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Reading Time: 3 minutesThere is no doubt about... Reading Time: 3 minutesAt first glance, the 18-year... Reading Time: 2 minutesThe City Electric Supply (CES)... Reading Time: 3 minutesCity Electric Supply (CES) employees... Reading Time: 2 minutesCity Electric Supply (CES) employees... Reading Time: 2 minutesThere's an electrical supplier in... Reading Time: 3 minutesCity Electric Supply (CES) is... Reading Time: 2 minutesCES has taken huge strides... Reading Time: 3 minutesCity Electric Supply (CES) is giving 10 future electricians in North America \$2,000 and a Milwaukee® Tool starter tool kit!Getting started in school or a new career path, like enrolling in an electrical trade program, can be financially demanding. Many students look for electrician training programs that offer hands-on experience and a clear path to employment. Between tuition, books, tools, and other essentials, the costs can quickly add up. For aspiring electricians, the upfront investment can feel overwhelming, especially with the need for training and tools right from the start.CES Cares, the social impact division of City Electric Supply, is excited to announce the 2025 Brighter Future Scholarship, designed to support the next generation of skilled professionals in our industry. Each winner will receive \$2,000 toward their education and a Milwaukee® Tool starter tool kit! This is one of the few scholarships for electricians, making it easier to take that first step into the trade.Simply submit a 500-750-word essay telling us why you're pursuing a career in the electrical industry. It's your chance to share your story and spark your future! Why should you join the industry?The demand for skilled trades continues to rise — and so do the opportunities. If you're looking for a stable, rewarding career with long-term growth, the electrical industry is one of the best paths you can take. Let's look at why now is the perfect time to get started.2025 is the year to join the trade industry in 2023 alone, the U.S. Electrical Services market reached \$158.5 billion and is projected to grow at a 5.6 percent compound annual growth rate (CAGR) from 2024 to 2032. For 2024, the market reached \$163.9 billion and is projected to have a compound annual growth rate of 6.3 percent through 2034.One of the fastest growing careers in the U.S. According to the U.S. Bureau of Labor Statistics, employment of electricians is projected to grow 11 percent from 2023 to 2033.Plenty of opportunities for electricians Not only are there many different specialties for electricians, but there are also many other opportunities present in the electrical field.Some opportunities include teaching, becoming a business owner, and even using electrical expertise in electrical wholesale. However, if you're wondering what an electrician's path looks like, this helpful guide takes you through the steps of how to become an electrician in 2025. Applying is easy!Ready to take the first step toward becoming an electrician? If this sounds like the right opportunity for you, just submit a 500-750-word essay telling us why you're choosing this career path and where you'd like to see yourself in the future. It's that simple!Here's what to do next.Select a trade school or certification program Submit your essay by June 30, 2025 Find out if you've been selected in early August 2025Questions? Reach out to CES Cares at CEScares@cityelectricsupply.com. Reading Time: 3 minutesThe scoop on solutions built... Reading Time: 4 minutesA well-stocked electrician tool kit... Reading Time: 3 minutesFor the first time in ... Reading Time: 4 minutesWe're proud to share that... Reading Time: 2 minutesIn honor of Electrical Safety Month... Reading Time: 5 minutesIt's that time of year... Reading Time: 3 minutesCity Electric Supply (CES) is... Reading Time: 4 minutesAs the spring season winds... Reading Time: 5 minutesStandby Generac generators are among the... Reading Time: 5 minutesThe aftermath of a severe... Reading Time: 4 minutesLooking to become a licensed... Reading Time: 5 minutesWondering what personal protective equipment (PPE) is... Reading Time: 5 minutesElectric vehicle (EV) charging is... Reading Time: 4 minutes“My dad always told me,... Reading Time: 5 minutesWhen City Electric Supply (CES)... Reading Time: 3 minutesThere is no doubt about... Reading Time: 5 minutesAccording to the U.S. Bureau of Labor and Statistics, the country employed over 725,000 electricians in 2020. And that demand is expected to grow by 9% between 2020-2030 — an average of 84,700 jobs per year.This job growth keeps pace with the average U.S. job growth and doesn't even account for the many other positions needed to support the industry, such as electrical suppliers.In addition to the growing demand for electrical professionals, learn why now is a great time to join the electrical industry.The electrical industry supports many individuals and their interests. Some enjoy hands-on projects, such as running electrical lines, installing solar systems, maintaining and testing equipment to ensure safety, and much more.Others love the problem-solving involved in repairing and upgrading electrical systems. Recently, City Electric Supply (CES) helped Denver Public Schools (DPS) with an ongoing project, upgrading old electrical panels with custom retrofitted panels.At City Electric Supply, everyone values the social aspect of servicing the electrical industry, whether helping to ensure supplies are delivered to contractors, providing project estimates, or providing electricians solutions with the latest tools and gear. “We lean on vendors to bring us certain products or resources,” said Mike Lakos, Electrical Department Manager for DPS. “We rely on CES to show us the latest and greatest stuff.” Vocational or trade schools offer electrical certification programs for those interested in getting their start in the field or on site. Others may choose an electrical-related two-year associate degree, with further specialization available. And some may train under the apprenticeship of a licensed electrician. “Entering the industry through a vocational or trade school is one of the easiest ways to ensure success,” said