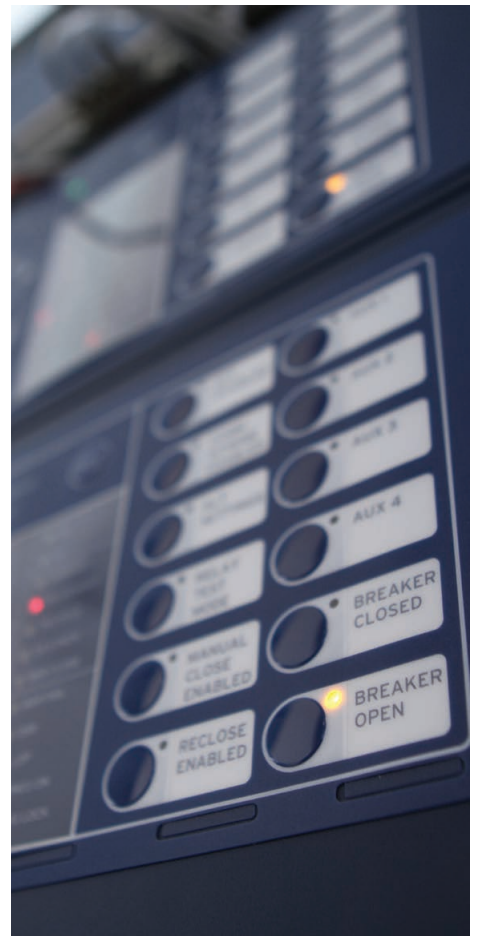
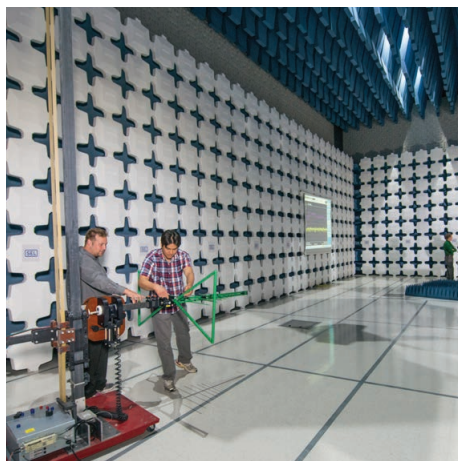
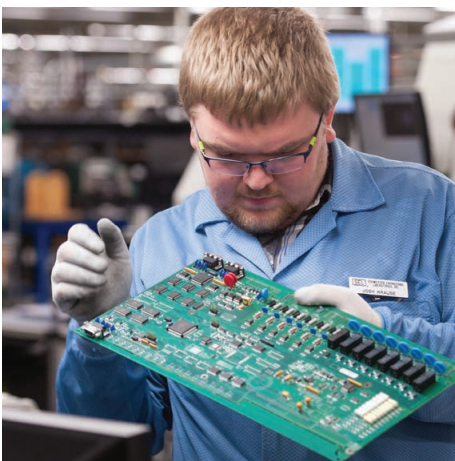




# Corporate Overview





## Letter From the President

At Schweitzer Engineering Laboratories, Inc. (SEL), our mission is to make electric power safer, more reliable, and more economical. SEL was founded in Pullman, Washington, in 1982, with the invention of the first all-digital protective relay, which revolutionized the power industry by reducing the cost and complexity of power protection. Today, we invent, design, manufacture, and support products, services, and solutions that protect today's power systems. We serve a broad range of industries, including pulp and paper, transportation, water and wastewater, education, healthcare, government, mission-critical facilities, and oil, gas, and petrochemical operations. In addition to our products, SEL provides engineering services and government services. We are committed to delivering unmatched value in our products and services. All SEL products are designed to meet the highest quality standards and ensure personnel safety.

