be obtained for major changes in electrical equipment or apparatus, changes in service, relocation of major pieces of equipment or high voltage devices and/or electrical remodeling of areas or spaces including changes in lighting.
5. An annual permit shall be issued only to those businesses, companies, or corporations which use qualified people in modifications and equipment changes. Annual permits may be issued to cover malls, hospitals, factories, and other organizations which have employees for the full-time and constant maintenance and repair of electrical systems.
6. The annual permit shall specify each and every building location or premises where work is to be performed along with the name of the designated supervising electrician.
7. The designated supervising electrician shall maintain a log of all work performed during each month for which the permit was issued. This log shall list the type and location of all work performed under the annual permit. Work not listed on the log and all major electrical work shall require a separate electrical permit. The designated supervising electrician shall update and maintain the log for review by the Electrical Official.
8. Any person violating any of the provisions of this article applicable to annual electrical permit certificates shall be subject to the penalties provided and in addition thereto, the annual electrical permit certificate issued to such person shall be revoked by the Electrical Inspector in writing to the party involved, and any unexpired fee therein shall be retained by the City, provided however, that revocation by the Electrical Official shall be subject to appeal to the Building Safety Code Board of Appeals.

Section 90-12 Registration of Electrical Contractors:

- A. Permits for electrical work shall be issued only to registered electrical contractors as defined herein.

EXCEPTION: Permits may be issued to the owner/occupant of a single-family dwelling used exclusively for living purposes, including the usual accessory buildings to perform electrical work in said dwelling, provided the person is a bona fide owner of such dwelling and that the same will be occupied by the owner for at least one year, and the owner shall personally purchase all material and perform all labor in connection therewith, and provided that all workmanship, methods, and materials shall meet the requirements of this article.

- B. Contractors shall become registered by applying to the Electrical Official. Upon satisfactory compliance with this section, the Electrical Official shall issue a Certificate of Registration authorizing the applicant to engage in such business during the fiscal period for which it is issued.
 1. Applications for registration of an electrical contractor shall not be taken unless submitted with the proper fee, as prescribed in Chapter 14 (Licenses and Permits) of the Urbana Code of Ordinances.
 2. **Assurances Required:** Registration as required above shall require filing with the Electrical Official a statement that such contractor shall restore the city streets, alleys, sidewalks, parking, and all other city property to as good a condition as the same were before such contractor disturbed such for work performed by the contractor.
 3. **Applications:** Registration shall require completion of the application upon the form approved by the Electrical Official.
 4. The application shall specify the supervising electrician(s) responsible for the performance and/or supervision of any and all electrical work to be performed as authorized by a permit obtained by the applicant.
 5. In the event of any change or termination of the Supervising Electrician, the registered electrical contractor shall have five days in which to apply for revision of registration or to have another registered electrical contractor apply for a permit and to complete the unfinished work.

6. Any electrical contractor properly licensed in any other jurisdiction, where the licensing requirements of said other jurisdiction are deemed equivalent to Urbana requirements by the Electrical Official, who wishes to perform permit-required work in Urbana, shall submit an application along with proof of current license and the fee prescribed for reciprocal registration as prescribed in Chapter 14 of the Urbana Code of Ordinances. If reciprocal registration is denied, the applicant may either successfully complete the licensing requirements of a supervising electrician in Urbana or an appeal may be made within seven days of receipt of denial to the Building Safety Code Board of Appeals. The Building Safety Code Board of Appeals shall either confirm or deny registration by a majority vote.
7. Certificates of registration shall expire on the 30th day of June following issuance. Application for renewal shall be made by submitting the proper fee and by submitting any changes to the original application on or before 30 days after the date of expiration. Failure to renew registration July 31 shall require submission of a new application and double the prescribed fee. Any renewal or re-registration which has been expired, revoked, suspended, or otherwise invalid for a period longer than 90 days shall require re-examination of the supervising electrician.
8. Performance of permit-required electrical work without a valid registration as an electrical contractor in Urbana shall be deemed a violation of this Code.
9. Any false statement on the application for registration shall constitute fraud, and cause the registration to be null and void.
10. If in the opinion of the Electrical Official any electrical contractor registered under this Code shall have willfully or repeatedly violated any of the provisions of this Article, the Electrical Official shall refer written charges against such offending registered electrical contractor to the Building Safety Code Board of Appeals. Upon the receipt of such written charges, the Building Safety Code Board of Appeals shall within fourteen (14) calendar days after majority vote of those present, determine whether or not such registered electrical contractor's license shall be suspended or revoked by the City. In no event may a suspension exceed six (6) months. The Electrical Inspector shall keep a suitable record of all registrations issued and a suitable record of all suspensions or revocations by the Board.

