SUSTAINABILITY REPORT

2012 and 2013

S&C ELECTRIC COMPANY

Excellence Through Innovation

Though "S&C Electric Company" isn't a household name, our firm greatly affects the lives of millions in the United States and throughout the world, through our products and services for the electric power industry. From the ubiquitous green metal boxes that dot subdivisions and industrial campuses, to sophisticated power restoration systems that can make power system problems unnoticeable to customers, we pride ourselves in conducting business in a spirit of innovation, dependability, ethical business practice, and responsibility to our customers, our employees, our industry, and the environment.

We aim to safeguard and build on our reputation as a provider of innovative, quality products, and services that help to sustain the environment, assist our customers in their sustainability goals, expand our industry, and act in the best interests of our employees and the communities in which we do business. To achieve that, we keep these goals in mind:

ENVIRONMENT

- Meet or exceed all federal, state, and local requirements for air and water quality, manufacturing and labor practices, and product quality.
- Minimize waste of natural resources and manufacturing materials.
- Increase our use of sustainable energy and materials.

EMPLOYEES

- Provide our employees with a safe, healthy workplace, and opportunities for personal and professional development.
- Safeguard our workforce by investing in their health and well-being; integrating the latest in health and wellness programs within the workplace.

CUSTOMERS

- Provide rugged, quality products designed to last—avoiding the waste and expense of replacement costs.
- Provide a range of specialized engineering, technical, and consulting services for power transmission, power distribution, and renewable energy integration.
- Invest in research and development of innovative products and services to support the expansion of today's Smart Grid.

INDUSTRY AND COMMUNITY

- Develop and maintain a diverse, skilled, and knowledgeable workforce by promoting the professions of manufacturing technology and the engineering disciplines necessary to our industry including electrical, mechanical, industrial, and communication system engineering.
- Invest in the communities surrounding all S&C locations and continue to invest in the people served by our products and services.

ENVIRONMENT

When S&C began its **water conservation efforts**, over 20 years ago, emphasis was placed on water used in manufacturing processes. These efforts were quite successful and since that time we have decreased the company's annual water usage by 67%. To further these efforts, in 2012, S&C moved from the use of water-cooled compressors to air-cooled compressors.

S&C has applied the water- and electricity-conservation lessons we've learned from conservation efforts at our Chicago headquarters to our Toronto, Canada facility, and our new **facility in Franklin, Wisconsin**, completed in August 2012.

Since the completion of the LEED Certified Advanced Technology Center, S&C has made many of the same energy saving green building features standard on all new building construction and expansion projects.

The facility in Franklin features a heat-reflective membrane roof to help lower cooling costs during the summer. Translucent ceiling panels and light-directing windows take advantage of available daylight. De-stratification fans circulate air inside the facility, bringing down heating costs during the winter. Interior and exterior lighting is all high-efficiency, and operated by a programmable lighting control system. All interior water fixtures use water-saver technology. With the addition of green space and landscaping including new trees planted around the facility, the Franklin facility meets the standards of the **Village of Franklin Wisconsin's Green Building Program**.

Since applied, these conservation methods in the construction of Building 14A at **S&C's Chicago** campus, a new office building started in 2013 to house S&C's Power Systems Solutions and Strategic Solutions operations. Automated lighting controls, a heat reflective roof, and thermal "low-e" glass is used for the windows.

FRANKLIN, WISCONSIN

S&C is purchasing all electricity used at the Global Headquarters in Chicago from renewable energy sources. This renewable energy purchase of approximately 40 million KWH of electricity each year will eliminate an estimated 63 million pounds of CO_2 emissions annually.


Located at S&C's Chicago Headquarters . . . building 14A is the new home of S&C's Power Systems Solutions and Strategic Solutions operations.