SEL owns and operates four state-of-the-art manufacturing facilities, three in the United States and one in Mexico. Our largest manufacturing facility, with more than 200,000 square feet of manufacturing space, is located at our company headquarters in Pullman, Washington. We also operate a facility in Lewiston, Idaho, where we manufacture cables, plastics, transceivers, and industrial products. In Lake Zurich, Illinois, the SEL Fault Indicator and Sensor Division (FISD) designs and manufactures products that reduce fault-finding time and promote quick restoration of power after a fault occurs. In Mexico, our San Luis Potosí facility manufactures panels and drop-in custom enclosures, and specializes in customized enclosure installations.

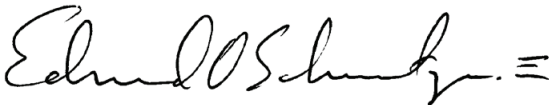
In addition to our manufacturing centers, SEL provides local application assistance and exceptional customer support from more than 50 offices in the United States and more than 40 offices worldwide. We put our customers first. People, not automated systems, answer our phones, and SEL engineers visit our customers to answer questions and address challenges when needed. SEL's 89,000-square-foot Solution Delivery Center, located at our headquarters in Pullman, is a dedicated space where customers can perform on-site factory acceptance tests.

SEL offers a wide range of dynamic and rewarding careers, from manufacturing and engineering to marketing and human resources. We are 100 percent employee-owned and conduct business following a strong set of core values—quality, customer focus, discipline, communication, integrity, creativity, community, ownership, and dignity of work. SEL employees think like owners while embodying the core values that have led to our continuing success. SEL employees across the country enrich and improve the lives of our neighbors by participating in community-minded programs, such as disaster discounts, United Way, blood drives, Coats for Kids, school supply drives, and sending care packages to our troops.

SEL offers a family-oriented atmosphere. We are devoted to learning, innovation, safety, and wellness. Personal milestones, career achievements, and company-wide goals are all shared and celebrated among our SEL family. In 2012, SEL earned a place on the FORTUNE® 100 Best Companies to Work For in America list based on SEL's values-based culture and a survey of our employee owners. SEL's reputation for outstanding customer service and technical support as well as our ten-year, no-questions-asked, worldwide warranty are second to none.

All of us at SEL are proud to serve our industry, and we look forward to working with you this year and for many years to come.

Sincerely,



Edmund O. Schweitzer, III Ph.D.  
President





# Company Overview



**Making Electric Power Safer, More Reliable, and More Economical**  
SEL Corporate Headquarters, Pullman, Washington, USA



SEL Manufacturing Facility, Pullman, Washington, USA



SEL Manufacturing Facility, Lewiston, Idaho, USA

SEL designs, manufactures, and supports a complete line of products and services for the protection, monitoring, control, automation, and metering of electric power systems. Our solutions range from comprehensive generator and transmission protection to distribution automation and control systems.

In each of our four world class manufacturing centers, we maintain a close relationship between Manufacturing and R&D, which enables us to rigorously adhere to high-quality standards, beginning with initial designs and extending through manufacturing and field support. We design and manufacture fault indicators and sensors in Lake Zurich, Illinois, and panels and control houses in San Luis Potosí, Mexico. Our other product lines are manufactured at our corporate headquarters in Pullman, Washington, and at our facility in Lewiston, Idaho.

In addition to manufacturing, SEL provides services, education, and support for a variety of industries. Our Government Services Division is dedicated to the security, safety, and reliability of electric power at facilities ranging from ships to military bases, while our Engineering Services Division provides engineering expertise and system solutions to customers worldwide. SEL University offers training that helps our customers meet the technical challenges of integrating digitally based technologies into the expanding power system infrastructure.

We work daily to succeed at our mission—to make electric power safer, more reliable, and more economical—by focusing on innovation, quality, and customer service.



SEL Mexico, San Luis Potosí, Mexico



SEL Fault Indicator and Sensor Division, Lake Zurich, Illinois, USA

# Innovative Research and Development

## Innovation

At SEL, we are passionate about our work, knowing it contributes directly to improving the reliability of electric power, keeping people safe, and helping customers conserve resources through efficiency, simplicity, and creativity. The superior features and cost-saving technology we design reflects the constant two-way communication we have with our customers.