Section 90-13 Approval of the Supervising Electrician:

- A. Before any permit to install or alter electrical work shall be issued to any person entitled to secure permits under this Section, such person shall appoint or employ a person, who may be himself/herself, or some other person, for the purpose of the electrical regulations of this Article, who shall be known as the supervising electrician.
 1. The supervising electrician shall be employed on a full-time basis with the electrical contractor, and should be available if necessary for any and all inspections if requested by the Electrical Official.
- B. The supervising electrician shall have had at least four (4) years or eight thousand (8,000) hours experience in the installation, alteration, repair, and maintenance of electrical wires, equipment, and apparatus, or an experience equivalent thereto. Applicants shall furnish the names and addresses of former employers, periods of time employed, and in what capacity. Proof of such service shall be furnished in a manner satisfactory to the Electrical Official. Every applicant provided for in this Section shall be required to pass the Standard Master Electrician Examination to be administered by the International Code Council. Said applicant shall pay any examination fees required by the International Code Council. Such fees are in addition to the registration fee required by the City of Urbana upon said applicant's successful completion of the examination process. Successful applicants shall be issued a certificate of registration without restrictions upon payment of the registration fees prescribed in Chapter 14 of the Urbana Code of Ordinances. Any person denied status as a supervising electrician by the Electrical Official may appeal the denial to the Building Safety Code Board of Appeals. The Board, following a hearing

of evidence, shall confirm or reverse the Electrical Official's decision by a majority vote of those members present.

- C. Re-examinations shall be administered by the International Code Council. Said applicant shall pay any examination fees required by the International Code Council. Applicants may re-examine at the earliest allowable time as established by the International Code Council.
- D. The Electrical Official may limit the size, scope, and type of electrical work which the supervising electrician shall be authorized to perform. Applicants seeking to obtain a restricted/limited registration as described in this section shall be required to have had at least two years or 4000 hours experience in the installation, alteration, repair, and maintenance of electrical wires, equipment and apparatus, or an experience thereto. Applicants shall furnish names and addresses of former employers, periods of time employed, and in what capacity. Proof of such service shall be furnished in a manner satisfactory to the Electrical Official. Every applicant provided for in this section shall be required to pass the Standard Journeyman Electrician Exam to be administered by the International Code Council. Said applicant shall pay any exam fees required by the International Code Council. Such fees are in addition to the registration fee required by the City of Urbana upon said applicant's successful completion of the examination process. Successful applicants shall be issued a certificate of registration with restrictions/limitations upon payment of the registration fees prescribed in Chapter 14 of the Urbana Code of Ordinances. Such restrictions/limitations shall be based upon the applicant's experience, technical education, and successful performance on the Standard Journeyman Electrician Exam. Such limitations shall be recorded on the Certificate of Registration(s) and shall authorize said supervising electrician to perform electrical work as follows:
 - 1. One- and Two-Family detached dwelling electrical work.
 - 2. Sign installations and neon lighting.
 - 3. Apartment buildings.
 - 4. Air conditioning and heating installations limited to residential use.

Appeals of limitations shall be treated the same as an appeal of denial as described in Section 90-13(B) of this Code.

Section 90-14 Registration of Electronic Fire Protection Contractors:

- A. A permit shall be required for the installation of electronic fire protection systems, low voltage or otherwise, including all fire alarm systems and electronic supervising components of fire suppression systems.
- B. Contractors who install and/or maintain electronic fire protection systems shall be registered electrical contractors as prescribed in Section 90-12 or shall be registered as Electronic Fire Protection System Contractors.
 - 1. The Electrical Official shall issue registrations as Electronic Fire Protection Systems Contractors (EFPSC) upon submittal of an application for registration along with proof of a valid State of Illinois license to perform such work. The application shall include the supervising electrician who shall, at a minimum, be approved for the installation of fire alarms.

Section 90-15 Fees:

Fees for permits, testing, licensing, and inspections shall be as prescribed in Chapter 14, (Licenses and Permits), of the Urbana Code of Ordinances.

