2600 MULTIPLE SECTIONS 3rd PARTY TESTING QUALIFICATION REV_00

Submittal for multiple sections of 2600:

1) **26 0519 – 1.4B LV Power conductor.**
2) **26 0526 – Grounding and bonding**
3) **26 0518- Testing of Electrical Systems**
4) **26 2413 – 1.7 Electrical Switchboard**
5) **26 2726 – 3.4 Switches and receptacles**
6) **26 3213 – Emergency Light and Power System.**
7) **NOTE: Below is List of equipment to be tested by 3rd party.**

1	Switchboard Rating: 480V (MSB)
1	Circuit Breaker - Insulated Case - Electronic Trip - Primary Injection Rating: 1000-2500A (2000A Main)
1	Low Voltage AC Generator Rating: 1000kW+ (Emergency Gen)
1	Circuit Breaker - Insulated Case - Fixed Mount - Electronic Trip - Primary Injection Rating: 1000-2500A (2000A Gen Main)
2	Switchboard Rating: 480V (HEM, Gen Docking Station)
4	Auto-Transfer Switch Rating: 480V
49	Three-Conductor Low Voltage Cable Megger Test
	Grounding Tests
1	Ground Fault System Test
1	Three Point (Fall of Potential) Grounding Test

QUALIFICATIONS SUMMARY

May 10, 2022

Rommel Electric

Mike Livingstone

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1.0 Introduction

High Voltage Maintenance (HVM) has been providing independent electrical testing, maintenance, and engineering services for more than 57 years. We help facility, maintenance, and engineering managers mitigate risks and reduce costs through providing services that increase reliability, reduce operating expenses, and ensure safety and regulatory compliance. We employ highly experienced engineers, NETA-certified technicians and support personnel to provide project, maintenance, and performance optimization services. Whether you need to commission a new facility, perform preventive and predictive maintenance, or extend the life of your equipment, we are a single-source solution for all electrical reliability needs.

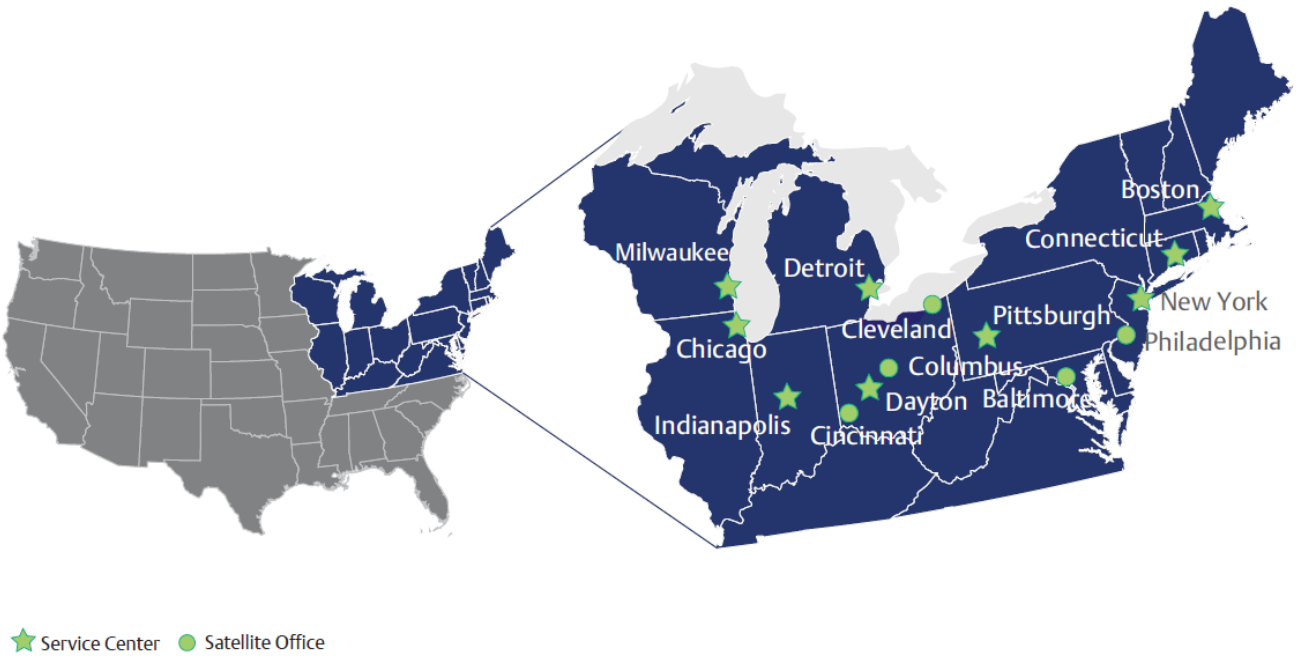
At the core of our organization are our Centers of Excellence: Engineering, Protection and Controls, DC Power, Compliance, Commissioning, and Electrical Testing and Maintenance. These centers are comprised of professional engineers, NETA-certified technicians, compliance engineers, training specialists and others who provide leadership, best practices, expertise, support, and training. Through these centers, we are driving superior service performance by exceeding customer expectations around quality, service and responsiveness.

Our focus is on your most critical equipment. Across your infrastructure, we service:

- Generators
- Switchgear
- Transfer switches
- Industrial UPS
- Utility/Substation
- Transformers
- Cables/Bus
- Meters
- Fire/Life safety systems
- Emergency lighting
- Circuit breakers
- Relays
- Instrumentation
- Cooling towers
- Monitoring/Control systems

2.0 Levels of Service Coverage

High Voltage Maintenance's team delivers the most complete solutions for electrical system reliability and safety. From testing for problems that could disable your system, to complete turnaround execution, we have the expertise to go above and beyond your expectations. With a network of 14 locations, High Voltage Maintenance's electrical service team puts experienced professionals where you need them, when you need them.



3.0 Credentials

HVM brings together a unique combination innovative technologies, and a highly qualified technical staff who partners with you to improve electrical reliability and performance.

We actively participate in numerous national organizations to assist in the development of standards important to our industry. With 57 years of experience in electrical testing, maintenance, and engineering, we are a trusted partner in promoting safety and reliability management. Our managers, field technicians, and engineers are active in the industry. Below are some of the organizations in which our team is involved:

NETA	**InterNational Electrical Testing Association (NETA)** NETA is an organization that serves the electrical testing industry by offering accreditation of third-party electrical testing firms, certifying electrical testing technicians, and producing American National Standards. **We are a founding member of NETA** and are dedicated to helping set world standards in electrical maintenance and acceptance testing. Key personnel serve on the NETA Standards Review Council, NETA Safety Committee, NETA Continuing Technical Development Committee, and the NETA Exam Committee. We also participate on NETA's new member evaluation team and as ballot pool members. We are leaders in staffing NETA-certified technicians and currently employ many Level 3 and 4 technicians. Many projects require a Level 3 or 4 to be on site. You can pull from our large team of experts to ensure your project is done in a timely manner.
NFPA	**National Fire Protection Association (NFPA)** NFPA is a nonprofit organization devoted to eliminating death, injury, property, and economic loss due to fire, electrical, and related hazards. The association publishes many key standards for the electrical industry: (1) Originally developed at OSHA's request, NFPA created the 70E standard to help companies and employees avoid workplace injuries and fatalities due to shock, electrocution, arc flash, and arc blast, and assists in complying with OSHA 1910 Subpart S and OSHA 1926 Subpart K. (2) The National Electrical Code (NEC) covers safe installation of electrical wiring and installation. (3) NFPA 70B details preventive maintenance. (4) NFPA 790 details standards of competency of third-party Field Evaluation Bodies. (5) NFPA 791 details recommended practice and procedures for unlabeled electrical equipment evaluation. We have NFPA 70E-certified trainers who are highly qualified to promote electrical expertise in workplace environments. Our certified trainers are recognized by their education, years of experience, training, and ability to pass a very challenging certification test. NFPA 70E certification is difficult to achieve, and trainers are required to recertify every three years.
IEEE Advancing Technology for Humanity	**Institute of Electrical and Electronics Engineers (IEEE)** IEEE provides the world's largest forum for sharing the latest in technological developments in the electric power industry; for creating standards that guide the development and construction of equipment and systems; and for educating members of the industry and the general public. Key personnel play a critical role in developing standards as committee chair members.
U.S. Green Building Council USGBC	**Leadership in Energy and Environmental Design (LEED)** LEED is a green building rating system that provides the framework that project teams can follow to create healthy, highly efficient, and cost-saving green buildings.

	To ensure your project meets the necessary requirements, our commissioning team consists of LEED Accredited Professionals (AP) who are trained and experienced in the LEED rating system.

