



## NFPA 70B: RECOMMENDED PRACTICE FOR ELECTRICAL EQUIPMENT MAINTENANCE

### 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?

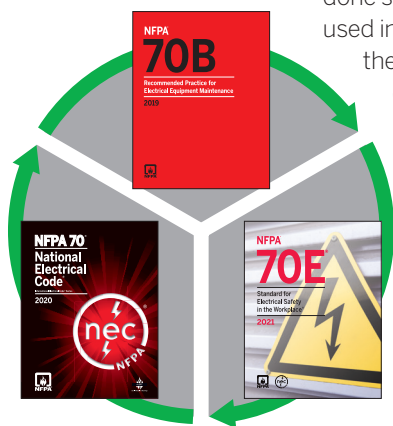
NFPA 70B is currently a recommended practice, which means it contains provisions that are advised but not required. A recommended practice is similar in structure to a code or standard but contains nonmandatory language using the word “should” to indicate recommendations in the body of the text.

### 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](http://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

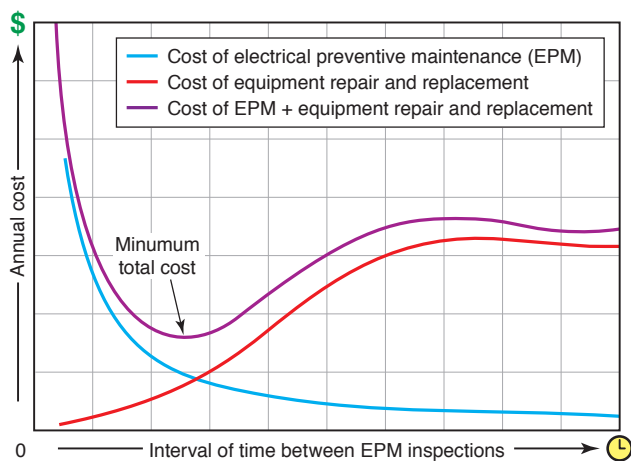




# NFPA 70B: RECOMMENDED PRACTICE FOR ELECTRICAL EQUIPMENT MAINTENANCE *CONTINUED*

## 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.

of NFPA 70B covers personnel safety. Section 7.1.3 states specifically that, "All maintenance personnel should confirm that the requirements of NFPA 70E are adhered to where performing electrical maintenance procedures." NFPA 70B provides the recommended practices for electrical equipment maintenance and NFPA 70E delivers the safety standards required to help keep personnel safe while doing so.

## LEARN MORE

 [nfpa.org/70B](https://www.nfpa.org/70B)

The NFPA 70B document information web page is the hub where you can get free access to the full text of NFPA 70B, sign up to receive email alerts, submit technical questions to NFPA staff, and check in on the status of the next edition, including the revision cycle schedule and posting and closing dates.

 [nfpa.org/onsite](https://www.nfpa.org/onsite)

NFPA offers on-site training for NFPA 70B that can be tailored to address the safety and educational requirements of your team. The training provides an in-depth overview of the primary principles required to design and implement an electrical equipment maintenance plan. In addition, you will receive a summary of the logical approaches you can apply to help develop a program that conforms to your unique specifications.

 [catalog.nfpa.org/70B](https://catalog.nfpa.org/70B)

Learn more about NFPA 70B and related products by visiting its page on our online catalog. Here you can access the NFPA 70B table of contents, purchase NFPA 70B in print or digital format, or explore what savings are available when purchasing an Electrical Toolkit that bundles NFPA 70B with NFPA 70E and the NEC.

