

## 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.*