

NFPA 70B Compliance Checklist

Electrical Maintenance Program (EMP) Requirements

Based on NFPA 70B-2026 Standard for Electrical Equipment Maintenance

How to Use This Checklist

This checklist covers the mandatory requirements of NFPA 70B-2026 organized by compliance domain. Use it to assess your current program, identify gaps, and prioritize remediation. Each item includes a checkbox for tracking completion and a space for notes.

Scoring: Check off each item your organization has fully implemented. Items left unchecked represent compliance gaps that should be addressed in priority order. A compliant program requires all items marked as "Required" to be completed.

Facility Name: _____

Date: _____

Assessed By: _____

Title: _____

1. Electrical Maintenance Program (EMP) Foundation

✓	Requirement	Priority	Status / Notes
☐	Formal, documented EMP has been established with defined scope, objectives, and applicable equipment categories	Required	
☐	EMP documents the organizational structure and assigns clear ownership (EMP Manager, responsible personnel)	Required	
☐	EMP includes measurable compliance goals and key performance indicators (KPIs)	Required	
☐	EMP is standardized across all facility locations with consistent procedures, testing methods, and acceptance criteria	Required	New in 2026
☐	EMP is reviewed and updated at least annually with documented review records	Required	
☐	EMP includes a process for incorporating lessons learned from equipment failures, near-misses, and maintenance findings	High	

■	All EMP documentation is stored in a centralized, retrievable system (not scattered across paper files, shared drives, or individual computers)	Required	
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2. Electrical Asset Inventory

✓	Requirement	Priority	Status / Notes
■	Complete inventory of all electrical equipment subject to the EMP (switchgear, transformers, panelboards, MCCs, disconnects, protective devices, cables, grounding systems)	Required	
■	Each asset has a unique identifier that is consistently used across all maintenance records	Required	
■	Inventory includes: equipment type, manufacturer, model, nameplate data, installation date, location, and criticality rating	Required	
■	Electrical system topology is documented (feeder relationships, upstream/downstream dependencies, single-line diagram alignment)	High	
■	Inventory is current — new installations, replacements, and decommissions are reflected within 30 days	Required	
■	Asset inventory is accessible to all maintenance personnel performing work under the EMP	Required	

3. Equipment Condition Assessment

✓	Requirement	Priority	Status / Notes
■	Every electrical asset has a current condition level assigned: Level 1 (Good), Level 2 (Fair), or Level 3 (Poor)	Required	
■	Condition assessment criteria are documented with specific inspection/testing results mapped to each level	Required	Strengthened in 2026
■	Condition levels are updated after every inspection and testing cycle — not just annually	Required	
■	Assessment criteria are consistent across all assessors and all facility locations	Required	New emphasis in 2026
■	Baseline condition assessments have been completed for all assets in the inventory	Required	
■	Condition data is used for trend analysis to identify deteriorating equipment before failure	High	New in 2026
■	Continuous monitoring data (IR cameras, hot-spot sensors, PQ analyzers) is integrated into the condition assessment process where installed	High	Recognized in 2026

4. Maintenance Scheduling and Procedures

✓	Requirement	Priority	Status / Notes
■	Maintenance intervals are determined by equipment condition level — not solely by calendar schedule	Required	
■	Documented maintenance procedures exist for each equipment type covering: visual inspection, testing, cleaning, lubrication, calibration, and functional testing	Required	
■	Condition Level 1 equipment follows standard maintenance intervals per the EMP	Required	
■	Condition Level 2 equipment follows shortened intervals (typically 50–75% of standard)	Required	
■	Condition Level 3 equipment receives immediate corrective action with maximum-frequency follow-up	Required	
■	Maintenance schedules automatically adjust when condition levels change	High	
■	Overdue maintenance items are flagged, tracked, and escalated per a documented process	Required	
■	All maintenance is performed by qualified persons with demonstrated competence in the specific equipment and procedures	Required	