Section 90-16 Inspections:

All work and equipment for which a permit is obtained under this Code shall be inspected and approved by the Electrical Official. Any portion of work intended to be concealed by any permanent portion of the building or by site work shall not be concealed until inspected and approved by the Official. When installation of any equipment is complete, a final inspection shall be made. Equipment regulated by this

Code shall not be connected to the power supply and placed in normal operation until it complies with all applicable requirements of this Code, and a final inspection has been completed.

- A. The Electrical Official may order the uncovering of any work which has been concealed and which may prevent reasonable inspection. The uncovering and subsequent repair work shall be performed at the owners of the buildings' expense and the Electrical Official shall not be held responsible for the failure of the permit holder to have the work inspected.
- B. **Inspection of Annual Permits**
 - 1. The Electrical Official shall make periodic inspections of sites where work is authorized by an annual permit.
 - 2. The possessor of a valid annual electrical permit shall be responsible for maintaining a log of work and for assisting the Electrical Official in determining the work performed, within reasonable limits.
- C. No wiring shall be concealed prior to inspection and approval. It shall be the responsibility of the contractor to request inspections as required, also to arrange for entrance to a building, and provide for removal of covers, devices, etc., as is necessary for inspection.
- D. **Final Inspection:** Upon completion of the electrical work and before final approval is given, the Electrical Official shall inspect the work and observe the final test to insure compliance with the requirements of this Code.
- E. **Right of Entry:** In the discharge of duties, the Electrical Official or an authorized representative shall have the authority, subject to applicable law, to enter at any reasonable hour any building, structure, or premises in the city limits of Urbana, to enforce the provisions of this Code.

Section 90-17 Workmanship:

All work shall be conducted, installed, and completed in a workmanlike and approved manner so as to secure the results intended by this Code.

Section 90-18 Electrical Power Supply:

It shall be unlawful for any individual, partnership, corporation, group, or association to supply electricity to any electrical equipment if a permit is required for its installation unless such connection has been authorized by the Electrical Official. It shall be unlawful to make connections to equipment that has been disconnected or ordered disconnected by the Electrical Official.

Section 90-19 Emergency Disconnections: Any person owning or controlling electric wires or apparatus for the transmission of light, heat, or power shall in case of emergency, upon the request of any official of the Fire Department or the Electrical Official disconnect such wires or apparatus as may be designated by such Official.

Section 90-20 Correction/Abatement of Hazards: When any electrical work is found by the Electrical Official to be dangerous to persons or property because it is defective or improperly installed, the person responsible for the electrical system shall be notified by the Electrical Official in writing, and required to make the necessary correction within the time specified in such written notice, and if the person shall fail to make these required corrections, the Electrical Official shall have the power and authority to disconnect or order the discontinuance of electrical service to the electrical equipment or to the entire structure; provided, upon receipt of such written notice from the Electrical Official, the person named as responsible therein shall have the right to submit an appeal to the Building Safety Code Board of Appeals if submitted within three (3) calendar days from receipt of such written notice, provided however, that the Electrical Official shall have the authority to require immediate corrections or to order the disconnection of any electrical device or system which, in the Electrical Official's opinion, shall constitute a fire hazard or shall otherwise be unsafe to the occupants of the building.

Section 90-21 Stop Work Orders:

- A. **Notice to Stop Work:** Upon notice from the Electrical Official that work on any building, structure, or premises is being conducted contrary to the provisions of this Code or in an unsafe or dangerous manner, such work shall be immediately stopped. The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. It shall state the conditions under which electrical work may be resumed.
- B. **Unlawful Continuance:** Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be a violation of this Code.

Section 90-22 Violations:

- A. **Unlawful Acts:** It shall be unlawful for any person, firm, or corporation to erect, construct, alter, repair, remove, demolish, or operate electrical equipment regulated by this Code, or cause same to be done, in conflict with or in violation of any of the provisions of this Code.
- B. **Notice:** The Electrical Official shall serve a notice of violation or order on the person responsible for the extension, repair, removal, demolition, or operation of electrical equipment or systems in violation of the provisions of this Code, or in violation of a detail statement or a plan approved thereunder, or in violation of a permit issued under the provisions of this Code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.
- C. **Penalties:** Any person who shall violate a provision of this Code or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter, or repair electrical equipment or systems in violation of an approved plan or directive of the Electrical Official, or of a permit issued under the provisions of this Code, shall be subject to the penalties prescribed in Section 1-10 of the Urbana Code of Ordinances.
- D. **Service:** The notice shall be deemed to be properly served upon such owner if (1) a copy thereof is delivered to the owner personally or (2) a copy thereof is mailed to the owner by regular, first-class U.S. mail, postage prepaid, and a copy thereof is posted in a conspicuous place on the premises where the violation exists. If the notice is served by mailing and posting, the service shall be deemed effective on the third day after mailing and posting.