We develop innovative products and services by focusing on the challenges our customers face. This helps us create the best solutions for a wide range of industries and applications. Because SEL equipment becomes part of critical—and complex—infrastructure, ranging from the electric power grid to processing and manufacturing facilities, we also focus on long-term reliability and quality. SEL backs these commitments with an unmatched ten-year warranty, no-charge diagnostic and repair services, local support, and a variety of test procedures and certifications.

## Quality

State-of-the-art manufacturing facilities reflect SEL's commitment to offering customers unmatched value in products and services. We lead in price, quality, features, innovation, delivery, and service. We practice lean manufacturing techniques to keep costs low and to provide a better value for our customers.

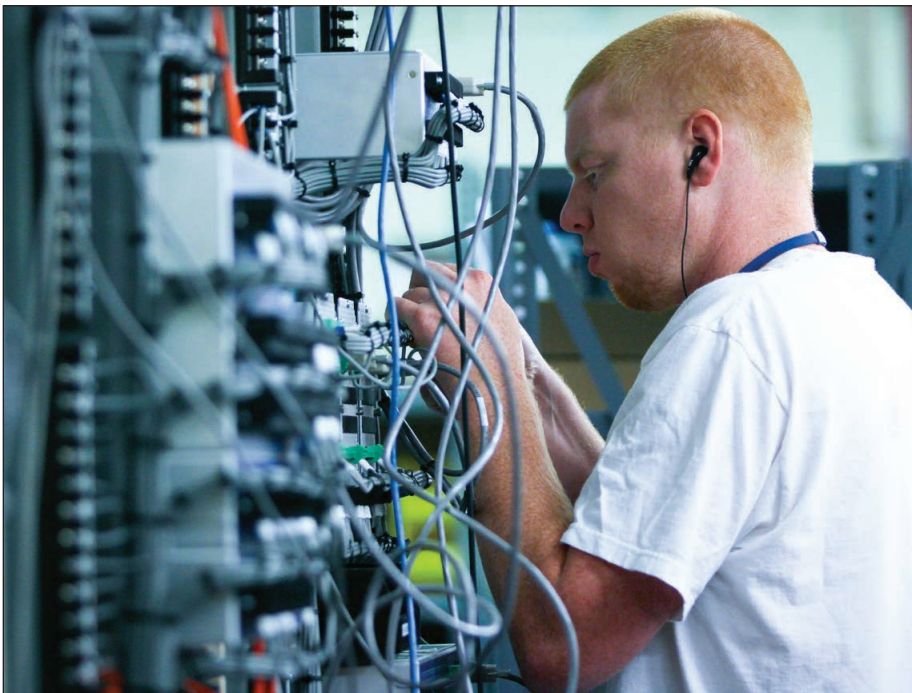
In the spirit of continuous improvement, SEL designs new ways to reduce waste and make our products more reliable. To ensure superior, reliable functionality, we test our products thoroughly and verify that they will perform for decades under demanding and harsh conditions. SEL complies with the highest quality standards—such as IPC-A-610 Class 3 and ISO 9001:2008—and constantly exceeds those requirements, and customer expectations, in specific ways:

- Monitoring and controlling processes to exceed the ISO 9001:2008 Quality Management Systems Standard
- Developing robust, repeatable, and scalable manufacturing processes to address design and process errors
- Ensuring that our test and calibration laboratories use the latest equipment and follow National Institute of Standards and Technology (NIST) traceable standards for accuracy and maintenance
- Partnering with our suppliers for the highest possible quality and value



“As engineers, we work every day to invent, design, and support products that monitor, control, and protect power systems installed all over the world. Serving our industry is a tremendous privilege and responsibility that we take very seriously. Listening to our customers’ requirements and needs, we strive to make our solutions innovative, reliable, easy-to-use, and secure. We invest in our people, tools, and facilities in order to produce designs that exceed our customers’ requirements. Engineering is our middle name, and it’s what we love to do.”