Joseph Wolfe, Electrical Instructor at Edison Academy. “Using a vocational or trade school helps to ensure that the persons receive proper training on not just the materials and techniques, but the specialty tools that are involved with the trade. Proper training of methods, techniques, and skills in a controlled environment with highly trained educators ensure the success of future electricians.” Outside Sales Representative Tim Brown started in the field. He later transitioned to sales with CES and has a total of 18 years of service in the industry. “I joined City Electric Supply after seven years of hands-on experience in the field. It's helped me to have walked in the customers' shoes and know their needs,” said Brown. But there are other ways to join the industry. Brown's team member Branch Manager Jamie Long, got his start joining his local electrical wholesale branch shortly after it opened. “About 24 years ago, I came to CES needing a job, and they gave me a great opportunity to work my way up and make it into a career,” said Long. “I'm proud of what I have achieved, and CES has been good to me. I wouldn't change a thing.” Getting in on the ground floor at City Electric Supply requires no experience, just the right attitude. CES can help anyone get up to speed, providing on-the-job training, workshops, and more. Branch Manager Samantha Lacroix walked inside her local CES branch 11 years ago with no electrical background and just spoke honestly to the manager. “I told him, ‘Sir, I'm a fast learner, but I don't know anything about the store,’” Lacroix said. She started as a driver, and with her willingness to grow, she began assisting customers at the counter and attending as many training opportunities as possible. About five years later, she became the branch manager of the location that hired her. Learning about the industry as it evolves is one of the most important ways to keep a career exciting. As technology quickly changes, electrical technicians and suppliers always have new products and solutions to learn. Many CES branches host or attend training with industry-leading manufacturers, such as TAMCO, Generac, and Spyder Products. Nancy Ramdon-Connolly, CES Director of Corporate Solutions, started at counter sales at her local branch while she completed night school. Over the years, she worked in customer service management, then project management, and sales development, before her current position. At Corporate Solutions, she and her team provide a one-stop shop for companies that need help with construction, remodeling, or maintenance. “Taking on additional challenges and responsibility just made sense to me,” said Ramdon-Connolly. “I didn't start knowing that my job could be a career, but that's exactly what it was. “In every area of the electrical industry, customer service is key to success. Excellent customer service helps build a personal network of customers, coworkers, and vendor partnerships. CES Vice President of Operations John Nantz explained the success of one branch, saying, “This branch operates like an old barbershop — the customers come in and share their stories. We're not just trying to make a sale; we want to get to know everyone and build relationships.” “I hope our customers take away our true sense of gratitude from this event,” said CES Senior Regional Manager R.T. Smith during the branch's 25th anniversary. “It's hard to express how much we appreciate the support and trust they have given us to help our business grow over the last 25 years.” Many trades are well-known for their job security. As mentioned previously, there is a continuing demand for electrical professionals. Plus, transferring to different positions over time, such as from the field to product sales, is possible. Electrical can take someone in many different directions as their experience and interests change. Three electricians in Georgia who previously worked in electrical maintenance decided to take on a new opportunity by opening a CES branch. They combined their shared backgrounds and experience to start a new chapter in retail. Even if one comes from a different industry, skills may be transferrable. Branch Manager Vicky MacKay brought 15 years of experience in plumbing, designing bathrooms and kitchens. She found an exciting new challenge in electrical. “If you go into the trades, you will find endless ways to succeed. There is always an opportunity,” said MacKay. “There's so much going on in electrical — just be willing to keep learning.” With so many possibilities available in the electrical industry, there's no reason not to explore available opportunities. Want to jump in faster? Contact your local CES branch today about open positions! Reading Time: 5 minutesMay is National Electrical Safety Month, so we are spotlighting electrical safety in our industry through the ages. Safety is important in any job, but in the electrical industry, safety is truly a life or death matter. Today, we have OSHA, the NEC, and many other protective guidelines in place to ensure safe working conditions for all electrical workers. As technology advances within the electrical field, new guidelines are created to maintain consistent worker safety and prevent accidents. With a long-storied history, electrical safety continues to evolve with the times. The Founding of Electrical Safety On September 4, 1882, Thomas Edison started the first commercial electrical power system. It produced 100 kilowatts of power, which lit 50 incandescent lamps, even though it generated enough wattage to light 1,200. Edison's generating station produced direct current (DC) electricity, and just a few years later, Nicola Tesla and George Westinghouse created a system that produced alternating current (AC). They discovered that AC proved to be the superior system because it could transfer power over longer distances. Both of these industrial feats made great strides in the development of the modern world. However, soon after, an often-overlooked event created the need for electrical safety: the first electrical shock from an industrial generator. In 1895, five different electrical installation codes were developed. These guidelines were put in place to keep workers safe and