BCxA	**Building Commissioning Association (BCxA)** BCxA is an international nonprofit organization that serves as the recognized authority and resource on commissioning. Its mission is to guide the building commissioning industry by advancing best practices and education, and promoting the benefits of building commissioning to achieve buildings that work. Our certified commissioning engineers help elevate the industry's technical level by participating in the development of guidelines and standards for BCxA.
ASHRAE	**American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)** ASHRAE is a global society advancing human well-being through sustainable technology for the built environment. The society and its members focus on building systems, energy efficiency, indoor air quality, refrigeration, and sustainability within the industry. Many of our field engineers actively promote ASHRAE guidelines to support the technical advances within the industry.
niulpe	**National Institute for the Uniform Licensing of Power Engineers (NIULPE)** NIULPE is a third-party certification organization mandated to establish and maintain international standards of education and competency for the power and energy-related trades and professions. This organization assists federal, state and municipal licensing agencies in maintaining the international standards within legislated programs. Key personnel have held leadership positions including serving as NIULPE president. Through our active participation, we help guide the standards for power and energy education.
BOMA International	**Building Owners and Managers Association International (BOMA)** BOMA International is a primary source of information on building management and operations, development, leasing, building operating costs, energy consumption patterns, local and national building codes, legislation, occupancy statistics, technological developments and other industry trends. Key personnel have participated in active leadership roles to help BOMA achieve their strategic objectives while volunteering their time to develop policy positions on issues that impact our industry.

4.0 Personnel Qualifications

High Voltage Maintenance and Vertiv's Electrical Reliability Services hire and maintain the top technical talent in the industry. From professional engineers, to specialized engineers in field service, commissioning, industrial DC power, power system and protection, and compliance, we have the expertise to cover your electrical reliability needs.

~500 Highly Skilled Personnel:	
Professional Engineers	32
NETA Level 1 & 2 Technicians	143
NETA Level 3 & 4 Technicians	138
Commissioning Engineers	6
Power System & Protection Engineers	26
Industrial DC Engineers	6
Compliance Engineers	9
Calibration and Repair Technicians	2
Training Specialists	3
Others	131

Our team of registered professional engineers have credentials throughout the United States. We are available to review and sign off on engineering projects to ensure that the results are accurate and meet established requirements.

With more than 25 power system and protection engineers on staff, we can ensure your power system operates safely and reliably. On average, our technicians have 21 years of experience working with all manufacturers' devices. This includes Schweitzer (SEL), Basler, ABB, and all makes and models from analog to the most advanced microprocessor-based relays. Our team is knowledgeable in the design of complex protection schemes and has the ability to program advanced features, efficiently troubleshoot hard-to-diagnose problems, and perform power system studies to ensure optimized system performance and protection.

Our commissioning engineers have experience across mechanical, electrical, and control systems to ensure your building is designed, built, and operated to meet the owner's specifications. With broad experience commissioning data centers, utility and renewable energy sites, commercial buildings, higher education facilities, retail space, telecom hubs and more, you can trust our commissioning experts to ensure your project meets the quality and standards you expect.

Industry Leader in Staffing NETA-Certified Technicians

We pride ourselves in the quality of field service engineers and technicians on staff. Every technician has at least two years of experience including 40 hours of safety training and 160 hours of electrical experience. Our Level 1 and 2 technicians are typically paired with more experienced technicians and generally require the supervision of a Level 3 or 4.

With many Level 3 and 4 NETA-certified technicians on staff, we have the expertise available to oversee your most complex projects. According to NETA, a Level 3 technician has a minimum of five years of experience including 64 hours of safety training and 400 hours of electrical experience. They manage complex tasks and projects, evaluate test data, conduct record keeping, and are responsible for the safety of others. NETA requires that all Level 4 technicians have at least ten years of experience including 104 hours of safety training and 600 hours of electrical experience. They can supervise large projects and multiple crews, perform complex investigations, evaluate test data, and make an informed judgment on the continued serviceability, deterioration, or non-serviceability of the equipment. They understand every plausible hazard and ensure the safety of both your personnel and ours. All of our Level 4 technicians have a tremendous amount of experience and have passed a thorough, rigorous exam as evidence of their knowledge and capabilities.

A commitment to continuing education is important in this industry. All our Level 3 and 4 NETA-certified technicians are required to earn 48 continuing technical development credits every three years to maintain their certification. This ensures that NETA-certified technicians remain current with emerging technologies and new editions to industry standards and best practices.

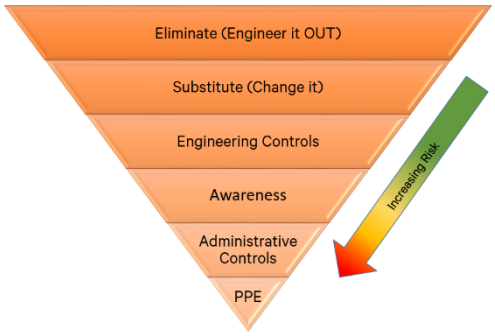
Longevity

With one of the lowest employee turnover rates in the industry, and numerous employees with more than 30 years of longevity, the quality and strength of our employees is evident by their long-term consistent performance. Our field technicians are known for their professionalism on and off the job site as demonstrated by their work ethic, timeliness, and preparedness. They show up ready to work with the right equipment, the required safety training, and years of experience. We know our people are our business, and we are committed to building sustaining capability through knowledge management, training, leadership development, advancement, and performance measurement.

Resumes for all personnel are available upon request.

5.0 Safety, Organization and Communication

Safety Training



HVM strictly adheres to industry safety and compliance regulations to ensure the safety of our personnel and yours. Every technician is trained to Occupational Safety and Health Administration (OSHA) standards for personal and environmental safety, including training in more than 60 Environmental, Safety and Health (ESH) topics and procedures. As part of our Safety Audit Program, each technician participates in a safety audit twice a year. The audit is performed by a manager or independent auditor who conducts a comprehensive check at a customer site. The auditor confirms the technician is following all safety standards, using all personal protective equipment (PPE) correctly, and that the technician fully comprehends our safety policies and procedures.

All HVM field employees receive more than 30 hours of in-depth safety training before working in the field and are certified in CPR, AED and first aid. This training includes eight hours of OSHA 1910 and NFPA 70E electrical safety training, and the OSHA 10-hour course for construction. Additionally, supervisors are required to complete the OSHA 30-hour course and all employees receive topic-specific monthly refresher training.

Electrical Safety Work Practices

To ensure the safety of everyone involved on a project, we designed an electrical safety program that directs activity appropriate to the risks associated with all electrical hazards. Our program takes into consideration the condition and maintenance of electrical equipment and systems, and focuses on teaching awareness and self-discipline while instilling safety principles and controls. Below are some key steps followed to ensure anyone who may be exposed to an electrical hazard is safe:

- A job safety planning and job briefing meeting is held to discuss all hazards associated with the project. Participants include our testing team, subcontractors, and the customer to ensure all parties' safety concerns are identified and addressed.
  - A risk assessment is conducted to address exposure to electrical hazards. This procedure identifies hazards, assesses risks, and implements risk controls according to a hierarchy of methods: (1) elimination, (2) substitution, (3) engineering controls, (4) awareness, (5) administrative controls and (6) PPE.
- The results of this meeting define the agreed upon safety procedures that all parties will follow for the duration of the project. Topics covered include lockout/tagout, personal protective devices, grounding procedures, etc.
- Additional job briefing meetings are conducted and documented to assess site-specific safety issues prior to commencing any activity and when conditions change, and are held daily as a minimum.
- Field work is audited to verify that the requirements contained in the procedures of the electrical safety program are being followed.

Risk Assessment

Controlling exposures to hazards is the fundamental method of protecting our employees. We adhere to a hierarchy of controls that demonstrates how we implement effective control solutions to ensure a safer environment.

Prepared for Safety

We provide the following PPE to every technician to safeguard them from potential hazards on the job:

- 12 cal/cm^2 Arc rated shirts and pants
- Balaclava
- Safety glasses
- Rubber-insulated blankets
- 40 cal/cm^2 Arc flash PPE
- Arc-rated face shield
- Hearing protection
- Class 0 and Class 2 rubber-insulated gloves
- Insulated tools

Incident Investigation

When an unforeseen incident arises, a cross-functional team of experts conduct a thorough incident investigation. Once a root cause has been established, corrective actions are taken immediately to correct all factors that contributed to the incident. To minimize or eliminate serious consequences in the future, the details of the investigation are shared throughout the organization. Based on the findings, a new or updated procedure will be put in place or a new tool will be created.

Safety Metrics

Excellence in safety is vital to the well-being of our customers and our employees; it is at the forefront of everything we do. Our dedication is why we maintain one of the best safety ratings in the industry and are well below the industry averages.

Safety Awards

We set safety expectations high and reward those that meet or exceed them. Below are some of our internal awards:

Quarterly Safety Excellence Award: Presented to highlight technicians who have submitted beneficial safety improvement ideas or have brought a safety concern to the forefront to be examined.

