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 - 3.1 Testing Organization
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- 4.0 Division of Responsibility
 - 4.1 The Owner's Representative
 - 4.2 The Testing Organization
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 - 5.1 Safety and Precaution
 - 5.2 Suitability of Test Equipment
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Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems



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PREFACE

The purpose of these specifications is to assure that all tested electrical equipment and systems supplied by either contractor or owner are operational and within applicable standards and manufacturer's tolerances and that equipment and systems are installed in accordance with design specifications.

The need for acceptance testing of electrical power systems is very clear to those with extensive startup and/or operating experience. Shipping and installation damage, field and factory wiring errors, manufacturing defects, and systems and components not in accordance with drawings and specifications are some of the many problems that can be detected by appropriate testing. When these defects are found before startup they can be corrected under warranty and without safety hazards, possible equipment damage, and of loss of production that could occur after startup. In addition, test results obtained during acceptance testing are invaluable as base reference data for the periodic testing that is an essential element of an effective maintenance program.

It is the intent of this document to list a majority of the field tests available for assessing the suitability for service and reliability of the power distribution system. Certain tests are assigned an "optional" classification. The following considerations are used in determining the use of the "optional" classification:

1. Does another listed test provide similar information?
2. How does the cost of the test compare to the cost of other tests providing similar information?
3. How commonplace is the test procedure? Is it new technology?

While acknowledging the above, it is still necessary to make an informed judgment for each particular system regarding how extensive a procedure is justified. The approach taken in these specifications is to present a comprehensive series of tests that is applicable to most utility, industrial, commercial, and government facilities. The guidance of an experienced testing professional should be sought when making decisions such as how extensive testing should be. In smaller systems, some of the tests may be deleted. In other cases, a number of the tests indicated as optional should be performed.

As a further note, it is important to follow the recommendations contained in the manufacturer's instruction manuals. Many of the details of a complete and effective maintenance testing procedure can only be obtained from that source.

The Association encourages comment from users of this document. Please contact the NETA office or your local NETA member firm.

Alan D. Peterson, Chair
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InterNational Electrical Testing Association



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1. GENERAL SCOPE

1. These specifications cover the suggested field tests and inspections that are available to assess the suitability for initial energization of electrical power distribution equipment and systems.
2. The purpose of these specifications is to assure that tested electrical equipment and systems are operational and within applicable standards and manufacturer's tolerances and that the equipment and systems are installed in accordance with design specifications.
3. The work specified in these specifications may involve hazardous voltages, materials, operations, and equipment. These specifications do not purport to address all of the safety problems associated with their use. It is the responsibility of the user to review all applicable regulatory limitations prior to the use of these specifications