ensure uniform installation across the country. However, with five different codes, it was hard to keep the same standards from job to job. In 1897, a committee formed the previous year developed and published the National Electrical Code (NEC), one uniform electrical code that any electrician could use. The National Fire Protection Associations (NFPA) became the sponsor of the NEC. The NFPA had two primary focuses: water and electricity. However, they soon found that fires were frequent in unsafe electrical conditions. Standards and practices involving the installation of sprinkler systems and electrical systems were necessary to maintain safety for workers and the public. In 1911, the NEC perfected the safety protocols and left the NFPA to update codes as the electrical field evolved. Dalziel's Discoveries In 1956, after being asked to invent a device to electrocute barn fires, Charles Dalziel started to research electric shock. At the time, there was no existing data on the subject, so he performed tests on volunteers. These studies turned out to be a benchmark in electrical safety. Dalziel eventually went on to write “The Effects of Electric Shock on Man,” a very important book that further illuminated the importance of electrical safety. In his investigations of electrical accidents, Dalziel found that many fatalities occurred from ground faults. Ground faults happen when inadvertent contact occurs between an energized conductor and ground or equipment frame. To help prevent ground faults, he invented GFCI outlets and breakers, a lifesaving and ground-breaking device that integrated a magnetic-sensing circuit with a newly developed semiconductor. The NEC mandated their use after seeing how effective they were in preventing electrical-related deaths. Establishing a Burn Injury Scale In 1969, Alice Stoll and Maria Chianta studied the effect of heat related to burn injury, inventing the Stoll Curve. The Stoll Curve determines the rating of the transfer of heat energy (calories) based on the time of transfer and the level of heat energy produced. In this study, women lined up and physically burned a number of young sailors on their forearms. They recorded the temperature and time. If blisters developed after 24 hours, the burns were recorded as second-degree burns. The results of this study are still used today to predict burn injuries. Founding OSHA In 1970, the United States Congress passed the Occupational Safety and Health Act. This resulted in the creation of the Occupational Safety and Health Administration (OSHA), which was formed to “assure safe and healthful working conditions for working men and women by setting and enforcing standards and by providing training, outreach, education, and assistance.” Setting the Standard In 1976, the NFPA formed a committee to develop newer electrical standards at the request of OSHA. First published in 1979, the NFPA 70E released the Standard for Electrical Safety Requirements for Employee Workplaces. Even today, the NFPA 70E is the core of electrical safety practices. Arc Flashses In 1982, Ralph H. Lee studied arc flashes and published a research paper titled “The Other Electrical Hazard: Electrical Arc Blast Burns.” Arcs are basically ionized gases caused when electricity travels through the air. This complex phenomenon is also known as an arc flash, arc blast, or electric arc. Lee's paper focused on three main parts: Model an arc blast as an expanding sphere Determine whether the arc blast causes curable or incurable skin burns Recommend ways to protect workers The understanding of arc flashes and safety suggestions that Lee provided have saved countless lives and helped many workers avoid injuries. However, it wasn't until over a decade later, in 1995, that the NFPA 70E acknowledged the arc flash electrical hazard and started developing standards for dealing with it. From 2000 to 2007, major strides were taken in response to arc flashes: 2000 – NFPA 70E PPE developed tables to select FR fabric and PPE for protection against the thermal effects of arc flash 2000 - Incident energy calculations were invented that allowed forecasting the prospective incident energy and became the foundation of today's arc flash calculation techniques 2002 – IEEE Guide for Performing Arc Flash Calculations is published, which defined methods to calculate the arcing short-circuit current, incident energy, and arc flash boundary 2002 - The NEC requires arc flash warning labels for marking certain electrical equipment to warn of potential hazards 2007 - The National Electrical Safety Code (NESCS) requires that electric utility systems that fall under this standard must perform an arc flash assessment Protective Equipment and Labeling Standards Personal protection equipment (PPE), which is a very important part of personal safety, was addressed by the NFPA 70E in 2009, requiring additional labeling to make selections easier for qualified people working on or near live energized systems. In 2015, OSHA updated its labeling standards for the NFPA 70E to further protect workers from the dangers of arc flashes. The new labeling requirements dictated that labels must contain nominal system voltage, arc flash boundary, and at least one of the following: available incident energy, corresponding working distance, minimum arc rating clothing, or site-specific level of PPE. In 2018, the NFPA 70E edition emphasized the account for human error in a risk assessment to further understand electrical safety. The NFPA found that human error can diminish a safety program's effectiveness, so the NFPA began proactively testing safety measures and protocols to minimize human error. With new technology on the rise and new ways to harness power, updates and new safety requirements are inevitable in the electrical field. With such an ever-changing, yet adaptable, industry, it's important to keep up with current regulations and maintain safety equipment to ensure your personal well-being. Whether you need protection from arc flashes or insulated tools to minimize the risk of electric shock, City Electric Supply has the safety equipment and tools you need to stay safe on the job. *Click to enlarge

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