What is the purpose of NFPA 70B?

The purpose of NFPA 70B, Recommended Practice for Electrical Equipment Maintenance, is to provide guidelines for creating an effective electrical preventive maintenance (EPM) program. NFPA 70B details what an effective EPM program consists of, why it is necessary, and how to develop a program that implements viable safety measures and maintenance methods. When properly implemented, an effective EPM program can help increase workplace safety; maintain or, in some cases, extend the life of equipment; and help to prevent losses in production which, in turn, result in lost revenue.

How does NFPA 70B work with other codes and standards?

NFPA 70B covers equipment maintenance and should be used in conjunction with NFPA 70®, National Electrical Code® (NEC®), and NFPA 70E®, Standard for Electrical Safety in the Workplace®. While each document covers a specific area, they must be used in unison to help provide the safest electrical system possible. NFPA 70B deals with electrical equipment maintenance, the NEC stipulates the installation rules necessary for a proper installation, and NFPA 70E addresses safe work practices needed to help ensure that the installation and maintenance are done safely. When the three are used in concert, and correctly, they provide for a complete electrical safety cycle. When one or more pieces are missing, it may leave the door open to catastrophic accidents—even death. Whether you are the contracted electrician doing the initial installation, a business owner implementing an electrical safety plan to keep your employees safe, or the plant electrician maintaining equipment, your role is critical for the continued safety of all personnel.

What does NFPA 70B include?

Chapters 4 through 6 explain what an EPM program is, how to create one, and why it makes financial sense to have one in place. Chapter 7 discusses personnel safety and Chapter 8 goes into the fundamentals of electrical equipment maintenance. Chapters 9 through 35 take a deeper dive, covering items such as power quality, testing methods, and maintenance for specific items such as switchgear, transformers, lighting, UPS systems, and many more. In addition, the Annexes contain a lot of valuable information, such as some instruction guidance, extensive maintenance guidelines, and an array of suggested inspection checklists, test sheets, and equipment survey forms.

Is NFPA 70B required?

NFPA 70B is currently a recommended practice, which means it contains provisions that are advised but not required. A recommended practice is similar in structure to a code or standard but contains nonmandatory language using the word “should” to indicate recommendations in the body of the text.

When will NFPA 70B become a standard?

At this time, NFPA 70B is being vetted through the NFPA standards process with the goal of the next edition becoming a standard that authorities having jurisdiction could mandate and enforce. For updates on when the next edition will be available, visit nfpa.org/70Bnext.

How do I use NFPA 70B with my electrical safety program based on NFPA 70E?

NFPA 70E, Standard for Electrical Safety in the Workplace, is just that—the standard that electrical safety plans should follow. It provides requirements to help employers meet OSHA requirements and ensure employee safety. Chapter 7
The Value of an Effective EPM Program

An EPM program can help identify impending issues and apply solutions well before they become major problems requiring more expensive, time-consuming solutions. To be effective, the program needs the support of top management, given that the maintenance of industrial electrical equipment is essentially a matter of business economics. Maintenance costs can be placed in either of two basic categories: preventive maintenance or breakdown repairs. The money spent on preventive maintenance will be reflected as less money required for breakdown repairs. An effective EPM program holds the sum of these two expenditures to a minimum.

As the interval of time between EPM inspections increases, the cost of the EPM diminishes and, in turn, the cost of breakdown repairs and replacement of failed equipment increases. By maintaining an inspection frequency that keeps the sum of the repair/replacement and EPM costs at a minimum, the lowest total annual expense can be achieved.