5. Testing and Inspection

✓	Requirement	Priority	Status / Notes
■	Infrared thermographic surveys are performed on all applicable equipment per EMP schedule	Required	
■	Insulation resistance testing is performed on all applicable equipment (transformers, cables, motors, switchgear)	Required	
■	Contact/connection resistance testing is performed on bolted connections	Required	
■	Protective device testing (breakers, fuses, relays) is performed at required intervals with pass/fail criteria documented	Required	
■	Test results are recorded with date, personnel, equipment tested, method, and findings	Required	
■	Failed tests trigger documented corrective action with follow-up verification	Required	
■	Testing equipment is calibrated and calibration records are maintained	High	

6. System Studies

✓	Requirement	Priority	Status / Notes
■	Short-circuit study has been performed within the last five years	Required	Mandatory interval — 2026
■	Coordination study has been performed within the last five years	Required	Mandatory interval — 2026
■	Incident energy analysis (arc flash study) has been performed within the last five years	Required	Mandatory interval — 2026
■	Single-line diagrams are current and reflect the as-built electrical system	Required	
■	A documented process exists to trigger study updates when system changes occur (utility upgrades, load changes, protective device modifications, generation additions)	Required	New in 2026
■	Study dates and next-due dates are tracked in a centralized system with automated reminders	High	
■	Arc flash labels on equipment reflect the most recent incident energy analysis	Required	

7. Record-Keeping and Documentation

✓	Requirement	Priority	Status / Notes
■	Complete maintenance records exist for every asset: inspection dates, test results, condition assessments, corrective actions, and responsible personnel	Required	
■	Historical condition assessment records show how each asset's condition has changed over time	Required	
■	All records are time-stamped and include the identity of the person performing the work	Required	
■	Records are retained per organizational policy and are retrievable for audits, OSHA inspections, and insurance reviews	Required	
■	Inspection and testing data is used for trend analysis and resource prioritization	Required	New emphasis in 2026
■	Corrective action records include: deficiency identified, action taken, date completed, and verification of effectiveness	Required	
■	Program review records document annual EMP evaluations, findings, and updates made	Required	

8. Qualified Personnel and Training

✓	Requirement	Priority	Status / Notes
■	All personnel performing electrical maintenance are qualified per NFPA 70B and NFPA 70E requirements	Required	
■	Training records are maintained for all maintenance personnel including: courses completed, dates, and certifications	Required	
■	Personnel qualifications are verified before assignment to specific equipment or procedures	Required	
■	NFPA 70E electrical safety training is current for all personnel performing energized or de-energized electrical work	Required	
■	Arc flash awareness training has been completed by all personnel who may encounter arc flash hazards	Required	
■	Refresher training is scheduled and documented at required intervals	High	

9. NFPA 70E Integration and Condition of Maintenance

✓	Requirement	Priority	Status / Notes
■	The organization can demonstrate a documented NFPA 70B-compliant EMP to support “condition of maintenance” claims under NFPA 70E	Required	Clarified in 2026
■	Condition assessment changes in the 70B program trigger review of arc flash risk assessments under 70E	High	
■	Arc flash labels, PPE requirements, and approach boundaries are updated when equipment condition or system configuration changes	Required	
■	Energized work permits reference current equipment condition level and maintenance status	High	
■	A single integrated system (or documented integration process) connects 70B maintenance data with 70E safety data	High	

10. Compliance Summary

Domain	Total Items	Completed	Gaps	Priority Actions
1. EMP Foundation	7			
2. Asset Inventory	6			
3. Condition Assessment	7			
4. Maintenance Scheduling	8			

5. Testing and Inspection	7			
6. System Studies	7			
7. Record-Keeping	7			
8. Qualified Personnel	6			
9. 70E Integration	5			
TOTAL	60			

Need Help Closing Your Gaps?

REALTIMEais is The Electrical Intelligence System™ — the only platform purpose-built for NFPA 70B compliance. From asset inventory to condition assessment to automated maintenance scheduling to audit-ready reporting — everything on this checklist, managed in one system.

Request a Free NFPA 70B Compliance Gap Assessment

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