Section 90-23 Appeals:

The appeal of any provision of this Code or any requirement or action by the Electrical Official shall be heard by the Building Safety Code Board of Appeals.

Article 120 entitled, "General Rules for Electrical Installations" is added and reads as follows:

Article 120 -- General Rules for Electrical Installations (Urbana, Illinois)

Section 120-1: The following rules shall apply to all electrical work and materials within the corporate limits of Urbana, Illinois, and shall apply specifically where other requirements in this Code conflict or are less stringent.

Section 120-2 Requirements for Rewiring Existing Residences:

- A. For the purpose of this Section, installation of a new service to increase the ampacity shall constitute a service upgrade and require no other rewiring. A service upgrade shall be subject to the requirements of Section [120-B and](#) 120-2E. Changing out the same size panel (ampacity) does not constitute a service upgrade or rewire. Application for a permit for a service upgrade and rewire shall be subject to the requirements of Sections 120-2B, 120-2C, 120-2D, and 120-2-E.
- B. The residence shall meet the requirements of the latest adopted edition of the Property Maintenance Code, except as amended in this section.
- C. **Service:** The size and usage of appliances and equipment shall be used as the basis for determining the need for additional facilities in accordance with the latest adopted edition of this

Electrical Code. The minimum allowable service capacity shall be 100 Ampere, minimum 20 circuit (full size breaker spaces), three wire, 120/240 volt. Panel locations shall meet the requirements of the NEC.

EXCEPTION: New panels may be located in the original panel location when located over readily moveable appliances or equipment with prior approval of the Electrical Official, and such approval shall require properly labeling to require moving the equipment prior to servicing the electrical panel.

- D. The electrical system shall comply with all requirements for new construction and shall specifically comply with Article 210 of this Code, except as follows:
1. Every habitable space in a dwelling unit, and every guest room shall contain at least two separate and remote duplex receptacle outlets. Where such spaces are larger than 120 square feet, an additional remote duplex receptacle outlet shall be required for each additional 50 square feet or fraction thereof, above 120 square feet.
 2. Every public hall, interior stairway, water closet compartment, bathroom, kitchen, laundry room, and furnace room shall be adequately illuminated. At least one electrical light fixture shall be provided with a wall switch (or pull switch were approved by the Electrical Official).
 3. Exterior lighting of entrance ways for all residential buildings shall be required and shall comply with Article 10, Section 1006 of the International Building Code.
 4. Ground fault protection shall be required as prescribed in Article 210.
 5. Arc fault protection shall be required for all sleeping rooms, bedrooms or dorm rooms in all residential occupancies as prescribed in Article 210-12.
 6. Existing exposed knob and tube wiring and its associated fixtures shall be abandoned and removed and the affected circuits rewired accordingly. All outlet connections and splices shall be within an approved box.
 7. Smoke alarms shall be installed as prescribed in Section R314 of the 2009 International Residential Code.
 8. Carbon monoxide alarms shall be installed as prescribed in Section R315 of the 2009 International Residential Code.
- E. **Electrical System Hazards:** All unsafe conditions shall be disclosed to the owner by the electrical contractor and corrected prior to inspection. The following items are declared to be hazardous and it shall be unlawful to create, maintain or permit the same to exist.
1. Conductors or devices carrying electrical energy in excess of the approved rated capacity.
 2. Electrical wiring of all types, not supported in an approved manner (existing wiring will be allowed to remain on the bottom of floor joists in basements if secured at appropriate intervals to eliminate sagging.)
 3. Splices unenclosed in approved boxes other than knob and tube wiring inside walls and attics.
 4. The absences of, or use of unapproved connectors for splices and termination into boxes or cabinets.
 5. Exposed fuse blocks or cleat type lighting fixtures.
 6. Defective wiring that is damaged or with deteriorated insulation.
 7. Flexible cords, commonly known as lamp or extension cords, used as a substitute for fixed permanent wiring; where run through or behind walls, ceilings, baseboards, doorways, windows, and floors or where attached to building surfaces such as walls, ceilings, floors and baseboards.
 8. The use of the grounded circuit conductor (neutral conductor) used for grounding, except where allowed by NEC 250-~~60.142~~(B), for such listed appliances as stoves, ovens, cook-tops, and clothes dryers.
 9. Broken porcelain fixtures or cord type fixtures with frayed or deteriorated insulation.
 10. Boxes or conduits with excessive number of conductors.