Dave Whitehead  
Vice President, Research and Development





# Superior Customer Service and Support



The SEL Solution Delivery Center is an innovative product acceptance center where customers can see their equipment and systems in action prior to delivery.

“SEL serves an ever-widening range of industries. Although we started with electric power utilities 30 years ago, we are actively reaching out to other industry segments: petrochemical, pulp and paper, water and wastewater, pharmaceuticals, metals and mining, and more. As we do, we learn the specific needs of these segments, and we develop and adapt our offerings accordingly. The Solution Delivery Center allows us to meet and exceed customer requests and adaptations, and also to invent entirely new products and solutions.”

Edmund O. Schweitzer, III Ph.D.  
President



“This was our first purchase of a complete control house from an outside vendor. SEL provided a competitive bid, a flexible design process, and excellent cooperation throughout the construction process. The final product is the best control house we have on the system.”

James W. Rice  
Plumas-Sierra Rural Electric Cooperative

## Customer Service

Our commitment to quality extends through a product’s installation and life as part of our customers’ critical infrastructure. With SEL products and solutions in more than 140 countries, we stay close to our customers, ensuring the best possible user experience.

We understand the importance of local support, which is why we have application and integration engineers, customer service representatives, and sales managers in over 50 offices in the United States and in more than 40 internationally. The SEL network of independent sales representatives and distributors provides additional sales support in many regions.

In an effort to help our communities and support our customers, SEL has a standing commitment to offer a 10 percent discount on all products destined for natural disaster relief. When major disasters occur, leaving residents without electric power, we rush deliveries and provide field support to restore power as quickly as possible.

Our outstanding customer service and support reflect who we are. SEL’s commitment to serving our industry is consistent with our corporate responsibility and ethics. We believe strongly in our core company values, which are not only an essential part of our working environment, but also the way we view our community, industry, and the natural environment.



## World Class Manufacturing

## History

Edmund O. Schweitzer, III, founded SEL in 1982 in Pullman, Washington. The company introduced the world's first digital protective relay to the electric power industry in 1984. That same year, Otter Tail Power Company in Fergus Falls, Minnesota, became SEL's first customer. The first SEL digital relay, the SEL-21, revolutionized the power protection industry by providing fault locating and real fault data at a much lower cost to the customer than traditional electromechanical relays. With the introduction of the load-encroachment element for feeder protection, synchrophasors as a standard feature in protective relays, and MIRRORING BITS<sup>®</sup> relay-to-relay communications, we continue to set the standard for technology.

In 1994, SEL became an employee-owned company. In 2009, we achieved our long-term goal of 100 percent employee ownership, providing the company with the framework necessary to continue to grow quickly and provide a lasting commitment to our industry, customers, employees, and community.

E. O. Schweitzer Manufacturing, a company started by Edmund O. Schweitzer Jr. in 1950 to design and manufacture faulted circuit indicators and sensors, is now the Fault Indicator and Sensor Division of SEL. Because fault indicators complete the job that protective relays begin by leading line crews directly to a fault's location, the joining of the two companies provides SEL customers with a more complete solution for distribution fault locating.



In a recent independent study conducted by the Newton-Evans Research Company, international utilities ranked SEL first in overall customer experience. Among North American utilities, SEL ranked first as a protective relay manufacturer in all categories, including technology, price, features, security against hackers, technical support, web information, ease of use, and maintenance costs.



"In Manufacturing, we differentiate ourselves through the quality of our products, customer service, delivery, and value. The idea of continuous improvement of processes has been ingrained in all of us. Improving quality and efficiency, while reducing lead times and total costs, is just part of our ongoing improvement goal. We use both automation and training to make our processes more robust and our goals achievable. It is important to me that our industry knows that our focus in Manufacturing is on the customer. Whatever it takes, we want to make sure our customers are happy. If there is a problem, we do everything we can to get to root cause and solve it, and we don't believe we have gotten to root cause until we can cycle the problem off and on."