Perpetual Safety Award: This is the most prestigious award given to our technicians. These are presented to those that have an outstanding safety record.

6.0 Quality Assurance

HVM Quality Policy

HVM is committed to providing quality services and software that meet or exceed all aspects of customer expectations. We will accomplish this through a foundation of globally consistent and coordinated teamwork based on the following principles:

- Fostering a culture of world-class quality through the application of consistent and capable processes.
- Driving continuous improvement by empowering and encouraging proactive contributions and quality ownership from every employee.
- Continuously measuring and monitoring all service delivery and business processes to ensure a positive customer experience.

HVM senior management is committed to this policy and will provide the leadership, resources, and training to support these principles.

Quality Assurance Manual

We maintain a documented quality assurance program. The major elements include: quality policy, organization structure and responsibilities, quality practices, human resources, quality assurance audits and customer surveys. Maintaining quality assurance is the responsibility of all employees with oversight by each department manager and corporate management personnel. We have successfully passed the quality audits of many government agencies and obtained quality supplier recognition by private industry.

Service Capability Model

The Service Capability Model is an assessment tool used to evaluate performance in a multitude of business areas to drive continuous improvement. This model is used for problem solving and ensures quality and standardization, allowing for consistent service delivery everywhere you operate. Holding ourselves to high standards is crucial for meeting and exceeding your service requirements and value criteria.

Customer Satisfaction Program

Understanding your perceptions and expectations are very valuable as they guide us in driving continuous improvement throughout our organization. Customers are surveyed across four broad categories including pre-sale, purchasing experience, order and delivery, and service experience. The overall results are shared throughout the organization and analyzed to see where we may improve the customer service experience.

Customer Resolution Center

To ensure a positive customer experience, we make ourselves available whenever you need us by offering 24x7 support. A live person will answer your call and assist you immediately because we are committed to solving your critical system issues. Our goal is to provide the resources you need, at the time you need them.

Test Equipment Calibration Program

Field test equipment and secondary standard laboratory equipment are calibrated every 12 months. All test equipment calibrations are traceable in an unbroken chain to the National Institute of Standards and Technology (NIST). (See Laboratory Traceability Chart in Appendix ll). All calibrations are accomplished within strict guidelines utilizing recognized calibration procedures, techniques, and quality assurance standards.

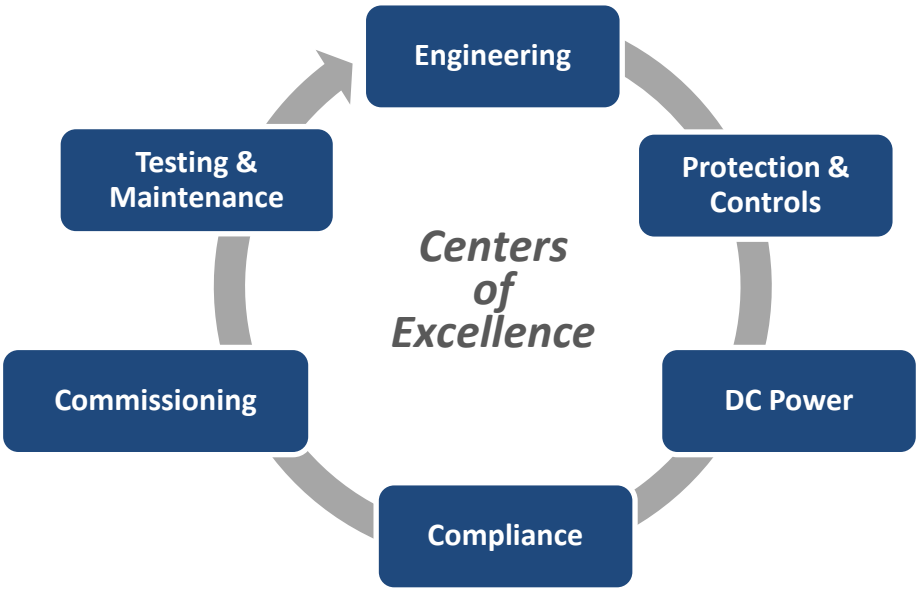
Vertiv's Electrical Reliability Services maintain a calibration laboratory that is among the few fully equipped, non-utility power industry calibration and metrology laboratories in the country. It's capabilities cover a wide range of measurement parameters:

- High voltage, AC and DC up to 100,000 volts
- High current up to 10,000 amps AC, 1,500 amps DC
- Instrument and meter calibration, analog and digital: amps, volts, ohms to 100 part per million, and phase angle
- Time and frequency: picosecond to megahertz
- Temperature: direct, simulated and low infrared
- Pressure: hydraulic and gaseous to 10,000 pounds per square inch (PSI)
- Dimensional: distance and weight

The laboratory has been approved and audited for nuclear power plant work and complies with MIL standards.

7.0 Centers of Excellence

The Centers of Excellence for HVM provide leadership, best practices, expertise, support, and training to achieve dramatic improvements in cost, productivity and quality. Our team members include professional engineers, NETA test engineers, compliance engineers, training specialists and more. Through their expertise and our infrastructure support, we can deliver industry leading customer satisfaction by exceeding expectations around quality, service and responsiveness.



Driving performance through:

Leadership

Provide oversight and governance to ensure alignment with customer and marketplace requirements.

Operations and Management

Manage costs, risks, and resources to ensure safe and timely project execution that meets objectives and budgets. Maintain capabilities and scale to effectively support single and multi-site projects.

Processes and Practices

Maintain predictable, repeatable, and consistent operational performance through standardized processes and methodologies. Utilize advanced tools and technologies, invest in research and development, and focus on continuous improvement to create best practices.

Service

Deliver project, maintenance, and performance optimization services throughout the lifecycle of a facility to ensure business critical infrastructure operates reliably, safely and efficiently.

Expertise

Hire and maintain top technical talent in the industry. Build sustaining capability through knowledge management, training, leadership development, and performance measurement.

8.0 Technical Resources

Intelligent Data Acquisition Forms

Megger's PowerDb application is the industry-leading data acquisition tool for the electrical testing industry. The out-of-the-box testing forms provide templates which are used to collect test data across many types of electrical assets and are widely used across the industry. For more than a decade, our in-house form developers have partnered with PowerDb to leverage our extensive field experience and make many improvements to the out-of-the-box design.

Today, our proprietary, customized forms enable us to collect more data, with improved safety, accuracy and efficiency. Through built-in form intelligence, we are able to quickly identify test data that may be suspect or does not meet NETA guidelines or other industry specifications. In addition, our intelligent forms are designed to generate auto-deficiency statements, which are derived from our large database of benchmark test results combined with our technical knowledge library.

Our proprietary customized forms offer:

- A searchable database of test results for auditing purposes
- Reliability in storing and organizing data by organization, plant, system or device
- Historical data or trend data comparing similar devices nationwide
- Auto-deficiency statements generated from a knowledge-based library
- Testing data and recommendations for next test interval
- A standardized report format due to forms being similar in appearance, performance and features
- Integration with industry tools and applications enabling direct input from RTS for relays and Doble Pro-Test
- Built-in safety reminders applicable to each unique testing scenario

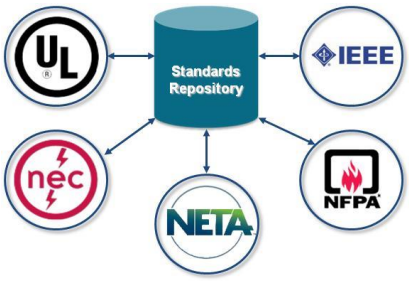
Real Time Data Applications

To improve efficiency and accuracy, we utilize the latest technology that increases the speed in which we share project information. Our data collectors use smart tablets that allow them to easily mark-up drawings and send them to the support engineer for review. Sending the data in real time allows for 24x7 engineering support.

The support engineer can quickly review the drawing, make any revisions, and send it back to the data collector before they return to work the following day. The data collector can review the progress with the customer as often as required. Before the job is finalized, they can review final drawings to ensure all data has been collected and all questions have been answered before they leave the site, eliminating unplanned follow-up visits.

Electronic Technical Library

We maintain an electronic library of international standards accessible to key employees 24x7. This information includes an index of standards written anywhere in the world and is updated every 60 days. This library's resources include reference materials and standards from organizations such as IEEE, ANSI, UL, NETA and NFPA. It also includes general reference materials and specialized text on electrical theory, engineering and compliance.



