

APPA Code Advisory Task Force

EXECUTIVE SUMMARY OF REGULATORY ACTIVITY

Two documents frequently applied as model law are under revision by the National Fire Protection Association (NFPA). The scope of each document is highlighted in the boxes. Comments on proposals for each were prepared by Mike Anthony and Rich Davis. A total of eight comments on these two documents were submitted to NFPA's Quincy, Massachusetts offices on March 5, 2010. A summary of the key ideas underlying the actual text of the comments for each NFPA document follows. The actual comments submitted to NFPA are available at the Facebook Site: **APPA.ORG - Electrical Professionals in the Education Facilities Industry**

NFPA 730 - Guide on Premises Security.
This guide describes construction, protection, occupancy features, and practices intended to reduce security vulnerabilities to life and property. Chapter 8 (xxx) and Chapter 11 (Educational Facilities) should be of particular interest to the education facilities industry.

Two concepts were asserted in three comments on existing proposals for the 2011 edition of NFPA 730:

- 1. Exterior Lighting Safety Liability Limitation.** Damage claims against APPA members that are based on exterior lighting may arise for several reasons, including failure to provide adequate lighting, negligence in physical placement with respect to vehicular traffic, or by causing an electrical shock due to improper wiring. APPA

asserted that adopting agencies should not conclude that increased lighting correlates with decreased in crime without credible evidence. The cautious approach advocated by the CATF on behalf of APPA can deter baseless legal claims of third parties who are the victims of crime on campuses.

The environmental issues related to exterior lighting are highly nuanced given the competing requirements of dark sky needs, energy conservation, and campus safety goals. Exterior lighting safety includes two key components. The first is related to sight, such as the ability to see walking and driving surfaces, road signs, routes, destinations, obstacles, and subtleties like keyways and other security devices. The second is the perception that light levels affect crime rates, such that increasing exterior lighting reduces crime. There is no straight line between campus security and

exterior lighting, and the perception of additional lighting correlating with reduced crime should not be assumed as fact and incorporated in codes without credible supporting data. The degree to which exterior illumination can contribute to the needs of educational facilities, colleges and universities is contingent upon robust communication among designers, the representatives of local municipalities, serving utilities, and campus facilities and security managers.

2. **Town-Gown Exterior Lighting and Wiring Safety.** Many multi-building educational facilities and college and university campuses have their own power distribution systems that are nested within a municipal or local system. They can share a perimeter with one or more serving utilities. The current edition of NFPA 730 does not yet contain enough specifics for informed decision-making on electrical safety and control issues. Comments submitted were intended to add language that will help campus planners, campus safety officials and electrical engineers to understand the difference between prescriptive requirements of the National Electrical Code (NFPA 70) with regard to premises wiring, and the performance-based assertions of the National Electrical Safety Code (ANSI/IEEE C.2) that govern the installation practices of public or cooperative utilities.

Comments on NFPA 730 were prepared with input from several trade associations involved in campus safety issues.

NFPA 731 - Standard for the Installation of Electronic Premises Security Systems. This standard covers the application, location, installation, performance, testing, and maintenance of electronic premises security systems and their components.

Three themes were asserted in five comments on existing proposals for the 2011 edition of NFPA 731:

1. **Constantly Attended Location.** The specifics of the risk analysis required in this document should include consideration of whether or not signals are routed to a constantly attended location near the protected premises and whether the constantly attended location has a backup site. Stand alone buildings with

off-site third party management will interpret signaling differently than the same security professionals located on the protected premises at a 24/7/365 site. Many APPA.ORG institutions would like to scale risk according to the capabilities of local staff and be able to negotiate better rates with insurance companies if there is industry recognition of the risk reduction possibilities with a 24/7/365 campus safety staff.

- 2. Performance-Based inspection, testing & maintenance.** Language that now appears in NFPA 25 Section 4.6.1.1.1 (*Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*) was presented to this committee. APPA's comment presented to the committee a performance-based option that another NFPA technical committee discussed and approved. Current prescriptive testing requirements in NFPA 731 do not consider specific user preventive maintenance programs that may result in decreased failure rates and increased reliability. In order to credit decreased failure rates, a performance based option should also be included as an alternative to the prescriptive requirements currently contained in the standard. The prescriptive option is significantly different than the "alternative" methods permitted in Section 10.3. This comment also aligns with the NFPA's "Performance-Based Codes and Standards Primer" which recommends that performance based options be incorporated into existing NFPA documents.
- 3. Clarification of backup power terminology.** Presently, the terms "primary" and "secondary" are used to describe the power to signaling systems for this technology. Primary and secondary have very specific meanings to the users of NEC Article 240 and 450. These distinctions are important because the building raceway systems and switchgear must be partitioned separately. Partitioning of Article 700, 701 and 702 power system raceway and switchgear affects capital budgets. Design choices, influenced by capital budgets, will affect premises security.

Comments on NFPA 731 document were prepared with input from the University of Michigan Fire Alarm Shop, The Evergreen State College, UM Zone Maintenance, and the Door & Hardware Institute (DHI.ORG, Chantilly VA)

Summary

Managing large, complex, capital-intensive educational facility infrastructure assets with unique architectural and social identities is different from managing other asset classes. Differences in everything from department culture to annual facility use patterns mean that facility managers cannot implement the same safety approaches in all buildings. Approaches must be scaled and tailored to the occupancy type and informed by the interconnectedness and the specifics of a given facility. The comments submitted support this common theme.

This is the second stage of a typical 3-stage NFPA process. Because APPA has asserted its position in the 2nd of three stages, a greater likelihood exist that the committees will--at best--regard these comments as "new material" and hold them over as new proposals in the 2014 revisions.

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