NFPA 70B: The Next Evolution

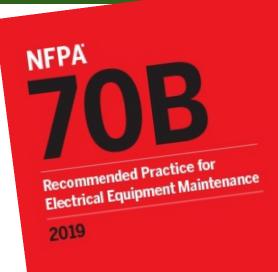
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Recommended Practice



• The first edition was 1975. (15 revisions since then)

- The current edition is 2019.
- The next edition will be 2023.





- Next edition will be a Standard.
- NFPA Correlating Committee asked the 70B
 Technical Committee to consider revising to a
 Standard





 Technical Committee held two meetings to discuss, Boston and Nashville.

Nashville meeting carried the vote





- Technical Committee voted to move directly to a Standard.
 - Adopted a modified schedule for next release.





 Current version is written more like a Guide than a Recommended Practice.

Explanatory text mixed in with normative text.





- NFPA Recognizes 4 distinct writing styles:
 - 1. Guide
 - 2. Recommended Practice
 - 3. Standard
 - 4. Code





1. Guide

- Uses advisory or informative language to establish a body of knowledge on a particular subject
- Contains multiple sentences per division and is permitted to be explanatory in nature





2. Recommended Practice

Uses nonmandatory language to establish recommendations

Contains a single, complete sentence per division.





2. Recommended Practice

...complete sentence with a practical, stand-alone recommendation that uses "should," "should not," "should be permitted to," or "should not be permitted to" ...





3. Standard

 Uses mandatory language, suitable for adoption by reference, to establish minimum requirements.

Contains a single, complete sentence per division.





3. Standard

...complete sentence with a practical, stand-alone recommendation that uses "should," "should not," "should be permitted to," or "should not be permitted to"...





4. Code

 Uses mandatory language, suitable for direct legal adoption, to establish minimum requirements

Contains a single, complete sentence per division.





4. Code

 ...complete sentence with an enforceable stand-alone requirement that uses "shall," "shall not," "shall be permitted to," or "shall not be permitted to"...





 Removes all informative text and follows the NFPA Manual of Style for a Standard





- Several year process

 Monthly and then bi-weekly
- 1st Public review/comment closed January '20.
- First draft report was October '20.

 2nd Public comment closed February '21.





 Technical Committee NITMAM* date is November 30, 2022

*NOTICE OF INTENT TO MAKE A MOTION





- Technical Committee NITMAM
 - Printed and published after this date
 - NFPA 70B will then be "Standard for Electrical Equipment Maintenance"
 - o 2023 Release





NFPA 70B: What Changed?

- Everything changed!
- Layout and format is all new
 - 707 Public Inputs (PI)
 - Address and vote on each one
 - Broken out into each task groups responsibility





NFPA 70B: What Changed?

- Chapters were deleted, moved, combined, and revised
- Some names of chapters changed
- Annexes were deleted, moved, and revised.





New Layout

• Chapters 1 − 25

 Annex A now becomes the vessel in which all informative content from the chapters now resides.





New Layout

Chapter Scope
Frequency of Maintenance
Periodic Maintenance Procedures
Visual Inspection (Table)





New Layout

Cleaning
Lubrication
Mechanical Servicing (Table)
Electrical Testing (Table)
Special





Old Layout for Reference

Chapter 6 Planning and Developing an Electrical Preventive Maintenance (EPM) Program

6.1 Introduction.

6.1.1 The purpose of an EPM program is to reduce hazard to life and property resulting from the failure or malfunction of electrical systems and equipment. This chapter explains the planning and development considerations that can be used to establish such a program.





Excerpt from Chapter 5

5.2 Electrical Maintenance Program (EMP).

5.2.1 General. The equipment owner shall implement and document an overall EMP that directs activity appropriate to the safety and operational risks.





- 1. Administration
- 2. Referenced Publications
- 3. Definitions
- 4. Personnel Safety
- **5. General Recommendations**

New

- 6. System Studies
- 7. General Test Methods
- 8. Hazardous Location Equipment
- 9. Maintenance Intervals
- **10. Power and Distribution Transformers**
- 11. Substations and Switchgear
- 12. Panels, Panelboards, Switchboards

New

13. Wiring Devices

- 14. Power Cables
- 15. Grounding
- **16. Overcurrent Protection Devices**
- 17. Ground-Fault Protection
- 18. Cable Tray
- 19. Electronic Equipment
- 20. Lighting
- 21. Portable Electric Tools & Equipment
- 22. UPS Systems
- 23. Motor Control Equipment
- 24. Rotation Equipment and Vibration
- 25. Alternative Energy Systems

ANNEX A

Revised

Opportunities

- Become an expert for your clients
 - Get into 70B and learn it
 - Learn the requirements for an EMP
- You don't have to know every test method for every piece of equipment





Opportunities

Don't sell individual testing methods!

 Provide your client with solutions to be compliant with 70B!





Opportunities

- Tie it into NFPA 70E!
 - 70E references 70B by name

 Required element of an electrical safety program





NFPA 70E 110.5 Electrical Safety Program

• 110.5 (C) Condition of Maintenance
The electrical safety program shall include elements that consider condition of maintenance of electrical equipment and systems.





Risk Assessment

130.4 Shock Risk Assessment

• (B)(2)...the electrical equipment operating condition and the condition of maintenance.





70E & 70B

 These two documents are meant to be intertwined and used together

 To have a successful safety program, you must perform maintenance!





70E & 70B

 The more you can get away from selling individual maintenance tests, the more successful you'll be with 70E and 70B

Sell 'Compliancy'





70E & 70B

- There are 6 steps to being compliant with 70E
- Three of those steps are...
 - Electrical safety program
 - Train employees
 - Perform electrical maintenance





Questions

Any questions?





Final Thought

Never Stop Learning!





Contact Information



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