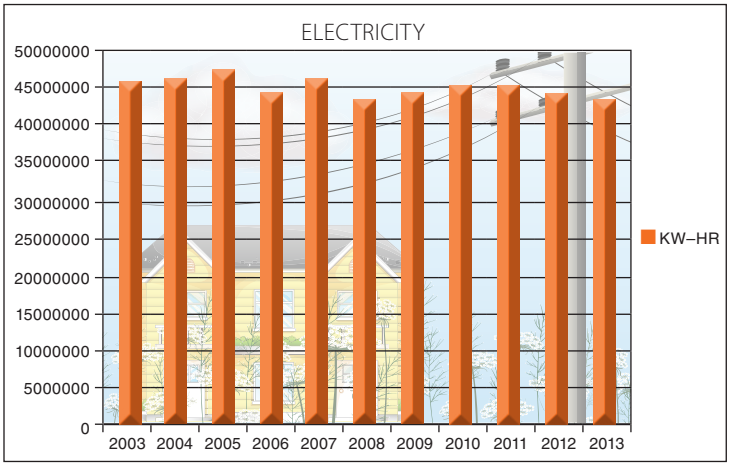
ENVIRONMENT

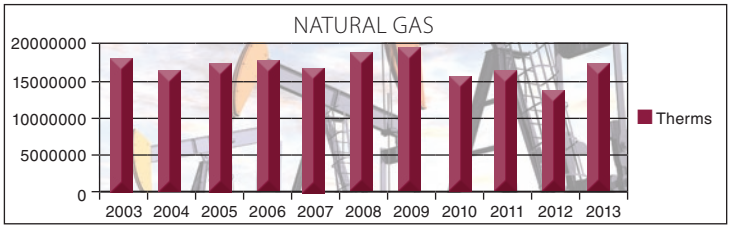
S&C is putting the finishing touches on a decade-long **electricity and natural gas usage reduction program**. Over the years, more-expensive tungsten lighting has been replaced with energy-efficient full-spectrum fluorescent lighting, and in 2013 we started retrofitting our existing breaker panels with programmable wireless lighting control systems.

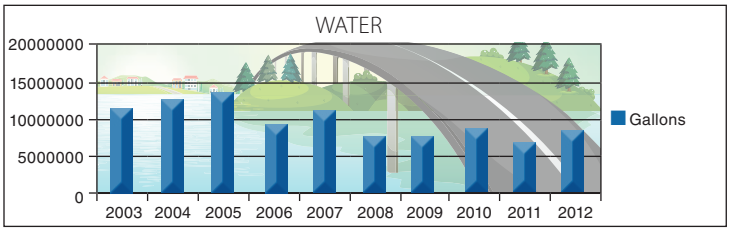
A large percentage of S&C's natural gas use is for heating and after a series of mild winters the winter of 2013-2014 proved a challenge with a record number of heating degree days. S&C uses natural gas for several manufacturing processes, as well as pollution control and heating. Though we can't control Mother Nature, we have progressively decreased the amount of natural gas used on heating.

In 2013 in accordance with recent changes in ASHRAE standards, we started using sophisticated carbon dioxide monitoring in some of our Chicago facility buildings to reduce the amount of outside air drawn into the ventilation system during the winter months, lowering our natural gas usage, and the electricity needed to run the ventilation system. We've also replaced some of our older central steam heating equipment with smaller, localized high-efficiency boilers . . . with this heating equipment located closer to the building it services, heat losses from long lengths of steam pipe are reduced, helping S&C to further reduce natural gas use.

To cap off these efforts, S&C has contracted to **purchase all electricity used at the Chicago facilities** from **renewable energy sources**. This renewable energy purchase of approximately 40 million KWH of electricity each year will eliminate an estimated 63 million pounds of CO_2 emissions annually.



