

Which Code Shall I Enforce?

by Dean K. Wilson, P.E.

***Question:* Working as a fire marshal in a medium-sized Midwestern community, I have a variety of different types and sizes of facilities in my jurisdiction. I have tried to take a very positive position with regard to code compliance. Now I am faced with the challenge of trying to understand which code I should enforce regarding fire alarm systems. Should I enforce the edition of the code referenced by the model building code? Or, should I enforce the latest version? And, can you help me understand the relationship between NFPA 70, *National Electrical Code*, and NFPA 72, *National Fire Alarm Code*?**

Answer: I can really think of two viable answers to your first question: a legal answer and a practical answer.

Legally, an Authority Having Jurisdiction (AHJ) always has the obligation to enforce the code specified by the legally adopted precedent code. If the legally-adopted building code references a particular edition of the *National Fire Alarm Code*, for example, then the AHJ must enforce that edition.

A problem arises when subsequent editions of the referenced code have included requirements that more accurately reflect current technology or other conditions. The AHJ must then make a judgment concerning which edition to enforce.

Let me offer a concrete example.

The National Fire Protection Association, through its standards making process, has just revised the *National Fire Alarm Code*. As I write this article, NFPA has sent the text of NFPA 72-2007 to the printing plant for publication. Typically, the new *Code* will reach the public in early- or mid-September.

In the 2002 edition, with relationship to a Digital Alarm Communication Transmitter used to transmit fire alarm, supervisory, or trouble signals from a protected premises to a central station, proprietary supervising station, or remote station, section 8.5.3.2.1.5 (6) specifies: “If long distance telephone service, including WATS, is used, the second telephone number shall be provided by a different long distance service provider if there are multiple providers.”

This requirement intends to help assure the continuity of operations should a long distance carrier experience a major switch failure. If the fire alarm equipment in a protected premises located in a city or town some distance away from the supervising station must dial a long distance telephone number, or a toll free (800) number, to reach the supervising station, the integrity of the communications pathway provided by the long distance carrier significantly impacts the integrity of the transmission of signals.

Failures have occurred a decade or so ago where an entire multi-state region lost the service of a particular long distance carrier for a period of several hours when a major telephone switch failed. When the code writers originally added this requirement to the *Code* in the 1993 edition, as a modification to requirements that appeared in the precedent standard, NFPA 71-1989, they did so in response to such rare, but major, failures of long distance service providers.

However, in the intervening years since those failures, current telephone technology has evolved to create a shared network that no longer requires each long distance service provider to maintain its own independent switch. This change has spread the potential for catastrophic failure

over many switches. While a failure could still occur, it would not as likely impair a significant geographic area, or persist for as long a period of time. In light of this change in technology, the code writers have responded by deleting the requirement from the 2007 edition of the *National Fire Alarm Code*.

In a jurisdiction where an AHJ has rigorously enforced this requirement, he or she must now decide which requirement to enforce: the legally adopted requirement, or the more practical and up-to-date requirement that recognizes the state of current technology.

I personally believe that an AHJ who makes it a point to keep informed regarding changes to each code he or she must enforce, will always do well to choose to enforce the most recent requirements. When the AHJ decides to enforce the most recent edition of a Code, he or she should document that decision, explaining the basis for the decision, so that any future inquiry will have the opportunity to fully understand the decision making process the AHJ employed.

To answer your second question, NFPA 72, *National Fire Alarm Code*, actually references the appropriate requirements of NFPA 70, *National Electrical Code*. The *National Fire Alarm Code* expects the installation of the wiring and components of a fire alarm system to meet the requirements set forth in the *National Electrical Code*. These two documents work very harmoniously to form a cohesive set of requirements for the installation of a fire alarm system.

As an AHJ, you must become very familiar with both documents. This will allow you to more effectively evaluate the fire alarm system installations you inspect in your jurisdiction.

Success in the field of fire protection depends on education and training. Those who avail themselves of the opportunity to learn will always experience the benefits of improved competence.

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