9.0 Equipment

We continually invest in our equipment to ensure we have the newest technology from handheld units to large transformer testing gear. With access to more than 3,000 pieces of equipment on hand, we always have the right equipment for the job. Below are examples of our equipment:

- Doble F-2553 high power convertible power simulator for relay calibration
- Doble TR-3100 motion analyzer which measures travel and velocity of breaker contacts
- Online, digital low-resistance ohmmeters allow for safe and efficient readings on energized equipment
- Agema digital color infrared cameras with software-driven data management
- OMEGA data loggers for power quality measurements
- Alber battery testing systems for online monitoring of battery back-up systems
- State-of-the-art power measurement equipment that measures load, harmonics, and line disturbance from well-known manufacturers including BMI, Dranetz, Elite and RPM
- Laptop computers for all field and sales engineers to facilitate efficient communication, proposal preparation, and test data management
- Customized automation software to ensure the timely delivery of estimates, test reports, and test data

Research and Development

With more than four decades of experience in maneuvering electrical equipment around big and small spaces, we understand the challenges. Our engineering and R&D resources help develop technology, methodology, and tools that improve the safety, efficiency, and accuracy of electrical testing. Physical improvements have made our equipment:

- Easier to maneuver, allowing for increased accessibility to more difficult/smaller sites
- Weigh less so there is no need for a heavy crane
- Easier to roll over uneven surfaces, allowing our wheeled pieces of equipment to travel through areas others cannot

10.0 Test Reports

Information management and communication within a service program is often the weakest and most detrimental facet of a client-vendor interface. Data storage and retrieval must be friendly and useable. Not only do our test reports adhere to NETA standards, we make sure they are easy to read and are consistent.

As an independent third-party electrical testing, maintenance, and engineering services firm and a founding member of NETA, we help set the standards for test reports. Each of our test reports include: (1) a summary of the project, (2) a description of the equipment tested, (3) a description of tests, (4) the test data, and (5) analysis and recommendations. In addition, our reports meet the following requirements:

1. Identification of the testing organization
2. Humidity, temperature, and other conditions that may affect the results of the tests/calibrations
3. Date of inspections, tests, maintenance, and/or calibrations
4. Identification of the testing technician
5. Indication of inspections, tests, maintenance, and/or calibrations to be performed and recorded
6. Indication of expected results when calibrations are to be performed
7. Indication of “as-found” and “as-left” results, as applicable
8. Sufficient spaces to allow all results and comments to be noted

When our work is complete, you will receive a comprehensive engineering report as specified in the maintenance testing contract. These detailed reports are reviewed by a dedicated group and contain infrastructure data and clear recommendations for improving safety and reliability. These reports help with compliance as they meet the NFPA 70E and NERC requirements for documentation.

11.0 Services and Capabilities

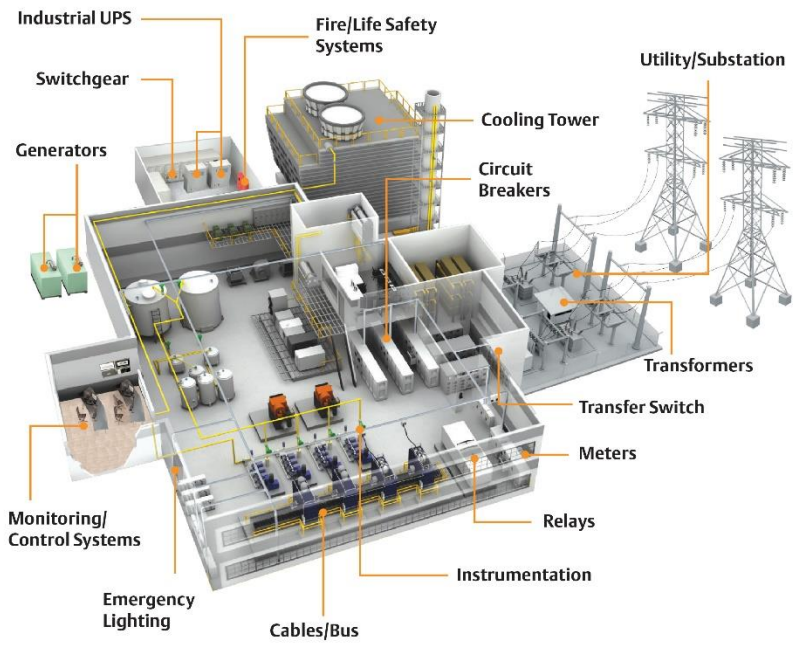
Every plant goes through a natural lifecycle. A typical facility with a traditional architecture enjoys its highest efficiency and performance right at startup. Once online however, the plant begins to gradually deteriorate due to the dynamic and often harsh environment of the process, as well as the normal wear-and-tear on the equipment.

Contrast this with the lifecycle of an optimized plant where HVM can help your plant start up faster. Throughout the lifecycle, this plant will see continual improvement in performance that is made possible through predictive diagnostics, preventive maintenance strategies, life-extension services, and engineering studies. In an optimized plant, unplanned outages are virtually eliminated and replaced by more efficient turnarounds, improving your plant's performance today, tomorrow and beyond.

As an independent third-party company, our recommendations are unbiased and based on principles of value engineering. We understand that the health and performance of your assets is vital to your success, and we have first-hand experience proving that electrical testing and maintenance has a dramatic impact on improving the cost of maintaining a reliable electrical power system.

Wherever you are in your plant's lifecycle, healthy assets are the way to a healthier bottom line. As your partner, we can provide the most comprehensive solutions for your electrical system reliability and safety.

We service equipment such as:



Over the next few pages, you will learn more about our services and capabilities.

11.1 Project Services

Our project services ensure that your facility is designed, built, and operates reliably and according to your project specifications. Whether building a data center, selecting technologies, planning an upgrade, or recommissioning an existing facility, we can support your projects and maximize your investment.

Commissioning Services

Commissioning is a quality assurance process that begins during planning and design and continues through construction, occupancy, and operations. The activities performed during each phase include a commissioning plan and specifications development, design review and scheduling, testing and verification, operational procedure development, training verification, and warranty reviews. Reference “Commissioning Services” section for more information on our capabilities.

Acceptance Testing

Acceptance testing is performed per NETA *Acceptance Testing Specifications* standards. Our experts will ensure your equipment is installed per manufacturer specification, integrated as needed, and able to safely and efficiently handle the designed load. Additionally, baseline data collected during your acceptance testing project is the foundation for required maintenance as stipulated by NFPA 70E. Reference “Acceptance Testing” section for more information on our capabilities.

Project Management

Combining a broad range of resources and knowledge, we can coordinate all aspects of your project and complete it on time and on budget, no matter the project size. Our services begin early and encompass a wide range of systems and capabilities. A certified project management team will ensure your project is a success and delivers the desired outcome.

Installation Services

Professional installation of all products and components is a key element of our project delivery service. As a general contractor that is licensed in many states and a company that works with a network of licensed contractors, we employ best practices for both electrical and mechanical installations.

Integrated Systems Testing

This process verifies integrated functional operation of critical building systems under designed load and under emergency conditions. An Integrated Systems Test script is developed that details the testing process for the entire critical system including the electrical and mechanical primary systems, redundant systems, backup systems, emergency and automatic switching systems, and building automation systems (BAS).

Electrical Engineering

Our experts work with you to fully understand your project requirements and recommend solutions. Our comprehensive engineering and design services give structure and context to the project planning team's recommendations. Reference "Electrical Engineering Services" section for more information on our capabilities.

COMMISSIONING

For more than a decade, Vertiv's Electrical Reliability Services team has been providing commissioning services to critical space facilities. Unlike some commissioners who primarily provide administrative oversight, our commissioning services team offers a comprehensive, hands-on approach to commissioning. We will work with you and your project teams from pre-design through construction and up to one year post-occupancy to verify and document that systems are designed, constructed, and tested to function safely and meet operational needs.

By working hand in hand with your design engineers and general contractor, our commissioners will ensure your project meets your needs from day one and is delivered on time and budget. Even more important, commissioning services ensure you get the results you expect. From lower operating costs and improved energy efficiency, to reduced downtime and increased reliability, commissioning your project today delivers benefits for many years to come.

Our commissioning experts are members in key industry associations such as ASHRAE and Building Commissioning Association (BCxA). Qualified staff members include NETA-certified technicians, certified Qualified Commissioning Providers (QCxP) and LEED Accredited Professionals (AP) who have training in ASHRAE commissioning guidelines and the LEED rating system.

Proven. Consistent. Agile.

Trust your mission critical facility to the commissioning experts at Electrical Reliability Services. Through our extensive experience in commissioning complex systems, we have developed proven processes which enable us to deliver consistent, quality results while increasing your speed to

Services

- Retro Commissioning
- Full Lifecycle Commissioning
- LEED Commissioning
- Commissioning Plan Development
- Project Management
- Integrated Systems Testing
- Personnel Training

ACCEPTANCE TESTING

A high percentage of early equipment failures can be traced to design, installation, or startup deficiencies. It is important to protect your plant's investment in new equipment or systems with acceptance testing.

Acceptance testing protects the reliability and uptime of a facility or piece of equipment. It also provides a baseline for trending and comparing data gathered during future maintenance testing. Our testing encompasses:

- **Pre-functional verification**: An inspection to verify proper installation prior to testing which covers the checking of belt tension, oil levels, labels, gauges and sensors.
- **Functional testing**: Testing performed in all operational modes to confirm that equipment operates according to the design intent.
- **Comprehensive report**: Report that includes testing results and any recommendations for infrastructure changes.

