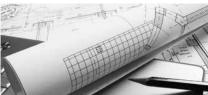


# Knowledge. Performance. Impact. Operations Knowledge<sup>™</sup> Series







## Power Plant Fundamentals

#### Course DESCRIPTION (4 Days)

This instructor-led course is designed as an overview and process description of electric generation in fossil-fueled power plants. The fundamentals required to understand the process, common equipment, and primary systems in power plant operations are emphasized. The discussions also target the roles of operations and mechanical staff in power plant operations.

#### Prerequisites

Students should be entry-level power plant personnel with basic power plant understanding.

#### Who Should Attend?

This course is designed for new power plant operators, maintenance personnel, and management as a process overview for those entering the power industry but will be of interest to all personnel working in a generating facility who wish to learn more about fossil-fueled power plants. System operators/dispatchers will also find the material covered in this course beneficial for system operations and planning.

#### Course CONTENT

- Basic Electricity
- Print Reading
- Basic Power Plant Equipment
- Essentials of Producing Electrical Energy
- Power Plant Systems
- Steam Turbine
- Generator

### Course OBJECTIVES

At the end of this course, students should be able to:

- Restate the laws of thermodynamics and energy conversion
- Recognize process and instrument diagrams
- Use a steam table to look up the properties of steam and water
- Explain the primary flow paths for fuel, air, steam, cooling water and power
- Describe the purpose and primary function of each major component
- Discuss the general purpose and basic operation of a boiler, steam turbine and generator



#### **REGISTRATION**

Customized classes and site-specific training are available. Call GP Strategies<sup>™</sup> Energy Services for pricing and course details. To obtain more information, visit us online at http://fossilfuelcourses.gpstrategies.com/reg/ or call 800.803.6737.

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