Site acceptance testing and power system studies protect your new capital equipment investment

Protecting your capital investment

On a new construction project, or modification to an existing electrical system, the verification that a system is performing in accordance with the design professional's plans and specifications is one of the most important functions performed. The best equipment, if not tested properly or protective device settings not properly configured, could fail to protect your capital investment and provide system continuity in accordance with the design. Proper verification services include performing power system studies (short-circuit, coordination and arc flash), as well as, field services (site acceptance testing) of the electrical distribution system prior to energization.

Professionally-independent testing agency

Eaton's engineering services operates professionally independent of Eaton's product manufacturing plants, thus providing an unbiased evaluation of your equipment and meets ANSI/NETA Acceptance Testing Specifications testing organization qualification criteria.

Done efficiently

Provides a central point of contact for the design professional, installing contractor and end-user in resolving equipment operation and installation challenges. This reduces the inefficiencies and costs of having both a 3rd party testing agency and requiring the manufacturer to oversee testing. It eliminates 3rd party testing agency report delays that often must flow through several contractual layers.

Standards and guidelines

Manufacturer site acceptance testing guidelines are created specifically for the equipment provided and address testing of new technology (arc quenching devices, arc flash mitigation, arc resistant switchgear, communications, etc.). ANSI/NETA Acceptance Testing Specifications are also often utilized for electrical testing but defer to manufacturer's published data and procedures. Eaton's engineering services utilizes the Electrical Power Testing Certification Program from the National Institute for Certification in Engineering Technologies (NICET), to certify field personnel in testing electrical power distribution equipment per ANSI/NETA standards.

Comprehensive power system studies

Not all power system studies (short-circuit, coordination and arc flash) are equal; an inaccurate (not updated to as installed conditions) study unnecessarily endangers your employees and equipment. Making the right choice of who performs the necessary power systems studies is critical to confirm short-circuit interrupting ratings, proper selective coordination and calculated incident energy levels exposed to the electrical worker. Eaton's power system engineers perform over 3,000 studies a year, with one of the largest and most experienced teams in the industry.

Peace of mind for the future

Proper site acceptance testing not only ascertains the proper functioning of new/upgraded equipment, once completed, it provides baseline data for designing predictive and preventive maintenance programs. Eaton stores all test data in a shared database allowing comprehensive trending data from multiple equipment installations and is used for future maintenance.

Manufacturer knows best, and provides more

Electrical distribution equipment is getting more complex to provide end users greater system continuity and uptime, protection of capital investment and safety features to protect their employees from electrical hazards. Because of this added complexity, the manufacturer is best qualified to determine that the equipment is operating as designed, installed and configured for optimal protection and system continuity. Having Eaton provide and test your electrical equipment, enables the design professional and installing contractor a central point for resolving issues related to proper equipment operation and installation.

In addition, Eaton extends the standard factory warranty coverage on Eaton manufactured equipment when site acceptance testing is performed by Eaton and also offers optional 3, 4 and 5 year extended warranty service agreements.
Working with Eaton

Eaton’s engineering services has been regularly engaged in the testing of electrical equipment devices, installations and systems since 1998. In addition to NICET certification, Eaton field personnel receive hands-on training, conducted by Eaton and select outside vendors, in our manufacturing and Experience Centers where field personnel obtain a clear understanding of the entire equipment construction and assembly process.

Benefits of Eaton’s site acceptance testing

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<tr>
<th>Additional warranty coverage</th>
<th>Standard factory warranty coverage is extended by 12 months on Eaton-manufactured equipment when site acceptance testing is performed by Eaton</th>
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<tbody>
<tr>
<td>Comprehensive standardized test procedures</td>
<td>Meets or exceed industry standards, providing an accurate and impartial assessment of its suitability and reliability</td>
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<tr>
<td>ANSI/NETA ATS compliance</td>
<td>As a professionally independent division of Eaton, our service team is qualified to test to ANSI/NETA site acceptance testing specifications</td>
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<tr>
<td>National Institute for Certification in Engineering Technologies (NICET) certified</td>
<td>This program provides an independent verification of the capabilities, knowledge and experience of our field personnel for electrical testing per IEEE, NEMA, NFPA and ANSI/NETA standards</td>
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<td>Highly trained and experienced field personnel and power system engineers</td>
<td>Trained by both Eaton and other vendors, including safety training related to arc flash and OSHA requirements. Active participation in technical societies such as IEEE and collaboration with utilities/industries</td>
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<td>Direct access to factory and engineering personnel</td>
<td>Provides quick resolution to issues related to improper equipment operation and installation</td>
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<td>International Standards Organization (ISO) equipment calibration program and use of the latest technologically advanced field test equipment and diagnostic software</td>
<td>Assurance that your site acceptance testing is done efficiently, comprehensively and accurately</td>
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<tr>
<td>One of the largest and most experienced teams in the industry</td>
<td>We’re there when you need us; over 1500 trained field personnel in North America and over 140 power system engineers</td>
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About Eaton’s engineering services

Eaton’s engineering services team operates professionally-independent of Eaton’s product manufacturing plants offering a comprehensive portfolio of services and solutions tailored for every stage of a power system’s life cycle. Our services integrate and optimize the elements of a power system to make sure it’s aligned with operational goals. Whether you’re a utility, industrial manufacturer, data center, hospital, government complex or in another market, we help keep your power system safe, cyber secure, efficient and reliable.

- Factory warranty coverage provided in accordance with Eaton Selling Policy 25-000
- Excludes the following products (covered under separate, factory-supported warranty programs):
  - Low-Voltage Drives. Coverage as detailed in Drives Sales Bulletin TD040003EN
  - E-House enclosures and sourced non-Eaton transformers. Extended warranties can be provided for a fee
  - All Power Quality Products: e.g. Uninterruptible Power Supplies (UPS’s), Surge Protection Devices, Power Distribution Units (PDUs), Power Factor Correction, UPS batteries, etc.
  - Excludes Power Monitoring Software: e.g. Intelligent Power Manager (IPM), Visual Power Manager (VPM), Eaton Foreseer®
  - Eaton Pederson Power electro centers

Contact your local Eaton representative or visit Eaton.com/services for information on Eaton’s engineering services.

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