



Legislative Briefs

from the Legislative Reference Bureau



Legislative Brief 08-2

March 2008

STATE ELECTRICAL CODE AND ELECTRICIAN LICENSING

2007 Wisconsin Act 63, passed by the legislature and signed by Governor Jim Doyle on March 5, 2008, requires the Department of Commerce to establish a state electrical wiring code, generally requires electricians to be licensed and registered, and provides for electrical construction inspections of all buildings, including private homes.

Act 63 was introduced as 2007 Senate Bill 167 on April 26, 2007, by Senators Decker, Cogg, Wirch, and 14 others, and cosponsored by Representatives A. Ott, Tauchen, Hahn, and 32 others. It passed the senate unanimously on February 19, 2008, and passed the assembly on February 26 by a vote of 83 to 14. The act generally takes effect on March 19, 2008, but the requirements relating to the licensing and registration of electricians take effect on April 1, 2013. The act also repeals the law authorizing Milwaukee County to license and regulate heating and air conditioning contractors.

THE DANGERS OF FAULTY WIRING

Wiring faults account for about one-third of all electrical fires, often due to arcing and sparking caused by overloaded circuits, poor connections, broken conductors, and worn or damaged insulation. The Federal Consumer Product Safety Commission (CPSC) estimates that hazardous home wiring is associated with more than 40,000 home fires each year, which claim over 350 lives and injure 1,400 persons. In addition, the CPSC estimates that 20 to 30 electrocution deaths result annually from household wiring accidents. The General Electric Corporation, a leading manufacturer of components used in electrical construction, estimates that these fires account for \$500 million in property damage each year.

Proper maintenance of aging wiring systems is important, as parts can wear out and increase the risk of problems. But the recom-

mended approach for effectively preventing most accidental electrical fires and electrocutions is to have all electrical wiring installed by trained and certified electrical contractors, and for their installation work to be carefully checked by official building inspectors.

2007 WISCONSIN ACT 63

Act 63 (www.legis.wi.gov/2007/data/acts/07Act63.pdf) aims to improve the electrical safety of the state's buildings through establishing a statewide electrical code, licensing and regulating electricians and electrical contractors, and enhancing inspections of newly constructed or renovated buildings. The law will be administered by the Department of Commerce (Commerce), whose Safety and Buildings Division may be contacted at (608) 266-3151 or <http://commerce.wi.gov/sb/>.

Statewide Electrical Wiring Code. Act 63 directs Commerce to promulgate a state code that establishes standards for installing, repairing, and maintaining electrical wiring. The code will apply to all types of buildings, including private residences. Prior to Act 63, Commerce had been required to establish rules for electric construction only in public buildings and places of employment, and in places where farming was conducted. Drafts of administrative rules establishing a state wiring code are to be submitted to the Legislative Council staff by March 1, 2009.

Municipalities were previously authorized to adopt local electrical codes applying only to certain types of construction. Act 63 provides that they may continue to have local codes that are at least as strict as the state code, but they must apply to all types of buildings.

Act 63 exempts from the state electrical code all equipment and wiring used by public utilities, electrical cooperatives, or operators of

wholesale merchant plants for the generation of electricity to their customers or members.

Regulation of Electricians and Contractors. Previously, Wisconsin law did not specifically require that a person be licensed or certified by either the state or a local government to work as an electrician or electrical contractor. Commerce administered a voluntary certification program for master electricians, electrical contractors, and journeymen and beginning electricians. In contrast, 34 other states and the District of Columbia require some form of mandatory licensing, registration, or certification for electricians, according to the National Electrical Contractors Association.

The voluntary state program included a uniform examination for master electricians. The program required that only master electricians and persons who employ at least one master electrician could be certified as electrical contractors. The program also established requirements for the certification of journeymen and beginning electricians. Municipalities could, by ordinance, provide for licensing of an electrical contractor if the contractor had at least one master electrician as an employee.

Act 63 mandates that no person may work as an electrician or electrical contractor unless the person is licensed by or registered with Commerce. Commerce will promulgate rules for the licensing of electrical contractors and the examination and licensing of master and journeymen electricians. Beginning electricians must register, but will not need to pass an examination in order to work and learn the trade under more experienced practitioners. The law requires that no person may do electrical work unless a master electrician is at all times responsible for the quality of the job. Municipalities will no longer be allowed to license electrical contractors, or register or license electricians.

Commerce will promulgate rules to:

- differentiate the scope of installation, repair, or maintenance that may be performed by electrical contractors and the different levels of electricians;

- establish standards for the supervision of beginning electricians; and
- establish criteria and procedures for the certification of electrical contractors.

Licensure as a nonresidential journeyman electrician will require either completion of an apprenticeship program of at least four years' duration that is approved by the U.S. Department of Labor and the Wisconsin Department of Workforce Development, or have at least 60 months' experience in electrical work and pass an examination administered by Commerce. A residential journeyman must have completed an approved apprenticeship program lasting at least three years or have at least 36 months of work experience and pass a state examination.

Persons exempted from the licensing and registration requirements include those who perform certain types of electrical work ("do-it-yourself") on their own homes or property; persons who work on energy utility facilities; those who perform electrical work on elevators, escalators, and alarm systems; and those who perform equipment installation that is not primarily electrical in nature.

Any person who violates the electrical codes or licensing rules is subject to a forfeiture to the state of not less than \$25 nor more than \$500 for each violation. Each day of violation constitutes a separate offense.

Inspection of Electrical Construction. Act 63 provides that all building construction, including public buildings, commercial properties, and residences, be inspected for compliance with state electric wiring standards by inspectors certified by Commerce. It will promulgate rules establishing the criteria to be used in all electrical inspections. Municipalities may continue to opt to be responsible for inspections in their jurisdictions, but Commerce must likewise continue to provide for implementing a process to ensure the performance of electrical inspections in municipalities that do not conduct inspections. The fiscal estimate prepared by Commerce to accompany SB-167 stated that the department anticipates contracting with private electrical inspectors to provide for such inspections.