11. Knob and tube wiring in areas other than inside walls or attics that are subject to physical damage (run exposed on walls, ceilings below 7 feet 6 inches, and below floor joists in basements).
12. Broken receptacles or switches and receptacles with inadequate tension.
13. Missing or broken cover plates.
14. Any unsafe conditions other than those specifically noted.

Section 120.3 Additional Load on Existing Service:

It shall be the responsibility of the contractor or other authorized person adding additional circuits or equipment to existing services to determine beforehand if the service is of sufficient size and capacity to carry such additional load according to the rules established under other Sections of this Article, and if not, it shall be unlawful to make the addition until the service has been increased to required size.

Section 120-4: All existing and new residential services shall comply with the following:

~~A.~~ New residential service capacity shall not be less than one hundred ampere, twenty circuit (full size circuit breakers), three wire, 120/240 volt for new residences and service upgrades.

Section 120-5: All residential branch circuits shall comply with the following:

- A. Fifteen amp, 120 volt residential branch circuits shall contain no more than 11 (eleven) outlets. Twenty amp, 120 volt residential branch circuits shall contain no more than 13 (thirteen) outlets.

~~Article 210, Section 210.8(B)(3) of the 2002 NEC is amended to read as follows :~~

~~**Section 210.8(B)(3):** Kitchens: Exception: Receptacle outlets utilized solely for refrigeration equipment.~~

~~Article 210, Section 210.12(B) of the 2002 NEC is amended to read as follows:~~

~~**Section 210.12(B): Dwelling Unit Bedrooms.** All branch circuits that supply 125 volt, single phase, 15 and 20 ampere outlets installed in dwelling unit bedrooms shall be protected by an arc fault circuit interrupter listed to provide protection of the entire branch circuit.~~

~~**EXCEPTION:** Smoke detectors may not be installed on an arc-fault protected circuit.~~

Article 230, Section 230-43 of the National Electrical Code 2002-2008 is amended to read as follows:

Section 230-43 Wiring Methods for 600 Volts, Nominal or Less: Service entrance conductors shall be installed in accordance with the applicable requirements of this Code covering the type of wiring method used and limited to the following methods: (1) rigid metal conduit; (2) intermediate metal conduit; (3) electrical metallic tubing; (4) wireways; and (5) auxiliary gutters. Rigid metal conduit and intermediate metal conduit are the only wiring methods permitted from the weather-head to the meter socket.

EXCEPTION: Rigid non-metallic conduit shall be permitted for underground service installations and service raceways beyond the meter enclosure or current transformer enclosure, provided all portions of raceway are constructed with rigid non-metallic conduit.

Approved cable tray systems shall be permitted to support cables approved for use as service-entrance conductors. See Article 318.

Article 310, Section 310.5 of the National Electrical Code 2002-2008 is amended to read as follows:

Section 310.5: Minimum Size of Conductors. Table 310-5 Voltage rating of conductors up to 2,000 volts shall be (minimum) #14 copper (AWG) – and #2 aluminum (AWG).

Article 320, Section 320.108 of the National Electrical Code ~~2002~~ 2008 is amended to read as follows:

Section 320.108: Type AC cable shall contain an individual equipment grounding conductor in addition to the internal bonding strip within the Armored Cable (AC cable).

Article 330, Section 330.108 of the National Electrical Code ~~2002~~ 2008 is amended to read as follows:

Section 330.108 Grounding: Type MC cable shall contain an individual grounding conductor to provide an adequate path for equipment grounding as provided by Article 250.

Article 348, Section 348.60 of the National Electrical Code ~~2002~~ 2008 is amended to read as follows:

Section 348.60: Flexible metal conduit is not approved as a grounding means.

Article 350.6, Section 350.60 of the National Electrical Code ~~2002~~ 2008 is amended to read as follows:

Section 350.60 Grounding: Liquidtight flexible metal conduit is not approved as a grounding means.

Article 386, Section 386.60 of the National Electrical Code ~~2002~~ 2008 added and reads as follows:

Section 386.60 Grounding: Metal surface raceways are not approved as a grounding means.

Secs. 5-54 - 5-60. Reserved.