

The Electrical Power Systems Specialists

PROVIDING COAST-TO-COAST
COVERAGE



Managing the **life cycle** of your electrical distribution system

■ **DESIGN & START-UP**

During this phase, you need the confidence that your new equipment is installed properly and will function as designed.

■ **OPERATIONS**


You need assurance that your system will reliably and safely function to ensure your operation remains productive and profitable.

■ **MODERNIZATION OR DECOMMISSIONING**

At the end of the life cycle, your equipment will reach a milestone where it requires modernization or decommissioning.

The decisions you make today to manage this life cycle will determine the risks you assume in terms of system reliability, safety, and code compliance. While the impact of these risks varies by industry, nearly every business is critically dependent on the reliability of its power system.





There is a life cycle for
everything in business
and your electrical
distribution system is
no exception

Acceptance Testing, Commissioning & Start-up

DESIGN & START-UP

You need to be confident that new electrical equipment and systems are installed and operational per design specifications, and comply with applicable codes, standards, and manufacturer's tolerances.

Engineering Services

DESIGN & START-UP ■ OPERATIONS

MET offers a complete range of engineering services to safeguard people and equipment, helping you meet NFPA 70B recommendations.

■ Short circuit/coordination studies

An updated short-circuit/coordination study is one of the most essential engineering studies you should complete on your electrical distribution system. We can recommend the safest, most economical devices and settings for your facility.

■ Updating system drawings

Building owners and operations managers should keep drawings updated and prominently displayed at all switchgear locations. Updated system drawings reduce downtime, avoid costly mistakes, and improve safety and lock-out/tag-out procedures.

■ Load flow/other engineering studies

A poorly performing system increases operating costs, while putting people and systems at risk. We can perform load flow studies to improve system efficiency and performance, and reduce the cost of power. Types of studies include:

- Reliability
- Stability Study
- Grounding
- Motor Starting
- Switching/Transient
- Harmonic Analysis
- Cable/Ampacity

■ Arc flash hazard studies

An electrical arc flash results in an explosive release of fire, energy and debris. These events typically result in serious injuries or death. As a result, NFPA 70E, OSHA guidelines, and the National Electrical Code direct Facility Owners/Managers to perform an arc flash hazard analysis prior to allowing anyone to work on or near energized equipment. In addition to performing these studies, MET can also provide the required hazard labels and personnel training. We also offer arc mitigation solutions to protect your people and equipment.

Power Quality Solutions

DESIGN & START-UP ■ OPERATIONS

- Unexplained computer shutdowns
- Overheating of motors or other electrical equipment
- Nuisance tripping of protective devices (breakers, switches)
- Static or buzzing on the telephone

Symptoms of power quality problems like these can be traced and fixed. Poor quality of electrical power from the utility increases the users' costs, threatens safety by introducing fire hazards, plus reduces equipment performance and life. The growing number of microprocessor-based devices (computers, printers, copiers, monitors) are often the major source of power quality problems—and often the main victims of these problems.

MET's experience in diagnosing power quality problems and prescribing solutions, along with its investment in leading edge metering technologies and software, makes us a leader in meeting customers' power quality needs.



Reliability Testing and Maintenance

OPERATIONS

A well-designed maintenance program improves reliability. You experience increased equipment, uptime, improved safety, reduced operating/replacement costs, and avoid unexpected failures. We can structure a maintenance program to help you satisfy the requirements of the National Fire Protection Association (NFPA), National Electrical Code (NEC), local county/city Building Codes, insurance company requirements, and manufacturer's recommendations. We perform both Predictive and Preventive maintenance testing, to enhance the overall safety and reliability of your power system.

Customized Training Programs

OPERATIONS

OSHA data shows most electrical injuries and equipment damage occur due to human error. MET provides customized training programs so you won't become one of the statistics. Training offered includes:

- OSHA Part 29CFR1910.331-335/NFPA 70E Safety Training (OSHA -10 or OSHA-30)
- OSHA Part 29CFR 1910.269 Power Generation Station Worker Training
- Arc Flash Hazard Training
- Equipment Switching, tailored to your site
- Protective Equipment Selection and Use

Life Extension and Overhaul Services

MODERNIZATION/DECOMMISSIONING

Through MET's expertise, we can determine the most cost-effective approach for your equipment: overhaul, upgrade, modernize, or replace. These services can be performed for all key components of the electrical system.

Arc Flash Prevention & Mitigation

MET delivers arc flash hazard solutions. We can provide arc hazard assessments, arc detection, prevention and mitigation systems. Our 24/7 monitoring of electrical discharge systems provides arc detection. We provide and install arc mitigation systems to maximize personnel safety and minimize material damage.

Other MET Services

DESIGN & START-UP ■ OPERATIONS

- UPS/Battery Testing and Maintenance
- Stand By/Emergency Generator Services (load bank testing)
- Electrical Power System Vulnerability Assessments
- Forensic or Fault Investigation Capabilities
- Electrical Protective Equipment (EPE) Testing
- Remote Monitoring





Are you losing **profits** to the rising costs
of keeping the **power** on?

Are your people **safe** from
electrical hazards?

Does your electrical system comply with
current **codes** and **standards**?

For almost 50 years, MET Electrical Testing has offered our clients critical power system solutions. Our skilled professionals deliver customized services to fit your needs.

We are so serious about safety that we pioneered the integrity of third party testing and the necessity of standards and certifications that ensure the safety of your facility and your employees. In fact, MET was instrumental in founding the InterNational Electrical Testing Association (NETA) in 1972. Today, NETA is the standards developing organization for the American National Standards Institute (ANSI).

We have grown significantly since our inception, enabling us to serve our customers Nationwide. MET is also one of the few NETA companies that provide expertise in the U.S. and overseas. MET's clients include major U.S. corporations, utilities, healthcare facilities, institutions and government agencies.



Engineering Services Agreement

Managing the Electric Distribution System Life Cycle from the start

It's better to prevent an incident than try to recover from it.

An ESA serves as protection against accidents, lost production, and lost profit. An ESA is a program that is customized for your facility that includes:

- System Survey
- Reliability Testing
- Predictive Maintenance
- Switching
- Customized Training
- 10% Discount on Additional Services
- Technical Consultation
- Modernizing/Upgrade Recommendations

MET evaluates your operations, loss exposure and potential for injury. The benefits of an ESA include:

- MET provides guaranteed emergency response 24/7.
- With an ESA, maintenance costs are amortized over a multi-year period, providing predictable fixed payments and avoiding wide fluctuating maintenance bills that wreak havoc with your budget.
- MET develops a private web page/portal that will be utilized to store and share project information, post concerns or work requests, and provide continuous access to your reports, blueprints, procedures, and schedules. Use of this technology accelerates and improves timely communication and information sharing, giving you nonstop access to your MET support team.
- Convenient reminders for scheduled testing due dates.
- Complimentary access to MET's annual technical conference.

With an ESA, you'll receive MET's *highest* level of customer service. Your account will be serviced by a support team that's dedicated specifically to you. MET's primary goal is to ensure the success of your organization. With an ESA in place, you can count on us for help any time you need assistance.

Call us today

www.met-test.com

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