

Your Reliable Guide for Power Solutions

To fulfill our commitment to be the leading supplier in the power generation industry, the Total Energy Systems, LLC. team ensures they are always up-to-date with the current power industry standards as well as industry trends. As a service, our **Information Sheets** are circulated on a regular basis to existing and potential power customers to maintain their awareness of changes and developments in standards, codes and technology within the power industry.

NETA Certification for Generator System Service Personnel

1.0 Introduction

Frequently generator customers and bid specifications are asking for NETA certified companies and/or technicians to conduct tests of electrical power equipment, particularly those relating to generator sets and their associated systems. We felt it would be timely to give an overview of this organization so you will be better informed, should such an occasion arise in the future

This information sheets discusses NETA certification and details the standards NETA is laying down and how they apply to generator set system installations and why NETA certification is being requested and specified.

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InterNational Electrical
Testing Association

Setting the Standard

Setting the standard for generator test and installation



2.0 Overview od NETA:

NETA, headquartered in Portage, MI, is an organization dedicated to serving the electrical testing industry. In light of the ever-increasing importance of reliable electrical power, especially for standby or emergency generator sets that have to be available in the case of any utility brownouts, inconsistent utility supply, or failure. In particular, data centers and vital services such as hospitals, or buildings where human life can be at risk, etc., have to count on back-up power supply or face potentially disastrous outcomes, with possible loss of life and/or major financial/revenue loss

NETA is an accredited developer of standards for the American National Standards Institute (ANSI) and defines the standards by which electrical equipment is deemed safe and reliable. NETA certified technicians can conduct tests to ensure this equipment meets the association's stringent specifications. NETA is the leading source of specifications, procedures, testing, and requirements not only for the commissioning of new equipment, but also for testing the reliability and performance of existing equipment.

NETA's mission is to serve the electrical testing industry in many ways:

- Establishing standards
- Publishing specifications
- Accrediting independent, third-party testing companies
- Certifying test technicians
- Promoting professional services of its members

3.0 NETA Promotes Electrical Maintenance and Safety:

NETA hosts Powertest – its annual Electrical Maintenance and Safety Conference, and publishes the NETAWorld technical journal, in addition to collecting and disseminating valuable information and data to the electrical industry, while educating the public and end users about the merits of electrical acceptance and maintenance testing

A NETA Accredited Company (NAC) will best support the interest of the owner, with the objectivity and competency of the testing firm, which is as important as that of the individual technician. The NAC will assure the customer that:

- The certified technician who performs the work has a broad-based knowledge and is trained to inspect, test, maintain, and calibrate all types of electrical equipment in all types of industries
- The technician has fulfilled the stringent educational and experience requirements
- A registered Professional Engineer will review all the engineering reports
- All tests will be conducted objectively in accordance with NETA specifications, using calibrated instruments traceable to the National Institute of Science and Technology (NIST)

4.0 NETA Accreditation of a Company:

NETA accredits the company as well as the individual technician. This assures the end-user of both the member company's qualifications as well as the technician's competence.

NETA's bylaws ensure that its members meet the stringent criteria and will provide a full range of testing services. The full-service, third-party, independent testing company will conduct uniform testing standards, maintain calibration accuracy program and has a Professional Engineer review all short-circuit studies, overcurrent coordination studies and other engineering reports. Continuing Technical Development is required by NETA for all Certified Electrical Testing Technicians.

5.0 ANSI/NETA Automatic Transfer Switches:

NETA acceptance tests determine that the electrical equipment has been selected in accordance with the engineer's requirements, installed in accordance with all applicable codes and installation standards, and performs in accordance with their design and setting parameters. Also it complies with regulatory and safety requirements


6.0 ANSI/NETA Maintenance:

Tests determine whether or not the electrical equipment is suitable for safe and continued service. With service-aged equipment, wide variations are commonplace in determining the criteria for exactly what is to be tested, at what intervals, and to what extent. Ambient, duty cycle and load conditions along with downtime availability and maintenance budgets can play into plans for a maintenance schedule. The ANSI/NETA 'Standards for Maintenance Testing Specifications for Electrical Power Distribution Equipment and System' publication lists the majority of field tests available so as to assess the suitability of continued service and reliability of the power distribution system.

7.0 ANSI/NETA ETT:

The Standard for Electrical Test Technicians was developed to ensure that those individuals performing electrical tests are competent not only to perform the tests but also able to evaluate the results and make a competent judgment on the equipment's condition. The Standard sets four levels of expertise from Entry Level to Senior Technician. It establishes knowledge and skills for each level and the testing requirements necessary to attain each certification.

Further information and contact details for NETA can be obtained at: www.netaworld.org

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