

CAREER

● Power-Plant Manager

As a power-plant manager, Cheryl Mele is responsible for almost a billion watts of electric power generation at the Decker Power Plant in Austin, Texas. More than 700 MW are produced using a steam-driven turbine system with natural gas fuel and oil as a backup fuel. Another 200 MW are generated by gas turbines. The steam-driven turbine system and gas turbines together provide enough electrical energy for many homes and businesses.

According to Cheryl Mele, her job as plant manager includes “anything that needs doing.” Her training as a mechanical engineer allows her to conduct routine testing and to diagnose problems successfully. A firm believer in protecting our environment, Mele operates the plant responsibly. Mele states, “It is very important to keep the plant running properly and burning as efficiently as possible.” Her previous job helping to design more-efficient gas turbines helped make her a top candidate for the job of plant manager.

The Team Approach

Mele uses the team approach to maintain the power plant. She says, “We think better as a team. We all have areas of expertise and interest, and we maximize our effectiveness.” Mele observes that working together makes everyone’s job easier.

Advice to Young People

Mele believes that mechanical engineering and managing a power plant are interesting careers because you get to work with many exciting new technologies. These professions are excellent choices for both men and women. In these careers you interact with creative people as you try to improve mechanical equipment to make it more efficient and reduce harm to the environment. Her advice for young people is to pursue what interests you. “Be sure to connect the math you learn to the science you are doing,” she says. “This will help you to understand both.”

A Challenge

With the help of an adult, find out how much electrical energy your home uses each month. How many homes like yours could Mele’s billion-watt power plant supply energy to each month?