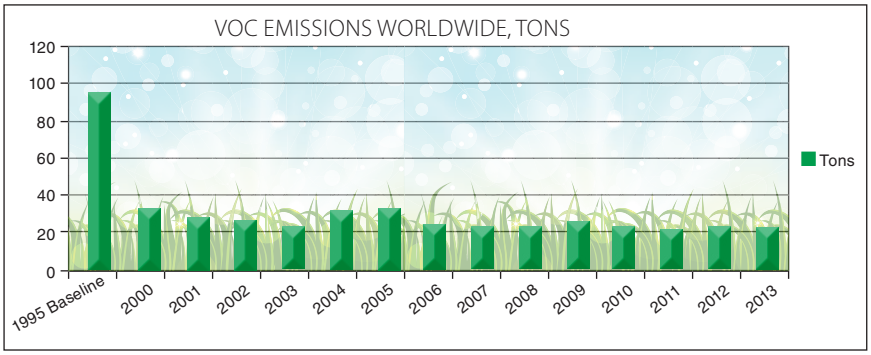


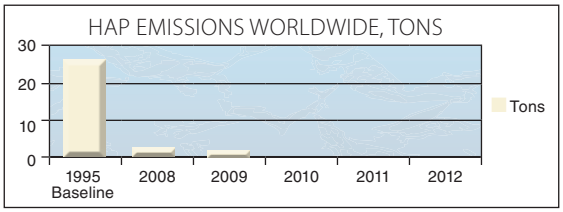


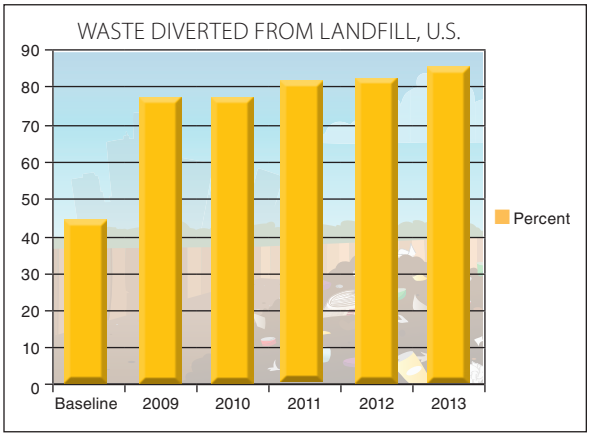
Our efforts to eliminate air emissions have resulted in significant reductions in **Volatile Organic Compounds (VOCs)** and **Hazardous Air Pollutants (HAPs)** since our benchmark was taken in 1995. We continue to monitor and report air emissions as required by state and local government, but room for improvement is becoming smaller. Most of our key processes have already been targeted for reduction programs over the last 20 years. Now the goal is to maintain our current level of air quality improvement worldwide as we expand and grow as a company.

S&C's UK Operations have been awarded **Certified Emissions Measurement and Reduction Scheme (CEMARS) certification**, and have set a goal to reduce carbon emissions 10% by 2016, including "carbon" generated from business travel. The increased use of video conferencing for meetings across S&C will help in this regard.

Recycling programs for manufacturing, office, and cafeteria waste have helped us significantly reduce our solid waste sent to landfill over the last decade, but further **solid waste reduction** is our next goal . . . with an ultimate goal of zero landfill waste. In the fall of 2013 we started assessing our total "solid waste footprint" to identify the areas of the office, employee cafeteria, factory floor, and shipping and receiving that accumulate solid waste. S&C Chicago is looking forward to starting a measurable solid waste reduction program by the end of 2015.







All S&C facilities have switched to **LED lighting** for their holiday displays. LED lighting lasts three to four times longer, and reduces electricity use by 80% compared to incandescent lighting. And all task and incidental lighting used in emergency and exit lighting has also been replaced with LEDs.

A splendid LED lit blue spruce "holiday tree" was planted in front of the Executive Offices in Chicago in time for the 2013 holidays. This "living holiday tree" replaces the decorative outdoor fountain which was original to the building and constructed well before any water and electricity conservation measures were considered, and takes the place of the cut tree that S&C used to display in front of the main entrance during the holidays.

CUSTOMERS

In 2012, S&C introduced the **Global Support & Monitoring Center** as an expansion to the company's Asset Management offerings. The center uses existing or newly deployed sensors to gather real-time condition information on customers' critical equipment. This information is monitored by the staff of the center, 24 hours a day. If an equipment parameter exceeds its normal limits, an alert is sent to the staff of the center, who then works with the affected customer to resolve the issue.