Kevin Fritch  
Vice President, Operations



# Industries Served



### Electric Power Generation

SEL's power interconnection, protection, communications, control, and metering equipment is ideally suited for utility-, industrial-, and commercial-scale power generation systems. SEL solutions protect and control base load, peaking, and stand-by generators of every size and

fuel type. Our automatic generation control (AGC) and synchrophasor technology give system operators unprecedented diagnostic and control capabilities to maximize power output, stability, efficiency, and reliability.



### Electric Power Transmission and Distribution

SEL leads in the protection, monitoring, and control of electric transmission and distribution lines, apparatus, and stations. Our protective relays, substation and distribution automation systems, cybersecurity devices, automation controllers, and networking

equipment work together to provide protection, SCADA, automation, monitoring, and asset management.



### Oil, Gas, and Petrochemical

Around the world, SEL makes electric power safer, more reliable, and more productive for oil, gas, chemical, and petrochemical companies. From platforms in the North Sea, refineries in the deserts of Saudi Arabia, biofuel plants in the United States, oil sands upgrades in Canada, and

SCG/LNG terminals in Australia, over 700 industry customers rely on SEL solutions for production, quality, equipment, and employee safety.



### Renewable Energy

SEL substation solutions include Job Done® control enclosures that are delivered fully tested and ready for service. Wind, solar-thermal, solar-PV, geothermal, and waste-to-energy systems commonly employ SEL intertie, synchrophasor, and metering solutions so that energy flows

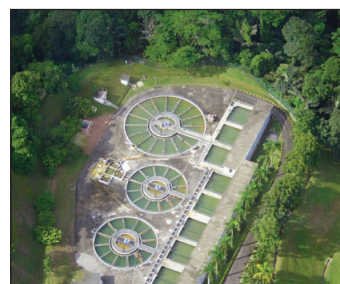
are protected, properly metered, and delivered to the grid without interruption. Our faulted circuit indicators (FCIs) help system operators troubleshoot cabling problems quickly and minimize downtime.



### Metals and Mining

SEL equipment handles extreme operating environments with ease and ensures reliable power under the most demanding conditions. Our medium- and low-voltage protective relays easily retrofit into existing metal-clad switchgear and include our innovative arc-flash technology

to protect equipment and personnel. Our industrial computing and communications products improve the reliability of human-machine interfaces (HMI) with simple, intuitive software that empowers employees with real-time power system information.



### Water and Wastewater

SEL motor protection solutions substantially improve motor and pump operations by employing thermal models to optimize motor starts and reduce equipment wear. Additionally, our power quality and revenue class meters help reduce energy bills and identify power problems before they damage

equipment. Our reputation for equipment reliability is substantiated with a ten-year, no-questions-asked warranty. Our field engineers are available with application and operations know-how, at no charge, from local offices.





### Pulp and Paper

SEL power system, communications, and automation products are ideally suited for pulp and paper plants, especially those with cogeneration assets. By integrating process- and power-control systems, SEL products deliver new efficiencies that often aren't seen through single-purpose control

networks. Our library of industry-standard protocols makes integration easy, and our secure, robust communications platforms bring speed and reliability to data communications and control networks.



### Mission-Critical Power Systems

SEL's communications, networking, precise-time, cybersecurity, and electric power protection products are designed for facilities that must maintain the highest level of online availability. SEL is uniquely qualified to integrate utility power sources, standby generation, and uninterruptible power supply

(UPS) assets within a seamless power system network. The control logic in SEL protective relays, combined with our real-time automation controllers, can eliminate PLCs and redundant control wiring while reducing complex software requirements, lowering costs, and improving system reliability.



### Government

Government facilities employ expanding information technology (IT) and mission-specific assets that require fault- and damage-tolerant power systems. These systems must also employ data encryption and layered levels of security to safeguard power systems, sensitive information,

and data communications. SEL engineering services, power system control, and data security solutions are highly respected among military and government institutions. SEL engineers perform within stringent physical and information security requirements and deliver Job Done solutions to government customers around the world.



