

# Careers in Energy

You might be surprised to learn how many types of jobs there are at a utility company like Xcel Energy. It's like your body, which has many different parts that work together when you run to catch a ball or sit down to read a book. An energy company needs many different kinds of employees to do all the work needed to supply energy to your home and school.



Whatever your skills and abilities, chances are you could find an interesting career in the energy industry. If you are good at science, math, like working with people or fixing things with your hands, there are good jobs you might enjoy at an energy company. Read on to learn some of the many possibilities!

## Sales & Marketing

■ **Marketing & Sales** employees help the company communicate with its customers in many ways. They prepare brochures and other materials about the company's products and services, research what customers are thinking and what they want, and look for ways to help them use energy more wisely.



■ **Account Executives** spend a lot of their time visiting big customers – companies, schools, hospitals and others who use a lot of energy. They help customers understand their energy use, and help them to save energy and money through conservation and other special programs.



■ **Energy Schedulers and Energy Traders** keep track of how much energy customers are using so they can make sure the company has enough electricity for all its customers even on peak, or high demand, days.



■ **Product Developers** work to come up with new products or programs, or improve existing ones that help solve customers' energy problems. For example, Product Developers have developed ways to help customers reduce their air conditioning costs by 50%.

■ **Product Portfolio Managers** work to make sure products are successful. They inform customers about products and programs, and motivate customers to use them.

■ **Risk Consultants** work throughout the company to prevent problems that might happen when the company borrows money, deals with customer issues, and faces challenges running the company's power plants and other equipment.

Since electricity cannot be stored, a utility company that needs more electricity than it produces – for example, on a very hot summer day when everyone is running their air conditioners – will buy extra power from another utility company that has more than it needs that day. Energy schedulers and traders look for the best price and a reliable supply.

# Careers in Energy

### Administrative & Customer Service



■ **Administrative Assistants** work in an office. They keep track of files and records, schedule meetings, prepare letters and reports on the computer, and help keep their boss or department organized and running smoothly.



■ **Customer Service Associates** work in special call centers. They use the telephone and computer to help the customers who call in with questions or problems with their energy service.

■ **Billing Associates** also work on the phone and computer, helping customers who call with questions about their energy bills.



### Finance & Accounting

■ **Financial Analysts** work with the numbers and reports that show how much money the company is making. They help leaders plan and make good decisions so the company will earn enough money to keep serving its customers. They also make sure the company complies with, or obeys, all the rules and laws about how financial information is reported.



■ **Accountants and Accounting Analysts** also work with numbers. They keep track of the money the company earns and spends, and look for ways the company can save money and do things better for customers.



### Engineering

■ **Electrical Engineers** are experts on all the electrical equipment and systems the company uses. They solve electrical engineering problems and help decide what electrical equipment the company should buy.

■ **Mechanical Engineers** work in the power plant on all the mechanical equipment and systems the company uses. They make detailed drawings of these systems and help decide what mechanical equipment the company should buy.



■ **Chemical Engineers and Environmental Engineers** keep track of state and federal environmental rules, help reduce power plant emissions and make sure company projects are done in a way that does not damage the environment. They work to prevent spills or other accidents, and respond to emergencies.



■ **Civil Engineers** plan and supervise large construction projects such as dams, buildings, pipelines and roads. They work to build strong, safe structures, and help decide what equipment to buy and solve other construction problems.

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### Science

■ **Chemists** work in laboratories and power plants, where many chemicals are used in the production of energy. They do chemical tests and help keep chemical equipment and instruments working well so that the power plants run safely and efficiently. They also manage the chemicals used by the company and make sure they are disposed of safely to protect the environment.

■ **Environmental Analysts** and **Chemical Analysts** use their knowledge of science to help the company understand how its operations and projects may affect the environment. They do studies and work with the federal government's Environmental Protection Agency to get environmental permits and licenses and make sure the company is following all environmental rules and laws.



■ **Biologists** study the impact of company operations on wildlife, water quality and habitat. They work with the natural resource department in each state to make sure the company is acting as a good steward of the environment in the way it runs its power plants.

■ **Metallurgists** are experts in the many metal materials used throughout power plants. They do lab work and inspections and give advice about welding and repair of equipment.

### Field Operations



■ **Linemen** take care of the electrical lines and equipment, restoring power after outages and responding to emergency calls. They work outside most days, alone or as part of a crew.

■ **Pipe Fitters** work in power plants or as part of gas construction, maintenance and operations crews. They install and fix gas lines, meters and appliances and repair cooling systems and steam pipes in the plant.



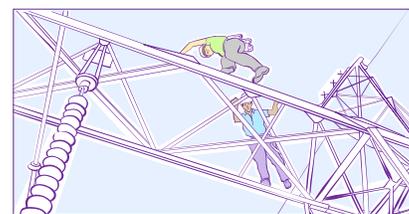
■ **Utility Workers** install and repair gas lines, using heavy equipment and tools. They work outside, usually as part of a crew, and in the shop.

■ **Gas Street Helpers** are beginning workers who work mainly outside and as part of gas construction crews. They help to install and repair gas projects



### Power Plant Operations

■ **Electricians** build, install, fix and take care of electrical equipment in power plants and substations. They often work from ladders and bucket trucks and wear special protective clothing to keep them safe. If something breaks or there is an emergency, they are called to come in after hours.



■ **Instrument and Control Room Operators** work inside the plant on sensitive equipment that controls the operation of the plant. They do tests, install, adjust and fix the instruments.



■ **General Plant Helpers, Plant Specialists and Maintenance Helpers** work mostly in and around the power plant. They unload coal from rail cars, cut grass, remove snow and keep the grounds clean. They also repair and take care of power plant equipment.

■ **Material & Procurement Specialists** are in charge of ordering the supplies and materials used in daily operations at the plant.