

# A Brief NEC History

by Steve Garstang P.E.

The NEC (National Electrical Code) began development just a few years after Thomas Edison demonstrated the commercial feasibility of the incandescent light bulb in October of 1879. Up to this time, there was little wide spread use of electricity and little recognition of its dangers. The light bulb and rapid development electric motors changed this.

In a letter from Edison to The New York Board of Insurance Underwriters, dated May 6, 1881, Edison replies to a newspaper article written by the Underwriters. They requested information on the subject of the danger of fire from electric wires. Edison wrote: "I beg to say that the system of lighting of the Edison Electric Light Company is absolutely free from any possible danger from fire, even in connection with the most inflammable material" -- It didn't quite work out that way.

Because there were no electrical codes, and electrical installers were forced to make decisions based on limited experience, electrical fires became epidemic. In 1881 alone, one insurer reported 23 fires in 65 textile mills in New England.

By 1895 there were five electrical installation codes in use in the United States, each one different enough from the others to cause enormous confusion. There was obviously a critical need for a uniform electrical code.

In March of 1896 representatives from a number of organizations met at the New York City headquarters of the American Society of Mechanical Engineers. They recognized that the five existing codes should together be used as a basis for a single document suitable for installations throughout the country.

The representatives formed a committee to select the most suitable rules from all five of the outstanding codes. The results were sent to more than a thousand concerned individuals in the U.S. and Europe. The committee met again in May and June of 1897 and established an electrical code that was unanimously approved at the June meeting as the "National Code." Because it was so well written and widely applicable, it was recognized almost immediately by the National Board of Fire Underwriters. It was published by them as the "National Electrical Code of 1897" This was the beginning of our Code.

The committee that had established the National Code was savvy enough to realize that it did not have the depth to continue to administer the "Code" as its applications rapidly grew (the most recent edition of our "Code" has more than a thousand pages!). When the committee, met in March of 1911, they announced that their purpose had been accomplished, and at this point in time, the work of periodically revising the National Electrical Code was transferred to the Electrical Committee of the NFPA (National Fire Protection Association).

The National Fire Protection Association (NFPA) was established in 1896 to reduce fire and safety hazards. The NFPA has over two hundred Articles (Codes and Standards) and produces the National Fire Codes. These Codes cover all areas of fire safety. NFPA Articles vary from NFPA 10: "Standard for Portable Fire Extinguishers" to NFPA 1192: "Standard on Recreational Vehicles". Our National Electrical Code is Article 70.

This article was compliments of Steve Garstang P.E.

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