The Global Support & Monitoring Center's services help our customers identify and rapidly address issues that could otherwise lead to service disruptions and expensive equipment repairs or replacement. Getting more out of existing resources and preventing expensive repairs, helps create a sustainable Smart Grid. For example, the **PureWave® Condition-Based Monitoring Service**, which uses a cloud-based software platform, can help owners of S&C's PureWave® family of power quality products improve the reliability of their power systems and extend equipment life. PureWave products are typically used at renewable energy plants, data centers, factories, and hospitals.

Expanding on the **IntelliRupter® PulseCloser**, S&C introduced a **pad-mounted version** of this popular Smart Grid switch, and expanded the overhead product line to include models rated 38 kV. The pad-mounted IntelliRupter allows integration of underground segments of a feeder into an IntelliTeam® SG Automatic Restoration System. IntelliTeam SG-equipped devices automatically reconfigure the distribution system after a fault, restoring service to unaffected sections in seconds. Automatic restoration not only reduces the amount of time that consumers are out of power, it helps utility customers get more out of existing resources and significantly reducing the number of truck rolls associated with restoring power after an outage, reducing their carbon footprint.

IntelliTeam® VV Volt-Var Optimization System allows utilities to increase energy efficiency and better manage peak loads. Featuring a flexible control algorithm, IntelliTeam VV provides precise control of distribution system voltages and improves power factor based on real-time conditions . . . assisting utilities in meeting federal-, state-, and local-government mandated energy-saving goals through improved efficiency. IntelliTeam VV works with a broad range of equipment types and can be applied on 240-volt systems, allowing use in Europe and Australia.

The GSMC is monitored 24 hours a day, seven days a week . . . allowing immediate identification of issues that may affect equipment or system performance.

Pad-Mounted IntelliRupter PulseCloser integrates underground segments of a feeder with an IntelliTeam SG Automatic Restoration System.

IntelliTeam VV also enables conservation voltage reduction, which allows utilities to lower voltage levels at the end user—eliminating the waste associated with running system voltage conservatively high—while still meeting power quality requirements.

Expanding the **PureWave® UPS System** line is the medium-voltage **PureWave® UPS XT System**, which can provide power protection to critical loads for 15 minutes or more without the need for diesel-powered generators. Unlike other battery-based UPS systems, the PureWave UPS System only runs during power interruptions. Its single-conversion design eliminates the inefficiencies associated with converting incoming power twice before use by the critical load. The PureWave UPS System is in keeping with the U.S. Department of Energy's Energy Star Program goals for improving system efficiency.

S&C launched the **IntelliTeam® CNMS Communication Network Management System**, which allows a utility to manage their S&C SpeedNet™ Radio network from a central location. Highly reliable communication is essential to distribution automation applications. The IntelliTeam CNMS System monitors the Ethernet and wireless interface performance of each radio and alerts operators to impending trouble due to tree growth, building construction, or other causes. The IntelliTeam CNMS System supports continuous monitoring and management of radio configuration and network topology, helping ensure optimal performance of the critical communication system.

S&C launched **TripSaver® II Cutout-Mounted Recloser**, the next generation of S&C's award-winning overhead distribution system protection product. TripSaver II improves power reliability on lateral circuits. New features—including a higher 6.3 kA fault interrupting rating and a lower minimum trip current of 5 amperes—expanding the application range of this product, and allowing its use in more places on the grid.

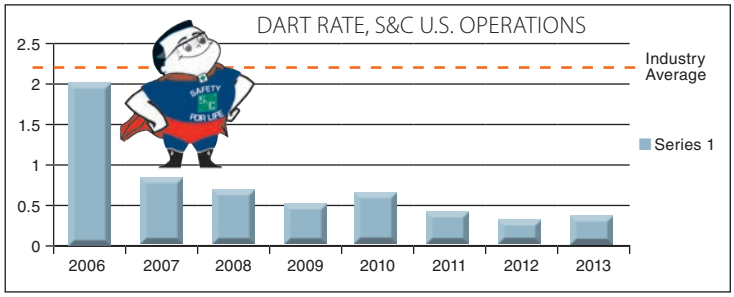
S&C's PureWave UPS System protects power-sensitive equipment from the detrimental effects of disturbances such as voltage sags, surges, transients, momentary disruptions, and complete outages. No need to construct a building or an addition to a facility to house the equipment. The PureWave UPS System is completely self-contained in a NEMA 3R (IP 14) enclosure, with an exceptionally small footprint. And PureWave batteries are 100% recyclable.