### Education and Healthcare

Education and healthcare campuses commonly install power generation and distribution systems to enhance safety for students, faculty, and healthcare providers. SEL time distribution and display systems provide coordinated time throughout the facility, traceable to NIST time.

Mission-critical data centers, operating rooms, laboratories, public venues, classrooms, and dormitories must all receive a reliable stream of electric power. SEL can safeguard and supplement that power with local sources of clean, renewable energy and bring standby power online quickly when needed. SEL provides the tools, training, services, and information employees need to run clean, safe, and energy-efficient facilities.



### Consumer Product Manufacturing

SEL's power management and process automation solutions enhance production processes that produce healthy food, life-saving pharmaceuticals, and personal-care products that meet the highest standards for product quality and safety.

These processes often operate in hot and humid conditions that require the performance and reliability found in SEL products. SEL's high-speed communications and logic-processing capabilities facilitate power management and production process decision-making that automatically keeps problems from escalating and adversely affecting safety, quality, or production.



### Transportation

SEL instrumentation, control, and protection systems are especially useful for distributing power across larger facilities and systems, which are commonly found in harbors, airports, shipyards, and electrified mass-transit applications. SEL power management systems are equally

well-suited for large manufacturing complexes, such as automotive and aerospace facilities. SEL products retrofit easily within existing power distribution assets to bring powerful, modern control capabilities to aging infrastructure. SEL products can extend the life of electrical assets and speed repairs through local and remote diagnostic capabilities that are available with every SEL measurement and control product.

# SEL Values

## *Guiding our business objectives and activities.*

### QUALITY

Our business requires continuous improvement of our performance.

- Identify, measure, and improve processes
- Work in a spirit of constant improvement
- Recognize, offer, and accept criticism as an invaluable tool for improvement
- Seek simplicity
- Take pride in our work
- Use best available processes and tools

### CUSTOMER FOCUS

We commit to offer our customers unmatched value in our products and services by leading in:

- Price
- Innovation
- Quality
- Delivery
- Features
- Service

### DISCIPLINE

Society depends on us for the safe, reliable operation of electric power systems.

- Manage resources, projects, and our work wisely
- Commit and deliver
- Practice neatness, cleanliness, accuracy, and organization

### COMMUNICATION

Communicate needs and expectations efficiently, clearly, and respectfully.

- Listen carefully to our internal and external customers
- Use charts and graphs for visible and open communications
- Transmit and receive
- Ask for help, information, and understanding when in doubt or unsure

### INTEGRITY

Practice unquestionable ethics.

- Make clear promises to our customers and exceed their expectations
- Assume responsibility
- Depersonalize problems to solve them

### CREATIVITY

Think, learn, apply, evaluate. Creating is hard work!

- Have ideas, share them, and work together to develop and evaluate ideas
- Be an inventor!
- Ask “Why” five times
- Expect, encourage, and enjoy change in the spirit of creativity and improvement
- Be a problem solver—a hero is someone who solves a problem

### COMMUNITY

Participate in the development of our community.

- Be the best employer
- Share our success with others
- Be an asset to our community

### OWNERSHIP

Recognize the Four R's of Ownership: Risks, Rights, Responsibilities, and Rewards.

- Be professional at all times
- Share our expertise with others to help us succeed
- Expand our knowledge into new areas
- See beyond today, and envision the big picture and our future

### DIGNITY OF WORK

Appreciate the dignity of work as a significant part of our lives.

- Appreciate, respect, and enjoy diversity of thought and opinion
- Achieve personal satisfaction from our creations and contributions
- Help others recognize, appreciate, and enjoy individual and team success
- Enjoy pursuing our purpose and vision
- Balance the interests of our customers, employees, stockholders, suppliers, and community





**Making Electric Power Safer,  
More Reliable, and More Economical**



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