NFPA 72 2013 Brings Big Changes to Central Station Communications by Ken Gentile

One of the fire alarm industry’s more significant changes in recent years has been the updates to the [NFPA 72 2013](http://www.nfpa.org/codes-and-standards/document-information-pages?mode=code&code=72) code for central station communications. It is vital that fire alarm dealers understand the evolution of these requirements, which will have a significant impact on the entire industry in the coming years.

**Changes in the Technology**

The way fire panels communicate to a central station is undergoing significant changes in the future. For more than 40 years, plain old telephone systems (POTS) had been used for fire alarm communications. Today, analog POTS are becoming an obsolete technology and eventually will be phased out. Even the FCC says POTS is not sustainable, and AT&T agrees the technology is past its prime.

The transition away from POTS technology to alternative communication methods impacts the use of the traditional digital alarm communicator transmitters (DACTs) that are widely used in most fire panels on the market today. Fire alarm dealers and installers should be aware of this shift, which will begin to impact the type of technology that can be used in new installations. It will also have an impact on existing fire alarm panel installations that currently communicate over POTS and will need to be retrofitted to an alternative form of communications.

**What Code do I have to comply with?**

If you have decided to move away from POTS lines and have been investigating using alternative communication for your Fire Alarm system, the best place to start is to check with your local Authority Having Jurisdiction (AHJ) to understand the local code requirements. Different jurisdictions commonly adopt various versions of NFPA 72 code. Understanding your local code requirements will help you select the correct technology to meet your local AHJ requirements and help you speed up the inspection process for your fire installation. It will also help you better meet your customer’s needs while helping them save on costs by providing them with the best technology for their installations.  Here is a closer look at the NFPA 72 codes that govern central station communication for fire alarm systems.

**NFPA 72 version 2010 Basics**

Chapter 26 of the NFPA 72 version 2010 standard helps define some of the communication methods for central station reporting that are acceptable. This is an important part of the POTS conversation because it specifies many of the alternative communication methods that can be used and are rapidly replacing POTS lines. It also clearly states that there is nothing in Chapter 26 of the 2010 standard that prohibits the use of alternative communications technology. Here are some of the highlights of the standard.

* ​NFPA 72 does allow for the use of alternate communications technology, including cellular or IP, for central station reporting.
* The code requires that any alternate communication technology must provide a level of reliability and supervision consistent with the requirements listed in Chapter 10.
* When using a single communication technology, the central station must annunciate a trouble within 5 minutes after loss of communication
* When using multiple communication technologies, the central station must annunciate a trouble within 24 hours after a loss of communication.

This is good news. NFPA 72 specifically allows for IP and/or cellular communication with central stations, and also ensures that our modern fire alarm systems still have the same level of reliability and supervision POTS has provided for four decades.

**So what has changed for 2013?**

The NFPA 72 code was updated in 2013 and impacts the use of POTS lines in a fire alarm installation, as well as the supervision requirements for single or multiple path technologies.

The 2013 version of NFPA 72 code includes some changes that will impact the primary and secondary POTS lines in an installation. If you have a primary POTS connection, and you’re under 2013 jurisdiction, you’re now required by the code to seek out alternative communication methods as a backup to the POTS Lines. This could be a one-way private radio alarm system, a two-way RF multiplex system or any transmission means that comply with NPFA 72 version 2013, such as IP and cellular. A secondary POTS line is not permitted for multi-path communications unless there is no cellular, IP or radio available in the area. In addition, you will find that some of the supervision requirements have been changed in version 2013 of the code. Here’s a summary of those changes.

* ​When using a single communication technology, the central station must annunciate a trouble within 60 minutes after loss of communication
* When using multiple communication technologies, the central station must annunciate a trouble within 6 hours after loss of communication.

[Ken Gentile](mailto:ken.gentile@Honeywell.com?subject=silent%20knight%20blog) is a Product Manager for Fire-Lite Alarms and Honeywell Power. Using his more than 15 years of marketing and engineering experience, Ken’s primary focus lies in the development of new products.

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