



PREMIUM POWER CONTROL FOR TRUE POWER QUALITY

Tailored Solutions For The Electric Utility Industry

The background image is a composite of industrial scenes. The top left shows a close-up of a large, dark, cylindrical component, possibly a transformer or part of a turbine, with a metal staircase leading up to it. The middle section shows a control room with several computer monitors displaying data and graphs. A man in a white lab coat and hard hat is seen in profile, looking at the screens. The bottom section shows a close-up of a large, red, cylindrical component, likely a circuit breaker or a similar high-voltage device, with a metal spring mechanism. The overall color palette is dominated by blues, greys, and oranges, with a bright, hazy light effect in the upper right corner.

Power Availability

Power Protection

Power Conversion/Distribution

Heat Removal/Precision Air Conditioning

Monitoring/Service



THROUGHOUT THE ELECTRIC POWER INDUSTRY, LIEBERT HAS THE PRODUCTS AND EXPERTISE TO TAILOR THE BEST SOLUTION

HELPING YOU DELIVER CONTINUOUS, HIGH QUALITY POWER

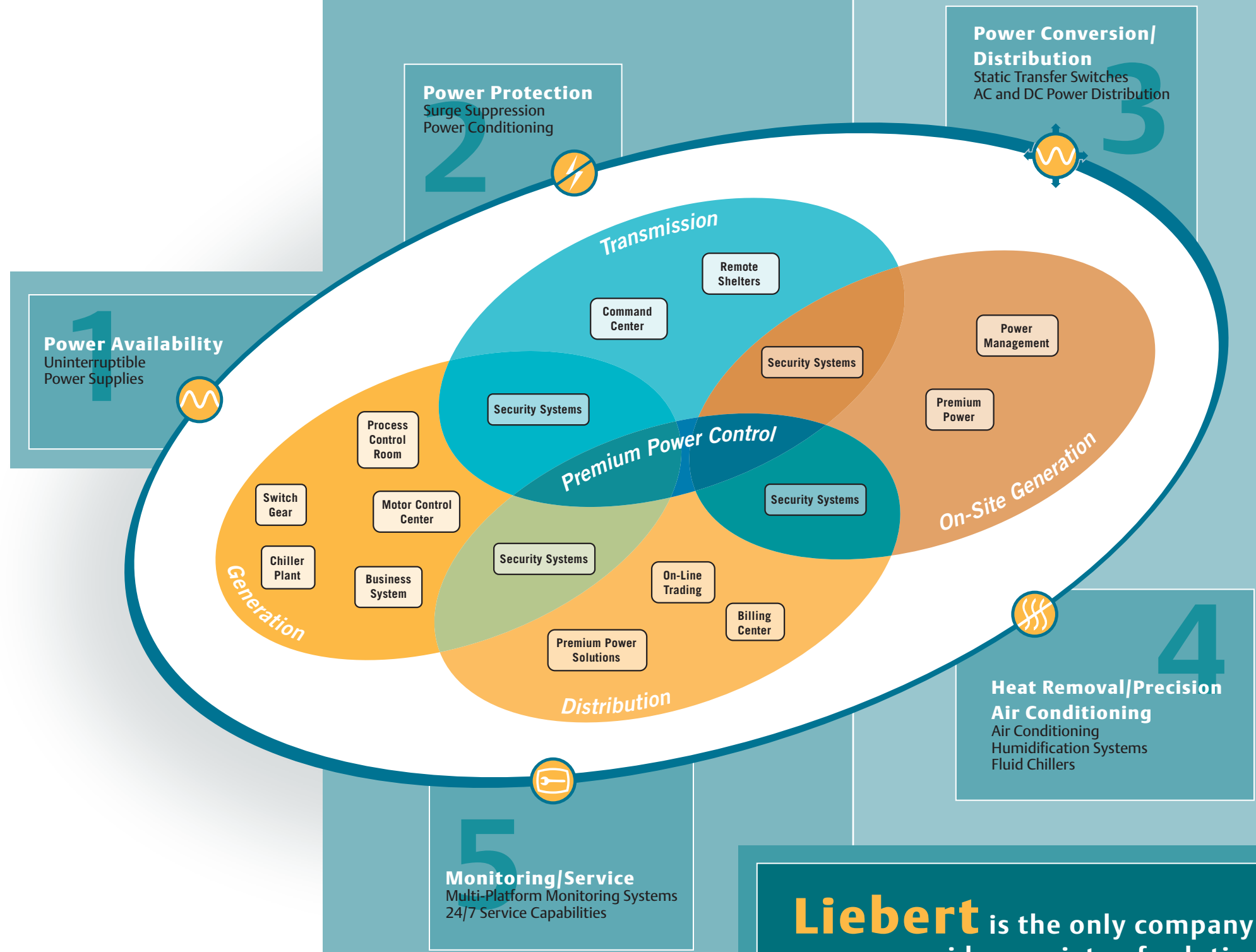
The rapid growth of digital technology has drastically increased the need for delivering higher quality electric power to mission-critical systems. Whether it is the power you use to help generate electricity – or the power you sell to your customers, the quality and availability of power has become a major issue in the industry. Now there is a single source you can turn to for the widest range of power quality solutions. Liebert is the one company that can help you create premium power.