Integrity. Efficiency. Accuracy.

Ensure the integrity of your system by confirming your equipment is installed per manufacturer specifications and design intent. Our technical experts will ensure a quality installation that supports system reliability and reduces the threat of costly downtime while maximizing operating efficiency. We will also make sure you receive accurate baseline data to be used for improved asset management in the future.

Services

- Visual and Mechanical Inspections
- High Potential Testing
- Cable Fault Location
- Ground Fault / Ground Resistance Testing
- Breaker Time Travel Analysis
- Battery Testing
- Voltage/Load Recording
- Load Bank Testing
- Contact Resistance Testing
- Standby & Emergency System Testing
- Current Injection Testing
- Relay Functional Testing
- Thermographic/Infrared Testing
- Partial Discharge Testing
- Fluid/Oil Analysis
- VLF Testing
- Power Factor Testing
- Fall-of-Potential Testing

11.2 Maintenance Services

We take a holistic approach to ensuring the safe, reliable operation of your facility. Using our solutions, companies can overcome challenges managing maintenance for data center, healthcare, telecom, industrial facilities and more. With proper maintenance and regular testing, you can identify and correct problems that would otherwise go undetected.

Preventive Maintenance

A preventive maintenance program should be performed in accordance with accepted industry standards and safety practices, such as NFPA 70B and NETA's Maintenance Testing Specifications. The following tests and services are part of our preventive maintenance program, designed to ensure your compliance:

- Turnaround and outage support
- Electrical testing
- Periodic inspection, cleaning and lubrication
- Calibration services

Reference "Preventive Maintenance" section for more information on our capabilities.

Predictive Maintenance

Predictive maintenance involves performing condition assessment tasks that monitor or trend equipment health to help determine what maintenance tasks should be performed to avoid unacceptable deterioration or drop off in performance. The following tests are part of our predictive maintenance program:

- Partial discharge testing
- Ultrasonics
- Infrared/thermography
- Fluid/oil analysis

Reference "Predictive Maintenance" section for more information on our capabilities.

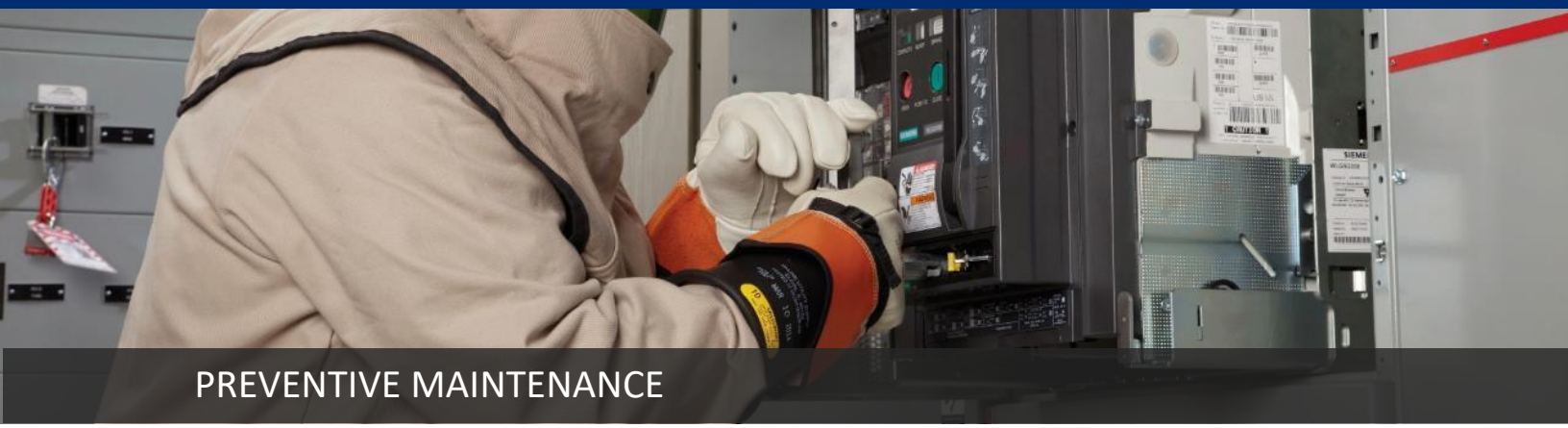
Corrective Maintenance

As electrical equipment ages, components begin to wear and insulation deteriorates. Our corrective maintenance includes repairing transformers and switchgear, inspecting wiring connections for proper tightness or discrepancies, and replacing broken or worn out parts as needed. It may also include retrofitting in order to update your equipment with the latest technology instead of doing a full replacement.

Maintenance Management

According to the current NFPA 70E standard, equipment must be properly maintained in accordance with the manufacturer's recommendations and applicable industry codes and standards. An effective electrical maintenance program will ensure compliance, enhance safety and reduce the probability of equipment failure.

Some of our key services offered to help support your ongoing maintenance program include maintenance planning, program development, outage planning and method of procedures (MOP) development.



PREVENTIVE MAINTENANCE

Facilities are dependent upon their electrical systems to maintain the continuity of processes and to transmit critical data. The continuing reliability and integrity of an electrical power system is based on an established program of maintenance and operational testing. The maintenance procedures and frequencies should follow the recommendations of nationally recognized standards.

NFPA 70B: Recommended Practice for Electrical Equipment Maintenance provides maintenance guidelines including suggested intervals. Another valuable resource is NETA's *Standard for Maintenance Testing Specifications for Electrical Power Equipment and Systems*, which has been adopted by the American National Standards Institute (ANSI/NETA MTS). These procedures and frequencies are used to develop a maintenance schedule that is based on the type of equipment, voltage, and ambient conditions.

Preventive tests and services provided by our NETA-certified field service engineers and technicians include:

- Insulation-resistance testing
- Ground resistance testing
- Dielectric withstand voltage test
- Clean, exercise, and lubricate components
- Troubleshoot and/or repair as necessary
- Thermographic survey
- Breaker time travel analysis
- Visual and mechanical inspection for functionality/operability
- Writing of test report with recommendations

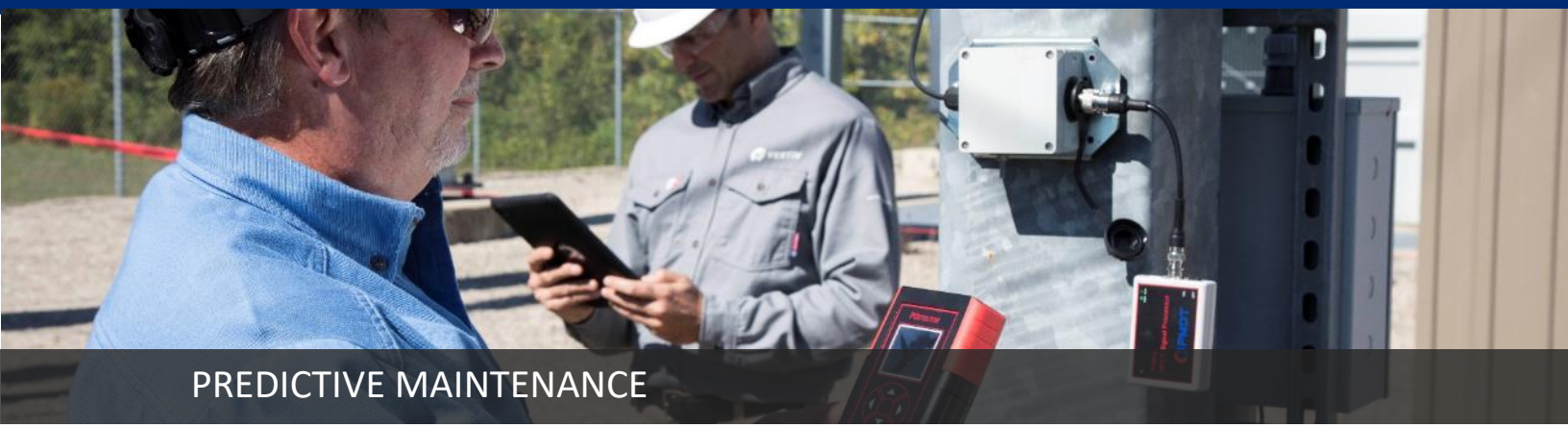
Turnaround and Outage Support

Plant turnarounds constitute the single largest maintenance expense. Part of ensuring a successful turnaround is controlling the time and costs associated with the outage, while making sure assets get the service needed to continue performing safely and reliably. To make the most of planned maintenance time, take advantage of our range of services:

- Pre-outage planning
- Pre-outage electrical maintenance
- Maintenance and testing services
- Pre-outage diagnostic testing
- Pre-outage electrical maintenance
- Post-outage report and feedback

Electrical Testing

Electrical equipment aging and deteriorating is normal, but equipment failure is not inevitable. An effective electrical maintenance testing program identifies and recognizes factors leading to deterioration. It provides measures for reversing these effects and avoiding failures. A well-administered testing program can prevent accidents, save lives, minimize costly breakdowns, and reduce unplanned outages.