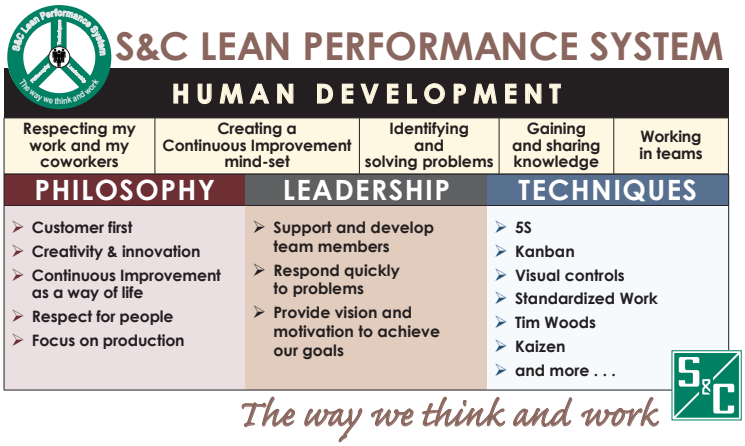
IntelliTeam VV Volt-Var Optimization System. The precise voltage control provided by IntelliTeam VV helps utilities maintain a narrower voltage operating range while ensuring that feeder voltage remains within specified limits.

EMPLOYEE SAFETY & HEALTH

S&C's most important resource is its team members. They provide the skills and expertise that maintain the flow of products and services to our customers. In 2013 we took our successful **ICON for Safety Program** worldwide. ICON is short for "I CONtrol" as in I control my safety, my environment, my equipment, and the safety of others. The successful safety program, launched in 2006, has made a significant difference in reducing injuries and promoting safer workplace behaviors. ICON for Safety's focus is on personal responsibility for safe work practices, and is based on individuals taking control of their behavior, environment, equipment, and the safety of others. ICON is already successfully in place at S&C's Chicago and Toronto Facilities, and is well on its way to being implemented in S&C's Facilities in Brazil, Mexico, and China.

Though we always strive for a goal of zero injuries, our goal for 2012 was a **"Days Away, Restricted, or Transferred (DART)"** rate of less than 0.6 across S&C's U.S. facilities. "Days Away" are counted when a workplace injury results in an employee being away from their regular job . . . regardless whether it is "Lost Time" or the employee is performing other duties due to restrictions. During 2012 and 2013, S&C employees created a world-class safety record, with a global DART rate—dropping from 0.4 in 2011 to only 0.24 in 2012 . . . far below the U.S. industry average of 2.2. Lost-time injuries dropped from four to three. The DART rate for 2013 was 0.28, slightly higher than 2012, but again well below the industry average for 2013 of 2.4.





The goals of S&C's **Lean Performance System** are "Safety, quality, delivery, cost, and human development." The highest priority of this system is making the jobs of all S&C employees safer and easier to perform; determining ways to reduce costs, conserve resources, and improve performance. The Lean approach allows S&C to make higher-quality products, in a safe environment, while creating less waste in time and materials. In 2012, S&C's Lean Performance System went global. Lean Performance team members from Chicago traveled to China, Brazil, and Mexico to train S&C employees at those facilities in LPS . . . continuing towards the company's goal of increasing safety, reducing waste, and improving product quality.

