WOODWARD

IPCS005—EGCP-3

DESCRIPTION

This class will give you the opportunity to learn more about the basics of power management using the EGCP-3 LS and the EGCP-3 MC. During the course you will learn about the theory, installation, programming, operation and maintenance of the EGCP-3 LS and the EGCP-3 MC with the help of various models, simulators and engines. The hands-on part of the training will include time for programming, adjustments and troubleshooting techniques on the EGCP-3 LS and the EGCP-3 MC.

CLASS OBJECTIVES

Upon successful completion of this course, the student will be able to:
• Demonstrate a strong foundation on power generation theory pertaining to the EGCP-3 LS and the EGCP-3 MC.
• Field calibrate and adjust the EGCP-3 LS and the EGCP-3 MC.
• Demonstrate an understanding of power management issues such as; soft loading and unloading, base loading, peak shaving, import/export control, and power transfer.
• Describe the concepts of isochronous load sharing, baseload, process control, import / export control, VAR/Power Factor control and droop.
• Demonstrate an understanding of methods of synchronizing, and paralleling of electrical generators.

CLASS OUTLINE

A. Concepts of Basic Load Control Theory
   • A review covering basic power generation, Load Control Modes, and paralleling generators.

B. EGCP-3 Control Systems
   • EGCP-3 LS and the EGCP-3 MC features, control modes and applications.
   • Input & Outputs (I/O) of the EGCP-3 LS and the EGCP-3 MC.
   • EGCP-3 LS and the EGCP-3 MC Programming menus and use of the ServLink / Watch Window software.
   • Synchronization, Load Control, VAR/PF Control and Process Control.
   • Calibration and Adjustment of the EGCP-3 LS and the EGCP-3 MC control.

C. Hands on familiarization
   • Live tuning and practice on the EGCP-3 LS and the EGCP-3 MC in our engine room with three engines.

The instructor reserves the right to modify the class content to best suit the class needs.