PREDICTIVE MAINTENANCE

Predictive maintenance tests determine the condition of in-service equipment in order to recommend when maintenance should be performed. We offer a comprehensive profile of services to assess and trend the health of your equipment.

Partial Discharge Testing

Our integrated partial discharge (PD) testing and monitoring solutions are customized for you and can provide early warning signs of impending failure. We offer the latest technologies in both online and offline PD testing. Our new technology expands the type of equipment in which PD can be detected. This list includes cables, air and gas insulated switchgear, dry-type and liquid-filled transformers, potential transformers, control power transformers, current transformers, arresters, bus, switches, voltage regulators and circuit breakers, as well as others.

We use multiple sensors to improve accuracy including transient earth voltage sensors, ultra-high frequency sensors, high frequency current transformer sensors and acoustic emission or ultrasonic sensors. Depending on your specific operating requirements and application, we can customize a program for you. Choose from periodic partial discharge testing, continuous online monitoring, ultrasonics, dissipation factor, and permanently mounted sensors. We offer a wide variety of options to fit your specific needs.

Infrared/Thermography

Annual infrared scans are specified in NFPA 70B and are recommended by most insurance companies. These tests can easily detect hot spots in your critical equipment. However, not all infrared scans are the same. We use high-end cameras that offer the highest imaging resolution and temperature range to clearly understand where electrical connections and components have degraded. Information gathered helps you determine how to best address these hot spots before they result in serious problems that lead to unplanned downtime.

Ultrasonics

Ultrasonic testing finds leakage, signs of corona, and other invisible problems within an electrical system before they become large, expensive problems. Performed without disrupting plant or facility operations, ultrasonic testing is a non-destructive, non-invasive predictive maintenance tool. Because it maintains insulation integrity, it is commonly employed in applications such as cable terminations, switchgear, busbars and transformers. Ultrasonic measurement is most powerful on a comparative basis and can significantly increase the reliability of partial discharge detection.

Fluid/Oil Analysis

Fluids and oils circulate in large power transformers to insulate them from high-voltage stresses. These fluids contaminate easily due to leaky seals and corrosion. Increased reliability and performance can result from a rigorous preventive maintenance program that purifies and filters these fluids over the life of the equipment. Advanced mobile

oil processing equipment provides vacuum, filtration, degasification, and dehydration of fluids/oils to restore optimum dielectric strength, viscosity, and insulation characteristics.

11.3 Electrical Engineering Services

Our highly qualified engineering resources provide innovative solutions to enhance the safety, operating performance, and reliability of your critical systems. Managing the complexities of your power system protection and ensuring safe, reliable operation can be a difficult challenge that requires multi-discipline expertise. We offer a variety of engineering services including electrical engineering design, power system studies and engineering drawings. Learn more below:

Electrical Engineering Design

Our protection engineers will evaluate your system and design settings to ensure your equipment functions as it is designed to do and that it performs at its optimum capacity while meeting applicable regulatory requirements.

Relay Design and Integration

Our highly experienced integration engineers can help you identify the specific relay features, capabilities, and configuration that will best meet your facility's requirements. In order to ensure our solution meets all of your needs including cost, space, time, functionality and regulatory compliance, our team will meet with you to understand your specific requirements. We will then design a retrofit solution utilizing the best technology for your system. Once a solution has been designed, complete schematics and diagrams are developed and reviewed prior to construction.

Relay Logic and Programming

Another important part of the design process includes accurate relay logic and settings. Correct logic settings affect the speed, selectivity, and reliability of your relays. Our protection engineers are available to help you design and implement logic settings to ensure your scheme delivers the required protection for your operation.

HMI/ Communications (SCADA) Programing

Human machine interfaces (HMI) and communications are crucial networking components in any integrated SCADA system. Our engineers have the expertise to design, program and implement a solution that will allow your operators such abilities as monitoring device status, polling metering data, creating multi-level user groups, or controlling protective devices such as breakers remotely.

NERC Compliance Engineering Evaluation

Evaluation of your infrastructure involves on-site data analysis and data collection by our highly-trained engineers who have years of experience working in and around operating generation plants. Once the data is collected, they will assemble and organize it to perform modeling and an engineering analysis of your electrical system. A complete NERC-approved mathematical proof will be provided for each load sensitive relay requiring study. Our

engineers leverage industry accepted software applications to model dynamic systems including PSSE, E-Tap, MatLab and Power World. Upon completion of the analysis, a comprehensive report will be provided with recommendations and corrective actions required for ensuring compliance and improving power system loadability at your facility.

Power System Studies

Our engineers help you optimize the design, function, and operation of your protection system by analyzing the operation of your power system during normal and fault situations. Our power system studies include:

Short Circuit/Coordination Study

A short circuit and coordination study helps to avoid accidents, productivity losses, costly fines, and higher insurance costs. By evaluating a system's protective devices and the circuits they protect, a coordination study determines how long equipment can sustain operation without damage or failure. These studies provide power transformers, switchgear, substations, motor control centers, panelboards, and other equipment with the required protection to ensure minimum service interruption under overload and short-circuit conditions.

Arc Flash Study

Arc flash studies provide recommendations for PPE; boundaries for limited, restricted and prohibited approaches; and recommendations for flash protection and safe work practices. Once our technical staff has completed an arc flash analysis, the appropriate hazard warning labels will be provided. Reference "Arc Flash Study" section for more information on our capabilities.

Power Quality/Harmonics

Dips, spikes, surges, and momentary outages can damage critical equipment and systems, or cause them to malfunction. Our power quality studies and harmonic analyses identify grounding errors, harmonic distortions, and other issues that reduce the reliability of your power system. Experts rapidly assess problems by examining harmonics, load flow, and power factor. Once the nature of the disturbances or operating condition is understood, we identify solutions that reduce total system loading and ensure optimal system performance.

Load Flow Analysis

Load flow studies identify and correct power system issues, such as overloads, load imbalance, harmonic problems, poor power factor, or other operational issues. Using software that simulates actual steady-state operating conditions, our power system experts can virtually investigate multiple scenarios that may alter a facility's load, creating operational or performance problems. The load flow study calculates load distribution and voltage profiles to examine the performance of the system and determine the effectiveness of voltage regulation or power factor correction equipment.

Power Factor Study

Measuring power factor detects insulation defects in electrical equipment. By maintaining a high power factor, a plant can avoid costly utility bills resulting from an enforced "low" power-factor clause or high kilovolt-ampere (kVA) demand. Power factor tests provide a benchmark which may be compared over periods of time in an organized manner and are used to identify trends within AC equipment insulation.

Grounding Study

A grounding system is one of the most important, yet neglected, segments of a critical facility's electrical power system. Testing is required by the National Electrical Code (NEC). Proper grounding is essential to ensure personnel safety and service reliability. Our technical services team can ensure your system grounding complies with code requirements, and that your ground fault protection is adjusted and functions properly.

System Logic and Control Settings

Another important part of the relay design process includes accurate relay logic and settings. Correct logic settings affect the speed, selectivity, and reliability of relays. They ensure the correct relay elements are being used in the trip scheme and that the relay control logic will produce the desired results. Our protection engineers help you design and implement logic settings to ensure your scheme delivers the required protection for your operation.

Ground Fault Analysis/Troubleshooting

A low-level arcing ground fault can destroy switchgear in seconds, before the main service overcurrent protection will operate. Ground fault protection is required by the NEC and is usually installed only on circuits and services of 480/277 volt 1,000 amps and larger. A properly installed and operating ground fault protection system will detect and clear the fault in milliseconds, fast enough to limit damage to acceptable levels. Our experts can verify proper installation of sensor and grounding connections.

Engineering Drawings

HVM engineers can develop a road map to enable proper maintenance of equipment, design redundancy, and protection of your electrical distribution system. Learn more below:

Single/Three-Line Diagrams

Facility equipment and loads are continually added or removed in small increments, constantly changing an electrical infrastructure. We conduct a comprehensive site survey to inventory the equipment, verify drawings and processes, and evaluate design redundancy. The resulting detailed schematic shows the main components of the electrical system and the power distribution path. You will then have the information needed for system analysis and testing, as well as for future maintenance and engineering studies.

Wiring Diagrams

Accuracy is incredibly important when translating engineering designs into actual installations. Creating wiring drawings is a time-intensive, detail-oriented step in the protection and controls engineering process, connecting each device together such that each device operates properly within the system. Our protection and controls engineers have the applied installation experience and a quality process to ensure the creation of accurate and precise wiring diagrams.