Helping to safeguard our employees' health outside of the workplace is just as important as ensuring their health and safety on the job. March 2013 saw the start of **S&C's AMP UP! Wellness Program**. AMP UP! Stands for "A More Powerful U Plan" and is a simple, private, and voluntary wellness program sponsored by S&C to help improve and sustain the health of our U.S. employees. AMP UP! includes on-site biometric screenings and an initial health risk assessments to give each participating employee a baseline for their current state of health. By participating in health coaching, educational activities and age appropriate health screenings . . . each employee works with S&C's outside wellness provider to improve their quality of life and monitor and control any existing health conditions. All employee health information is confidential, and only shared with the participant. The voluntary program started with a goal of 30% employee participation by September 2013 . . . and ended at the end of its first year with 37% employee participation.

Employee wellness fairs help spread the message of health and fitness opportunities available to S&C employees.

"A place for everything and everything in its place" is a saying that's been attributed to everyone from politicians like Benjamin Franklin to theologians like Charles A. Goodrich . . . even to the slightly more diminutive and furry philosopher "Winnie the Pooh" . . . but it is also an integral part of the 5S System for organizing and streamlining operations. The 5S System is an integral part of the Lean Performance System . . . and encourages S&Cers to "Sort, Simplify, Shine, Standardize, and Sustain" organization in the workplace. Here a workstation has been organized to have all of the tools for assembly clearly labeled, easy to access, and easy to replace.

The Lean approach allows S&C to make higher-quality products, in a safe environment, while creating less waste in time and materials.

AMP UP!

AMP UP! Lunch 'n' Learn Classes span a wide variety of subjects from heart, health, nutrition, and fitness . . . to choosing the right footwear for exercise.

EMPLOYEE DEVELOPMENT

S&C is committed to employee development and to providing equal employment opportunities, without regard to gender, race, religion, age, sexual orientation, national origin, disability, veteran status, or marital status.

To cultivate the company's human potential, S&C provided a number of training and personal development programs for our employees. The Chicago facility's **S&C Continuous Improvement Institute** supported the Lean Performance System by providing classes in a variety of topics including Problem Solving, Cost of Quality, and Document Systems.

S&C's oldest educational program, the **S&C University Program**, offers classes on shop math, blueprint reading, metrology, wiring techniques, and materials science. In 2012, S&C proudly graduated a member of the Machine Technologist Training Program, a five-year program that requires completion of outside college coursework as well as work within S&C mentored by a member of the leadership team, to "Master Machinist." In 2013 we graduated a member of our "Tool Technologist Program" a CEU program sponsored and taught by S&C employees. 2013 also saw the first graduates of our "Polymer Products Training and Certification Program."

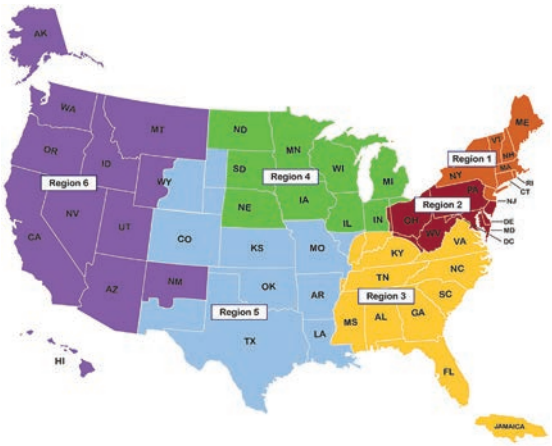
The introduction of 6800 Series Automatic Systems Controls in 2011 prompted extensive product training for more than 50 electric utility attendees and S&C employees at the Canada facility in 2013. Students received hands-on experience with the controls and configuration software, with experts available to answer questions and provide practical demonstrations of the equipment.

S&C additionally provided a number of classes in financial and retirement planning, health and wellness, and personal development. From free programs in Smoking Cessation, to S&C's extensive support of "Take Our Children to Work Day," S&C is dedicated to taking care of our employees, within and outside of the workplace.

S&C congratulates its newest "Master Machinist."

Trust and team building exercises test leadership skills and grow team spirit and cooperation during annual safety training.

INDUSTRY DEVELOPMENT



S&C and the IEEE PES's "Scholarship Plus Initiative" awards scholarships to top candidates in each of the six regions of the United States.

