Turbotronic 5 Control System Operations

Course Number

10208

Course Duration

5 days

Audience

Package Operators and Maintenance Technicians

Prerequisites

Participants must have attended the following course, or have equivalent field experience:

- Solar Turbines Operation and Routine Maintenance

Course Description

This course is designed for package operators or maintenance technicians who are required to perform basic first line control system tasks with minimal guidance from Solar field service.

The course will cover the Turbotronic 5 control system variation.

The course will cover the knowledge and skills required to help maintain the package in a serviceable state under several scenarios, including:

- Using the control system program to determine the conditions for package alarms or shutdown
- Reloading the control system program following a component replacement or system malfunction
- Loading a revised control system program that may have been received from Solar
- Modifying Tunable Program Constants
- The use of the control system indications for basic troubleshooting (for example, the use of module LED's to verify operation)

The course comprises a combination of theoretical presentations and instructor demonstrations, followed by hands-on exercises using programming terminals and control system simulators. Manipulation of the logic is not covered in this course.

Course Objectives

On completion of this course the student will be able to:

1. Describe the purpose and function of the control system, and the major components thatcomprise the system
2. List the purposes of the various software applications and tools in a Solar Turbotronicproject
3. Demonstrate the ability to distribute project software to a programming terminal
4. Demonstrate the ability to configure communications drivers in RSLinx
5. Demonstrate the ability to communicate with and download project software to the Controller
6. Demonstrate the ability to use the control system program to determine the conditions for package alarms or shutdowns
7. Describe the use of Program Constants and the method used to modify tunable constants
8. Describe the implementation of control system security in a Turbotronic 5 project
9. Describe the control system features and indications that can assist in basic troubleshooting

Course Topics

1. Control System Overview
2. Turbotronic 5 System Hardware
3. Ladder Logic and The Basic Instruction Set
4. Introduction to Software Applications
5. Turbotronic Offline Program Monitoring
6. Logix Familiarization
7. Turbotronic Program Architecture
8. Turbotronic Control System Security
9. Hardware / Software Interface
10. Troubleshooting Methods
11. Logix Online Functions