Elevation Drawings (Panel Elevations)

Every relay panel has unique dimensions and physical characteristics. Specifying a replacement relay panel requires intuitive field experience with insight into the constructability of the installation. Our protection and controls engineers have the knowledge necessary to create detailed panel elevation drawings, ready to be used to procure custom-made panels.

Control Schematics

Control schematics are the basis for showing how various devices interoperate. Creating control schematics requires technical knowledge of existing relay makes and models with an applied knowledge of protection and control theory. Our experts can create protection and control schematics according to your specifications and needs.

ARC FLASH STUDY

Ensure worker safety and regulatory compliance with a comprehensive arc flash study. Our professional and degreed engineers receive ongoing education and adhere to strict standards in safety and electrical testing when performing a study that involves the following:

- **Data collection** – Collecting critical equipment information is necessary to perform accurate arc flash hazard analysis. Depending upon the incident energy levels present at a given location, the minimum required levels of PPE is determined.
- **Arc flash calculations** – Calculations are performed with state-of-the-art software and in accordance with NFPA and IEEE standards.
- **Comprehensive reporting** – Report includes the results of the hazard analysis and expert recommendations, and helps ensure compliance with OSHA and NFPA standards. Once the study is completed, results should be maintained in the facility's engineering documentation and incorporated into a published safety manual.

Ideally, an arc flash study should be done in conjunction with the acceptance testing and engineering studies at the time of commissioning since a short circuit study is required to perform the evaluation.

Ensure Regulatory Compliance

Improve worker safety by identifying potential hazards and implementing recommendations to mitigate risks. You can identify these hazards and ensure regulatory compliance by performing arc flash hazard analysis in accordance with industry guidelines. Once you have enhanced system performance, you will see greater productivity by reducing

Related Services

- Risk Assessment
- Hazard Labeling Plan
- Site Review/Compliance Assessment
- Protective Scheme Design Review
- Single-Line Diagrams
- Short Circuit and Coordination Studies
- Preventive Maintenance
- Electrical Safety Program Review/Development
- Training and Performance Evaluation
- Personal Protective Equipment
- Optional Annual Re-certification
- Documentation

11.4 Equipment Upgrades & Replacements

Aging electrical equipment typically has higher maintenance requirements, that not only cost more, but also pose higher safety risks for personnel. We offer a full range of services designed to help aging facilities operate at peak performance.

Turnkey Relay Retrofits, Upgrades and Replacements

Relay retrofits and upgrades provide a fast, cost-effective way to leverage the advantages of microprocessor relays without the expense of installing new switchgear. Turnkey relay upgrade solutions include generator protection, main-tie-main systems, feeder protection, arc flash mitigation, and medium-voltage back-up generation. We deliver solutions utilizing all major relay manufacturers and relay applications including engineering evaluation, relay design and integration, relay logic and settings, panel fabrication, demolition, installation, testing and startup support.

Circuit Breaker Retrofits/Upgrades

Replacing aging circuit breakers will lower maintenance requirements and reduce the safety risk to your personnel. Our electrical system experts can upgrade your assets with rebuilt and retrofitted equipment, allowing for improved performance at a lower cost. Our capabilities include low, medium and high voltage circuit breakers, including vacuum and SF6 technology.

UPS Retrofits/Upgrades

Our life-extension services transform older equipment to like-new condition, delivering enhanced efficiency and reliability and extending the life of your system. Our expert technicians will modernize your control systems for the UPS, inverter and/or battery charger. They will replace most major components such as printed circuit boards, chokes, meters, potentiometers, and more. Your equipment will then be tested and calibrated to meet the OEM's specifications.

Battery Replacements

Once a battery reaches less than 80 percent, it is recommended for replacement. We offer complete battery replacement solutions including both expert installation of new cells and proper recycling of spent batteries. We also offer a mobile power solution for safe and secure DC system maintenance and battery replacement. Our Mobile DC Power Services Unit is transportable to provide on-site temporary power during system maintenance and replacement.

Direct Replacement Breakers

Advances in circuit breaker technology have enabled asset managers to exchange older, often obsolete equipment for upgraded replacements without disrupting existing switchgear. Most replacement breakers are designed to fit into the existing switchgear cells with minimal modifications and will interface with the existing switchgear structure while maintaining safety interlocks inherent in the original design.

11.5 Compliance Services

Understanding and complying with ever-changing standards requires considerable knowledge of the requirements and methodology used to successfully implement the technical requirements. Our compliance experts can help you achieve compliance with the latest regulations and requirements from NERC, NFPA, IEEE, NETA and more.

NERC Compliance Programs

Achieving compliance with NERC requires knowledge of complex regulations. Our NERC compliance services provide generator and transmission owners and operators with the resources and tools needed to address reliability requirements. Compliance experts leverage in-depth understanding of NERC standards and how they impact power-producing infrastructure to help customers develop a compliance program. Our NERC compliance services include compliance assessment, engineering analysis and modeling, NERC program management, and relay retrofit and upgrades.

NFPA Compliance Programs

The intent of *NFPA 70E: Standard for Electrical Safety in the Workplace* is to provide guidelines for reducing exposure to the hazards of shock, electrocution, arc flash, and arc blast. To help you improve safety and achieve compliance, our team of NETA-certified technicians, power system engineers, and electrical engineers provide solutions for your electrical safety policy and maintenance practices. Our NFPA compliance services include electrical safety compliance assessment, arc flash study, change management and control, training, safety, maintenance, and documentation.

OSHA Safety Training

Our OSHA courses are designed to support continuing education and relicensing requirements of most states. Many Fortune 500 companies have approved the courses for corporate training, and they are accepted by IBEW, DOD, DOE, MSHA and OSHA (Safety Training). The courses also meet NETA's continuing certification program for certified technicians.

Arc Flash Compliance Services

OSHA can and does enforce the NFPA 70E guidelines on arc flash safety. To ensure compliance, you will need to determine the steps needed to meet OSHA and NFPA requirements. Our experienced engineers can conduct a

comprehensive assessment at your facility to identify areas of risk and non-compliance. The results can then be analyzed to formulate a plan to bring your facility into compliance in the most efficient way possible.

11.6 Educational Services

Ensuring the safety of your workers and meeting the challenges of the latest safety requirements is a difficult task without assistance from qualified resources. Having delivered hundreds of on and off-site training courses annually, you can trust us to provide the education your team needs to become "qualified" electrical workers in accordance with NFPA 70E requirements.

Our training is delivered by equipment experts who are well-versed in the latest regulatory requirements. Whether customized on-site training is required or online training via WebEx, courses are designed around our customer's schedule. We provide the industry's leading innovative and cost-effective approach to training, offering comprehensive turnkey packages that are unparalleled in the industry.

We also offer consulting services that are designed to help customers improve the efficiency and performance of their most critical assets. These services will increase workplace safety, protection of property, and compliance with regulatory codes and standards. Solutions include:

- Specialized equipment training
- Safety training
- Safety audits
- Skill and training needs assessment
- Safety documentation
- Policy and procedure development

Note: HVM's safety training programs meet current OSHA requirements including OSHA 1910.269, 330-333 (Subparts R and S).

Here's what customers had to say about our educational services:

"The course was very interesting. The instructor was outstanding and knew the information better than any class I have attended."

"Great logical course progression; easily understood by different experience levels."

"This was the most informative and entertaining electrical safety course that I've had. It was easier to retain the information I learned. Thank you for creating such a well-planned curriculum."

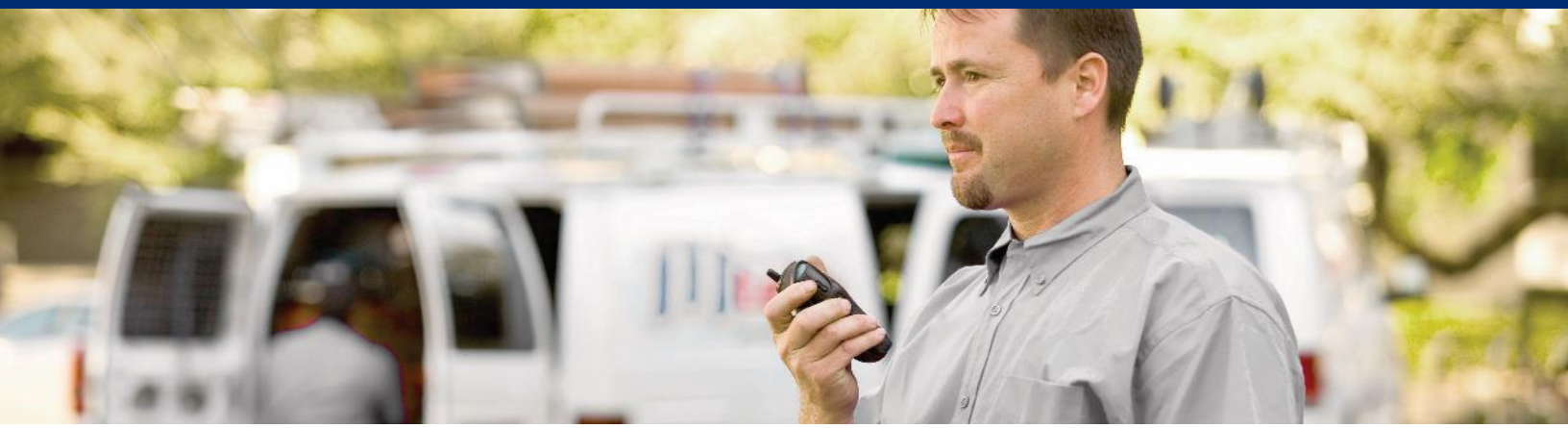
"Great training course. Instructor provided detailed information regarding each topic. Extremely helpful in our line of work."

