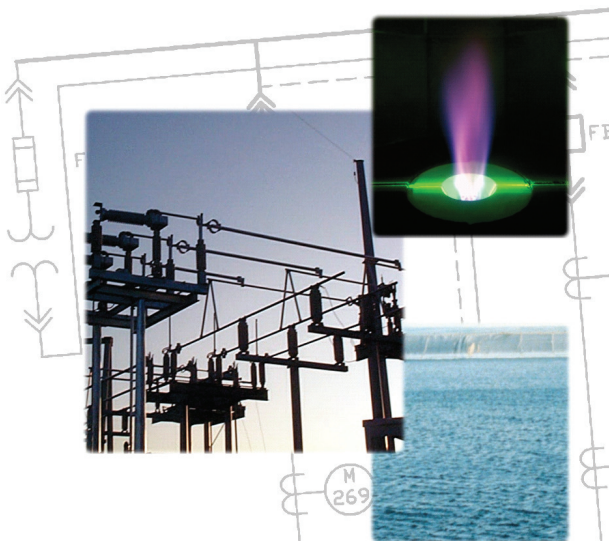




**D.L. STEINER, INC.**  
ENERGY CONSULTANTS AND ENGINEERS

# Energy Solutions

*Field-Proven Services & Products for High-Performance Energy Systems*



- **Design & Administration Services**
- **Power Quality Services**
- **Energy Management Services**
- **Electrical Safety Services**  
*(Featuring Arc Flash Analysis)*
- **Electrical Predictive/Preventive Maintenance (EPPM) Program**
- **Safety Products/Resources**



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# Maximum Benefit from *All* Your Energy Resources

**N**o matter what business you're in, energy is at the heart of your operation, running processes, powering equipment, heating buildings, and keeping the lights on. It's the unseen force that makes your company go. Getting the most benefit from the energy you use requires energy systems that are designed to deliver maximum performance.

Since 1988, D.L. Steiner, Inc. has been providing *total energy solutions* for clients from a range of industries, helping them implement and maintain energy systems that are well designed, reliable, efficient, safe, and environmentally responsible. With our years of proven experience, you're sure of economical, high-performance energy systems that meet your energy needs—both now *and* as your company grow!

***Let D.L. Steiner assist you with...***

## **Design, Power, Energy, and Safety Services**

### **Engineering and Related Disciplines**

#### **Power System Design**

Complete design services: generation and distribution systems, overhead power lines, substations (indoor, outdoor, utility), motor controls, system retrofits, and emergency systems.

#### **Project Administration**

Efficient, professional system planning and supervisory services: feasibility studies, project cost analysis, and project management.

#### **CAD Services**

Versatile AutoCAD-based drafting services: single-line diagrams, schematics, floor plans, panel layouts, and cable/conduit diagrams; paper-to-digital conversion; DWG to PDF conversion.

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## Power Quality Services

### Power Studies

- *System Surveys*—Evaluate the power system’s capabilities in terms of present and future needs.
- *Line Quality Studies*—Identify the sources of system power failure.
- *Power Profiling*—Quantify electric consumption rates and recommend alternatives for achieving more efficiency.
- *Grounding Studies*—Assess the system’s earth ground, bonding method, and equipment grounding.

### Disturbance and Harmonic Analysis

Locate the causes of momentary system outages and harmonic distortions in order to prevent or minimize their long-term damaging effects on the power system.

### Power Factor Analysis, Power Factor Correction and Filtering

Reduce the system’s nonproductive power draw, increasing efficiency and decreasing utility costs. Implement turnkey correction and filtering solutions.

### Load Studies

- *Load Surveys*—Accurately profile the system’s load characteristics and requirements over time.
- *Load Flow Analysis*—Determine if the system has adequate capacity to support present loads, as well as anticipated future loads.

### Reliability Analysis

Assess the electrical power system and recommend design, operation, and maintenance improvements to increase its reliability and availability.

## Energy Management Services

D.L. Steiner’s staff qualifications include the *Certified Energy Manager* (CEM) designation, enabling us to deliver knowledgeable solutions that help you better manage *all* your energy resources, not just electricity.

### Energy Measurement

Incorporate real-time system monitoring and measurement for improved operations, reduced energy con-

sumption, better diagnostics, faster responses to alerts, and accurate energy usage allocations.