The Five Keys To System Availability


There are five distinct areas of protection that must be addressed to maintain the highest levels of system uptime:

- 1 Power Availability**
Reliability depends on the continuity of power and the ability of an uninterruptible electrical supply to ride through outages of any duration.
- 2 Power Protection**
Raw utility power may be unsuitable for sensitive systems. In these situations, surge suppression and power conditioning can deliver the power quality you need.
- 3 Power Conversion/ Distribution**
Converting and delivering power throughout a large facility is an important step in protecting availability.
- 4 Heat Removal/Precision Air Conditioning**
Precision air conditioning, specialized enclosures and rugged remote protection can protect control rooms and equipment from heat and air impurities.
- 5 Monitoring/Service**
Knowing what is happening with your support equipment – and keeping that protective “envelope” at peak operating efficiency – are vital to system reliability.

The Five Keys To System Availability



Liebert is the only company that can provide a variety of solutions in all five of these key areas.



NO MATTER WHAT PART OF THE POWER INDUSTRY YOU SERVE, THERE IS A LIEBERT SOLUTION TO HELP YOU DO IT BETTER

In a changing electric industry, there is one constant: Liebert's understanding of how to assure power quality and continuous system availability. From protecting a single piece of equipment to an entire facility, there is a Liebert tailored solution to fit the needs of you and your customers:

Generation

Whether you are producing basic energy or filling peak demands, power generating plants have unique requirements for continuous operation of the process control systems that keep these facilities up and running. Around-the-clock operation creates severe demands on equipment performance and maintenance requirements.

Power plants require high-reliability Liebert uninterruptible power supply (UPS) systems to supply clean, constant power to support these critical systems. We are the knowledge leaders in the application of true double-conversion power protection technology for process controls, MCC centers, chiller plants and office systems.

Transmission

If you are a Regional Transmission Organization (RTO) or Independent Transmission System Operator (ISO), you know that system reliability is absolutely necessary. You are responsible for maintaining operation of the power grid that delivers power from generator to purchaser.

Control centers operated by these organizations allow for real-time oversight and administration of bulk electric system activity in their regions. Computer systems continually analyze forecasted and actual system conditions, load and congestion management, transmission security and billing. Extensive voice and data communication networks enable constant communication between various transmission systems.

Liebert offers these facilities its unequalled expertise in the protection of mission-critical data centers and control rooms. From precision environmental control to uninterruptible power to total system monitoring, we have the proven capability to deliver maximum availability.

Distribution

As an energy services company (ESCO) or power broker, you are providing electric power to commercial and industrial customers in many new ways. By offering value-added services to your customers, such as high-availability electric power and load reduction services, you are creating new and profitable business opportunities.

Each customer application is different, only Liebert can offer the breadth of product solutions to help you solve unique customer demands for power quality. We can help you turn commodity electricity into premium power. The combination of our knowledgeable network of local Representatives and unequalled service capability give you the support wherever it is needed. Our experience in many different end-user markets gives us an application edge that will help you serve a wider variety of customers.

On-Site Generation

Producing on-site power creates a number of power quality challenges. Whether you are using cogeneration to produce all of your energy, or simply using a generator system to provide back-up power for a critical facility, there is a need to address power continuity and quality issues.

For example, cogen systems require continuous power for the various control systems that operate the equipment, while gensets require equipment that will enhance power quality during periods of utility outage.

Regardless of the power source — utility, generator, fuel cell, microturbine — Liebert has the ability to provide unique solutions to assure continuous, high quality power. We can create a high-level power control plan, including conditioning, distribution, monitoring and the other keys to high availability. We can assist you with peak shaving, demand reduction and dual redundant strategies.



EMERSON: YOUR PARTNER IN PREMIUM POWER CONTROL

Emerson Network Power

As part of the Emerson Network Power Group, Liebert is uniquely positioned to join with other Emerson divisions to offer complete power quality solutions. This capability also includes Liebert Global Services — the industry's largest service and support organization dedicated to maintaining the availability of critical power systems.

