

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 DSLC-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.