While worldwide demand for power is expected to increase 50% by 2030, the Center for Workforce Development estimates that half of the people now working in the power industry will retire within the next five years. Attracting new talent to power engineering and manufacturing is thus a priority for S&C. Every year, S&C's senior engineers and technical staff mentor many undergraduate, masters, and Ph.D. students in engineering and related fields. And S&C has partnered with the IEEE Power and Energy Society to start the **Scholarship Plus Initiative**, which targets talented electrical engineering undergraduates with the goal of funneling them into careers in power engineering. The S&C Foundation has contributed one million dollars (USD) to create the John W. Estey Scholar Program, which awards scholarships to top candidates in each of the six regions of the United States.

S&C's **Cooperative Education and Internship Programs**, started in 1964, were designed to bring valuable engineering talent to the power industry, and provide students with valuable on-the-job experience. In 2013, 11 co-ops and 24 interns migrated through the program, joining work teams at all S&C locations around the U.S. S&C has a deep commitment to both the co-op program, and the internship program. Many students in the co-op program come back for multiple terms, and have worked on a variety of hands-on projects in product design and development, helping students lay a foundation of education at school, apply that knowledge at work, and then bring those work experiences back to their college studies.

Another significant accomplishment of 2012 was the launch of a series of **S&C Product Training Webinars** as well as training on other industry-related topics; including power system voltage stability, short-circuit analysis of electrical power systems, infrared imaging for electrical equipment condition assessment, and improving distribution asset performance. The webinars included follow-up sessions to address questions raised during live webinar sessions. Webinars are very advantageous in that they can be recorded, allowing them to be watched repeatedly as well as viewed by people in other time zones, and reducing the carbon footprint of travel for educational seminars.

S&C also partnered with the IEEE Power Engineering Society to offer more classes on the Smart Grid and sustainable technologies, in conjunction with industry conferences. The most successful thus far was a Smart Grid tutorial at the Great Lakes Symposium on Smart Grid and the New Energy Economy, held at the Illinois Institute of Technology.

On Friday August 3, 2012, the Institute of Electrical and Electronics (IEEE) recognized the Schweitzer and Conrad Liquid Power Fuse as an *Electrical Engineering and Computing Milestone.* It was the world's first reliable high-voltage power fuse and its invention enabled the safe and inexpensive supply of electricity for millions while being the cornerstone product in the formation of the S&C Electric Company.

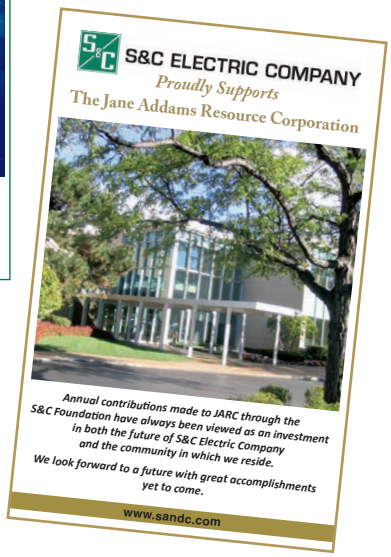
An interactive "Smart Grid Demonstration" at S&C's Product Demonstration Center educates visitors on the capabilities of today's Smart Grid.

S&C is dedicated to helping our customers provide clean, green, reliable power to their customers, as well as providing educational resources to the community, government, and future S&C Employees.

COMMUNITY

S&C is dedicated to helping our customers provide clean, green, reliable power to their customers, as well as providing educational resources to the community, government, and future S&C Employees. Giving is a key part of this philosophy. In 2012, S&C's Annual Employee Fund-Raising Campaign surpassed its goal of $90,000 with a total pledge of $98,275 to be donated to the United Way and Community Charities. And in 2013 we again broke records with $117,490 in donations.

Through the S&C Foundation—the charitable organization established by the late John Conrad to carry out the philanthropy of S&C Electric Company, the firm is a major supporting organization of the Chicago Community Trust, which helps fund scholarships, public health initiatives, volunteer recruitment, and science education to the Chicago community, and all communities in which we have a business presence.



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