In addition to Liebert, several other Network Power Group divisions are also focused on the needs of the electric utility industry:

ASCO Power Technology — the world leader in emergency and standby power transfer solutions. ASCO automatic transfer switches and power systems safeguard data and telecommunications networks, industrial process and critical installations from health care facilities to financial transaction centers.

Copeland Scroll Compressors — low-pressure natural gas compression technology. Manufactures fuel delivery systems utilizing scroll compressor technology for distributed power applications, including microturbines, gensets, and fuel cells.

Kop-Flex — heavy-duty, industrial shaft couplings and technology.

Emerson Process Management

The Emerson Process Management Group is also strongly aligned with the electric industry. Emerson systems are capable of controlling and monitoring not only processes but also support equipment. This includes products from Emerson Network Power such as ASCO switchgear and Liebert precision air conditioning and power systems — all of which can communicate with Emerson process management through dry contacts or SNMP. This group covers several product areas and includes:

Systems and Software:

Asset Management Solutions — software solutions for streamlining all maintenance activities relative to instrumentation and valves in a process plant.

Fisher-Rosemount Systems Delta V™ Automation System — from a suite of digital busses, to embedded advanced control, to easy enterprise integration and optimization, the DeltaV system delivers precision control and predictive maintenance.

PlantWeb® Field-Based Architecture — an automation solution that delivers asset management, process control and management execution through three key components: intelligent field devices, standards and platforms, and integrated modular software.

Westinghouse Process Control — the leader in providing innovative automation, process management, and enterprise integration solutions for power generation and a variety of other industries.

Measurement And Analytical:

Brooks Instruments — a technologically diverse line of flow measurement and control instrumentation for laboratory, industrial, and semiconductor applications.

Daniel — a leading provider of integrated process solutions in fluid measurement, flow control, actuation, and analytical products, services, and integrated solutions.

Rosemount Transmitters — solutions for your pressure, temperature, level, and flow measurement instrumentation.

Rosemount Analytical — offers a comprehensive line of analyzers and systems for efficiency, quality, and environmental analysis solutions.

Final Control:

Daniel Valves — self-activated pressure balanced, pilot operated valves, which can be configured to perform a wide range of low control functions in a variety of applications.

Fisher Valves — the world leader in providing reliable control valves, regulators, instrumentation and performance services to the process control industries.

The Emerson Performance Solutions™ Group

Performance Solutions combines the smart device diagnostics, monitoring and control capabilities of the Emerson Process Management PlantWeb architecture with consulting and implementation services on projects throughout the world. Services range from device and loop monitoring and repair, plant optimization studies and project justification to systems integration and project management. Performance Solutions has the expertise, funding resources, and service and support infrastructure to deliver guaranteed profitability performance to your operations.

Pick One:

Someone who bends your needs to fit their product

Someone who configures a solution for your unique needs

If you checked the second box, talk to us.

Simply put...

no other source has the products, application knowledge and service resources to meet your total need for **“high nines”** reliability in the Electric Utility Industry

For complete information, visit us at www.liebert.com

WE HELP YOU GET IT RIGHT — RIGHT FROM THE START.

Tailored Solutions For The Electric Utility Industry

For over 35 years, Liebert has been providing tailored solutions for protecting the operation of critical electronic systems in a variety of industries. From customer premise equipment to global networks, we've used our expertise to tailor the right products, monitoring systems and global service capabilities into a variety of specific solutions.

Liebert's years of experience and knowledge of leading edge technologies enables us to truly understand your needs — both in terms of overall reliability and specific areas of equipment protection. Whether it's a new or existing facility, centrally located or remote, we listen to you and your preferences to help us develop solutions that are right for your facilities.

We recognize that each situation has its own unique requirements and are better prepared than any other manufacturer to deliver the right level of reliability at the right price. And we do it through the right combination of knowledge, experience, product selection and service capability.

Someone Nearby To Help Before And After The Sale

Specifying and maintaining a high availability facility support system requires someone who is knowledgeable in all phases of environmental and power protection. And knowing where to turn for ongoing maintenance or service is just as important.

One of the many things that differentiate Liebert from others in our business is local expertise. We have the most extensive sales and service network in the world. Liebert's extensive network of technical sales associates, backed by the industry's largest service organization, enables us to respond quickly to customer needs.

Liebert is the one company that truly knows and understands your critical facility's total need for power and environmental protection.



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