### Energy Assessments and Audits

Identify opportunities to save energy through system additions or retrofits that meet your expectations for energy consumption and cost reductions, as well as for operating performance.

### Utility Coordination and Usage

Ensure successful installation or modification of electrical service and other utilities, and accurately measure the amount of each utility being consumed during specific time periods.

### Monitoring, Control, and Automation

Implement remote, centralized energy system operation, reducing instrumentation while promoting better status detection, demand control, and problem response.

### Energy System Integration

Integrate alternate and renewable energy technologies into existing energy systems for more reliable and environmentally friendly operation.

## Electrical Safety Services

### Safety Studies and Analysis

- *Short Circuit Studies*—Identify the short circuit currents of system buses and branches.
- *Protective Device Coordination Studies*—Isolate electrical faults and minimize the effects of short circuits on the rest of the system.
- *Arc Flash Analysis*—Evaluate the system’s susceptibility to shock, arc flash, and arc blast, plus mitigate or eliminate these hazards.

### Electrical Hazard Safety Labeling (of Electrical Devices)

Produce and install NFPA 70E-compliant, UV-resistant vinyl labels that list the shock and arc flash hazard details of electrical devices, and the safety precautions personnel should observe when working on or near these devices.

*The vision of D.L. Steiner, Inc. is to be the first engineering firm that business and industry turn to for total energy solutions: energy systems that are well designed, reliable, efficient, safe, and environmentally responsible.*

## **Electrical Safety Training**

On-site, live training courses to instruct qualified and unqualified employees in the NFPA 70E- and OSHA-mandated standards for workplace electrical safety.

## **Safety Audits and Program Reviews**

In-depth review of your electrical facilities and related areas to identify potential issues that may affect compliance with OSHA regulations and consensus industry standards for electrical safety.

## **Safety Policies and Procedures Development**

Detailed, custom-written instructions addressing specific electrical safety needs, for example, lockout/tagout, electrical safety permits, job briefings, and switching procedures.

# **Maintenance and Safety Products/Resources**

## **ReBEEMS EPPM Program**

ReBEEMS (*Reliability-Based Electrical Equipment Management System*) is an Internet-based database program that helps you effectively manage your electrical predictive/preventive maintenance (EPPM) and safety programs to meet NFPA 70B and 70E requirements. ReBEEMS makes all of your electrical system data available online, 24/7/365, via any device with a Web browser. Use ReBEEMS to access:

- Maintenance-testing data for transformers, switchgear, breakers, fuses, relays, and cables
- Bus data (busways, bus plugs and plug fuses, power panels, control panels)
- Maintenance records, equipment manuals, electrical drawings, action items, and more

## **Electrical Personal Protective Equipment (PPE)**

D.L. Steiner is your distributor of choice for PPE items that meet the requirements of today's electrical safety standards:

- Fire-retardant garments
- Arc flash suits, hoods, and face shields
- Voltage-rated gloves and tools



- *Haz-Cat Series* kits (complete, arc-rated electrical safety kits)

## Electrical Safety Educational Resources

- *The Electrically Safe Workplace—the NFPA 70E and You!* DVD and workbook
- *NFPA 70E Standard for Electrical Safety in the Workplace, 2012 Edition*

## Workplace Safety Training Courses

Along with electrical safety training, D.L. Steiner offers courses in other important workplace safety topics—*comprehensive, effective* training to keep you safe on the job:

- Lockout/tagout
- Confined spaces (with rescue planning)
- Fall prevention
- Hazard communication

**I**n today's competitive world, simply having access to energy is not enough. Success depends on wise, economic use of these vital-but-expensive assets. And for this, you need more than just energy services—you need *energy solutions*.

At D.L. Steiner, we specialize in developing reliable, safe energy systems that offer tight control over monitoring and consumption so you can finally implement an efficient, effective *energy management strategy*. For energy systems that deliver maximum benefit from *all* your energy resources, contact D.L. Steiner. Let us deliver *total solutions* to your energy needs!



D.L. Steiner, Inc. • [www.dlsteiner.com](http://www.dlsteiner.com)

Email [sales@dlsteiner.com](mailto:sales@dlsteiner.com)

P.O. Box 1157 • Lima, Ohio 45802

Tel (419) 222-6048 • Fax (419) 222-6170

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