"This was the most focused electrical arc flash course I have attended."

"I had a general idea of electrical safety before but [the trainer] was able to explain everything I didn't know, effectively and easily."

"Easy to understand and presented accurately. The instructor is very knowledgeable."

"Very good course, even for someone who



11.7 Service Management & Support

Unexpected failure can pose serious hazards to your critical infrastructure. Whether it is a large-scale outage or a localized technical glitch, each emergency demands a prompt response. Our Customer Resolution Center associates utilize a robust knowledge database and leverage interactive technology. This enables us to quickly and consistently provide you quality service and real results. Learn more about our services below:

Customer Resolution Center

When you call our toll-free number for help dealing with your critical system issues, you will never reach an answering service or voicemail. You will always be connected with a person for immediate assistance. Our call center is staffed with infrastructure experts that are part of the largest customer support team in the industry. They are equipped with technology that indicates weather patterns and natural disasters so they fully understand the issues that may impact your facility. Team members are armed with the information they need to resolve your call, which on average, takes less than three minutes.

24x7 Emergency Response

Our technical support team and call center is available 24x7. Any time day or night, we can dispatch a NETA-certified technician to your site with the proper equipment required to troubleshoot the problem and quickly meet your unexpected needs on site.

Disaster Recovery Services

Disaster recovery services are designed to support your business continuity objective. Whether you are looking to assess the damage to electrical distribution equipment, or need to conduct startup and commissioning of new or refurbished equipment, we can help. Our services are conducted according to guidelines from the National Electrical Manufacturers Association (NEMA) and adhere to ANSI/NETA specifications.

Our disaster recovery services include:

- Damage assessment
- Equipment repair/recondition
- Spare parts support
- Inspection and testing
- Equipment replacement
- Commissioning and startup

Appendix

Appendix I - Directory of Locations

Directory of Locations

HVM team has strategically located service centers and satellite offices throughout the Midwest and New England regions. These locations provide our customers with access to local resources with direct service capability.

Connecticut

Connecticut Area Service Center
29 Diana Court
Cheshire, CT 06410
PH: (203) 949-2650
FAX: (203) 949-2646

Illinois

Chicago Area Service Center
941 Busse Road
Elk Grove Village, IL 60007
PH: (847) 640-0005
FAX: (847) 640-0004

Indiana

Indianapolis Area Service Center
1052 S. Greenwood Springs Blvd.
Suite E
Greenwood, IN 46143
PH: (317) 322-2055
FAX: (317) 322-2056

Maryland

Baltimore Area Satellite Office
PH: (410) 309-5970
FAX: (410) 309-0220

Massachusetts

Boston Area Service Center
24 Walpole Park South, Suite 3
Walpole, MA 02081
PH: (508) 668-9205
FAX: (508) 668-2142

Michigan

Detroit Area Service Center
24371 Catherine Industrial Drive
Suite 207
Novi, Michigan 48375
PH: (248) 305-5596
FAX: (248) 305-5579

New York

New York Area Service Center
1250 Broadway, Suite 2300
New York, NY 10001
PH: (718) 239-0359

Ohio

Cincinnati/Kentucky Satellite Office
PH: (859) 371-5355
FAX: (859) 371-5399

Columbus Area Satellite Office
PH: (614) 807-3408

Cleveland Area Satellite Office
PH: (440) 951-2706

Dayton Area Service Center
5100 Energy Drive
Dayton, OH 45414
PH: (937) 278-0811
FAX: (937) 278-7791

Pennsylvania

Pittsburgh Area Service Center
355 Vista Park Drive
Pittsburgh, PA 15205
PH: (412) 747-0550
FAX: (412) 747-0554

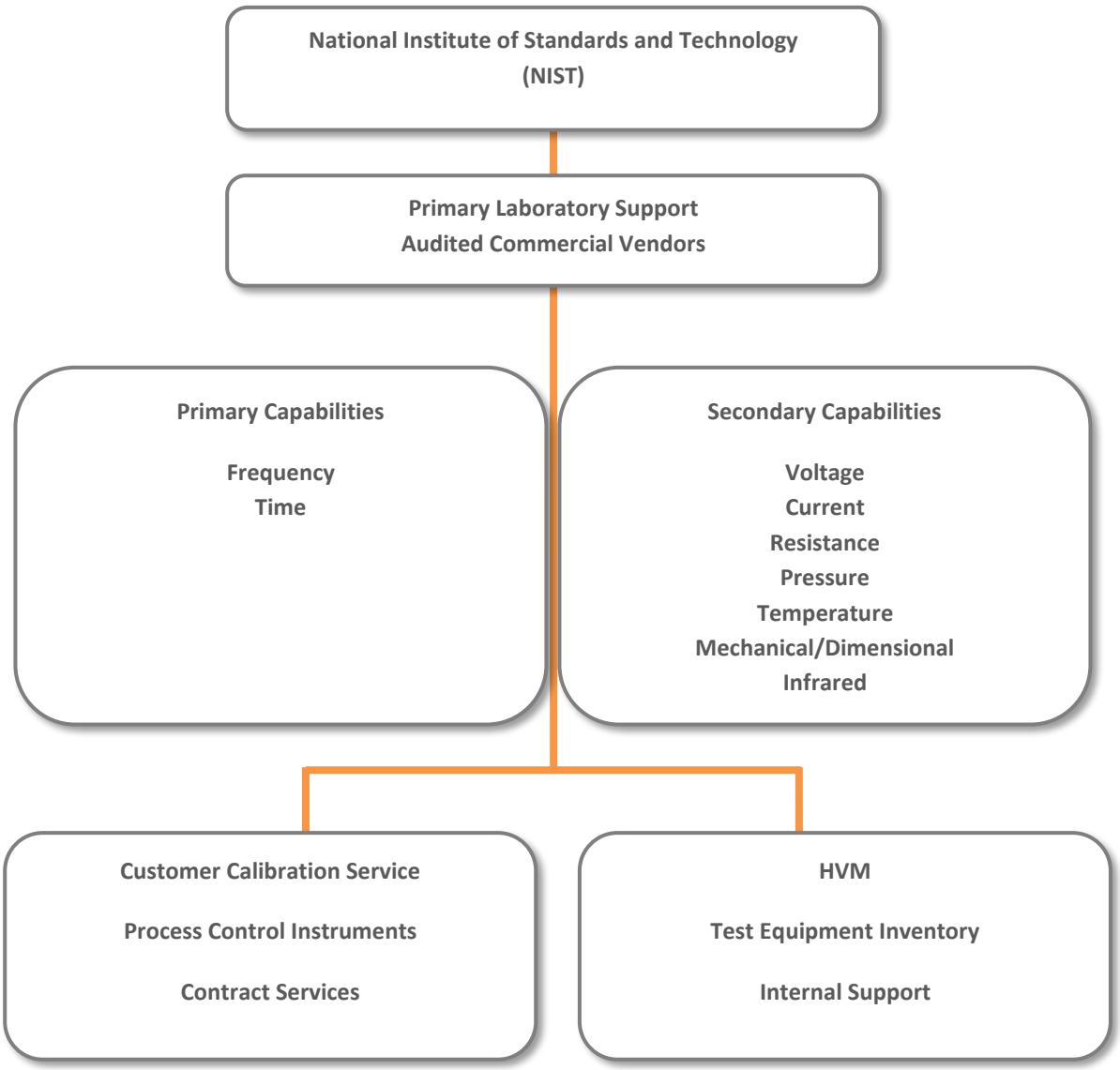
Philadelphia Area Satellite Office
PH: (800) 619-0032

Wisconsin

Milwaukee Area Service Center
3000 S. Calhoun Road
New Berlin, Wisconsin 53151
PH: (262) 784-3660
FAX: (262) 784-5124

Appendix II - Laboratory Traceability Chart

LABORATORY ENVIRONMENT: (Temperature: 70 ± 5°F) (Humidity: 25% to 70%)



Appendix III - HVM Organizational Structure