



Optimizing power systems to align with government and military goals

Eaton's Electrical Engineering Services team delivers solutions to enhance the power performance of your traditional, challenging and mission-critical electrical distribution system, reduce operating costs, and maximize reliability, safety and integrity. Independent of the age, manufacturer or complexity of your electrical distribution system, Eaton's design, build and support services integrate and optimize all elements of a power system to ensure that it is aligned with your operational goals.

Keeping power systems safe, secure, efficient and reliable

Eaton is a prime contractor and its services team is one of the largest and most experienced teams of power system engineers in the industry, with decades of design/build turnkey experience, industry-standard software and advanced modeling and analysis capabilities. Our comprehensive portfolio of design services includes safety studies and energy management, power quality and reliability audits.

Eaton understands your operational requirements and sets strategies for your power system. We provide reliable, efficient and safe power management capabilities with experience and an installed base within key government agencies and defense markets for mission-critical, data center, healthcare, office building, base and campus utility distribution, forward operating base, water treatment plant and ship applications.

With Eaton's help, you'll witness a range of benefits, from reduced costs to a more effective use of capital including improved electrical reliability and power quality that support your mission's operational requirements. Our engineering and consulting services help you manage your power system as a strategic resource that can support your agency or departmental objectives.



Powering Business Worldwide

Government contracts

- General Services Administration: Facilities Maintenance and Management—Schedule 03FAC
 - Contract No.: GS-06F-0023R
- General Services Administration: Energy Solutions Schedule 84
 - Contract No.: GS-07F-0577Y
- U.S. Army Corps of Engineers (USACE)—UMCS IV
 - Contract No.: W912DY-15-D-0003
- United States Postal Service—USPS Facilities
 - Contract No.: 4BSHSE-16-B-0075
- Department of the Air Force—ALC MAC/PCCIE MAC
 - Contract No.: FA8217-10-D-0002



Electrical reliability

Turnkey solutions for “always on” power reliability

Delivering confidence in power system availability through technology for critical infrastructure that minimizes risk, reduces costs and protects mission-critical facilities.

Electrical reliability offerings

Critical power solutions

- Professional consulting services
- Modular integrated transportable substation—a turnkey engineering substation solution
- Intelligent mobile power distribution system
- Substation and power system design
- Alternative power generation design, engineering and grid integration
- Mission-critical design/build, turnkey services (prime contractor)
- Substation and ground grid design
- Prefabricated control houses
- Programmable logic controller (PLC) automatic transfer schemes
- Utility grid management and monitoring systems
- Demand management
- Peak shaving

Renewable and distributed energy system solutions

- Microgrid design, engineering and installed system
- Resiliency Studies: Microgrid and distributed energy resource interconnection feasibility studies
- Microgrid energy system (MES) with the Power Xpert Energy OptimizerE controller: a microgrid/energy storage control system that, by design, simplifies control system configuration, testing, project cycle time and future adaptability to changing microgrid assets.
- Intelligent mobile power distribution system for forward operating bases (FOB): transforms an independently operating system of generators into a demand managed microgrid, assists to prevent grid collapse caused by generator fault, providing a constant, safe supply of power. Tested to reduce generator fuel consumption by greater than 30%

Facilities and systems optimization

Turnkey solutions for a safer, more reliable power system

Maximizing current power distribution, control and systems through retrofits, reconditioning, maintenance and replacement solutions that will optimize your operation performance with current technologies.

Facilities and systems optimization offerings

OEM equipment services and upgrades

- Westinghouse/Cutler-Hammer/Eaton/Cooper
- Square D
- General Electric
- ITE/ABB
- Allis-Chalmers/Siemens
- Federal Pacific/Federal Pioneer
- Others

Facility assessments

- Short-circuit analysis
- Protective device coordination
- Load flow analysis / power factor correction study
- Motor starting study
- Harmonic analysis study
- Power quality site surveys and disturbance monitoring
- Field harmonic measurements
- Transient stability study
- Protection and control design
- Advanced design and analysis
- Switching transient analysis
- Distribution systems reliability analysis
- Dynamic simulation

Switchgear modernization and upgrade solutions

- Low- and medium-voltage Class 1, 2 and 3 breaker reconditioning
- Solid-state low-voltage trip unit retrofits and upgrades
- Low-voltage air replacement breakers
- Medium-voltage vacuum replacement breakers
- Low-voltage VSR (breaker to motor starter replacements)
- Medium-voltage VSR
- Upgrade equipment front door metering and relaying
- Horizontal main bus upgrades
- High resistance grounding systems
- RPR-2 remote power racking systems

Turnkey project and construction management

- Single-point responsibility throughout the entire project
- Centralized project management group
- Standardized documentation practices including scheduling, reporting and project closeout
- Installation services including nationwide subcontracting capability of all trades with on-site supervision

Support services

- Start-up and commissioning
- Training
- Preventative and predictive maintenance

Electrical products and services
PH: 877 ETN CARE

Emergency response line
PH: 800.498.2678

Locate an Eaton services office
Eaton.com/service

Eaton's government services' website
Eaton.com/govt



Electrical safety

Solutions to protect people, property and the mission

Eaton's solutions stress prevention, protection and preparation. We offer a broad range of electrical safety solutions including the industry's most comprehensive suite of arc-flash-related products and services.

Safety offerings

- Electrical safety training
- Arc flash compliance programs
- Arc flash hazard analysis
- Arc flash hazard training
- Grounding studies
- Performance-based maintenance (PBM)
- Coordination and short-circuit studies
- Crisis planning and response with 24/7 emergency services
 - Pre-crisis risk mitigation audits
 - First responder and operational training
 - Significant refurbishment and repair capabilities in addition to a comprehensive portfolio of replacement products
 - Expertise in critical staging of support equipment, including generators, temporary and satellite communication networks
 - Single point of contact to coordinate activities and mitigate project risks

Powering business worldwide

Eaton's electrical business is a global leader with expertise in power distribution and circuit protection; backup power protection; control and automation; lighting and security; structural solutions and wiring devices; solutions for harsh and hazardous environments; and engineering services.

Eaton is positioned through its global solutions to answer today's most critical electrical power management challenges.

With 2018 sales of \$21.6 billion, Eaton has approximately 99,000 employees and sells products to customers in more than 175 countries.

For more information on Eaton Power solutions for state and local government, please contact us today.

Energy management

Meet the challenges of a world that demands more

Providing a portfolio of energy efficient solutions dedicated to enabling sustainable operations through improving, reducing and managing power.

Energy efficiency offerings

- Alternative/distributed power generation design, engineering and grid integration
- Energy storage system design engineering and grid integration
- Design and installation of energy management and monitoring systems
 - Power monitoring systems (EPMS)
 - Monitoring solutions: power quality and energy management
 - Demand management systems
- Mission-critical efficiency upgrades
- Power systems optimization
- Demand management and peak shaving
- Control system modernization and upgrade
- Motor control systems integration to parent system
- Control and power systems analysis

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