

## IPCS001—DSL-2 AND MSLC-2

### DESCRIPTION

This class will give you the opportunity to learn more about the basics of power management using the DSL-2 and MSLC-2 controls. During the course you will learn about the theory, installation, programming, operation and maintenance of the DSL-2 and MSLC-2 with the help of various applications and diesel engine generator sets. The hands-on part of the training will include time for programming, adjustments and troubleshooting techniques on the DSL-2 and MSLC-2 in Woodward's diesel engine lab.



**Students are expected to have a laptop with Woodward Toolkit software installed. A USB to Serial converter needs to be supplied by the student if required for the laptop being used.**

### CLASS OBJECTIVES

*Upon successful completion of this course, the student will be able to:*

- Demonstrate a strong foundation on governor control theory pertaining to the DSL-2 and MSLC-2 controls.
- Field calibration and adjustments to function with different speed controls and voltage regulators.
- Demonstrate an understanding of power management issues such as; phase matching and slip frequency synchronizing, soft loading and unloading, base loading, peak shaving, import/export control, and power transfer.
- Describe the concepts of basic adjustments for load and VAR sharing and droop.
- Demonstrate an understanding of theory, methods of synchronizing, and paralleling of electrical generators.

### CLASS OUTLINE

#### **A. DSL-2 Control Systems**

- DSL-2 features, control modes and applications.
- Input & Outputs (I/O) of the DSL-2 control.
- Connections of PTs and CTs on the DSL-2 control.
- DSL-2 Programming menus using Toolkit software for Synchronization, Load Control, VAR/PF Control and Process Control.
- Segmenting of applications with Tie Breakers.

#### **B. MSLC-2 Control Systems**

- MSLC-2 features, control modes and applications.
- Input & Outputs (I/O) of the MSLC-2 control.
- Connections of the PTs and CTs of the MSLC-2 control.
- MSLC-2 Programming menus using Toolkit software for Synchronization, Load Control, VAR/PF Control and Process Control.
- Segmenting of applications with Tie Breakers and Utility connections.

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