



# GE Speedtronic MK V Steam Turbine

## GE Speedtronic MK V Steam Turbine

This three-day course begins with a system overview; a “big picture” of the GE Speedtronic. Next, the hydraulic controls and components are explained. Other major topics include the system software, master trip circuit, control configuration, and miscellaneous circuits.

### I. System Overview

- System Block Diagram
- Operator Interface
- Backup Interface
- Diagnostics

### II. Turbine Control Hydraulics

- Main Turbine Control Oil System
- Emergency Governor
- Backup Overspeed Trip
- Thrust Bearing Wear Detector
- Fluid Actuation System and Fluid Jet System
- Main Stop Valves
- Control Valves
- Combined Reheat Valves

### III. Software

- Application Software
- Software Voting
- Diagnostics

### IV. Master Trip Circuit

- Fundamental Trip Circuits
- 24 Volt protective Bus
- 125 Volt Trip Bus
- Primary Trip Relays
- Emergency Trip Relays
- Logging Functions

### V. Control Configuration

- Speed Control Description
- Load Control Description
- Flow Control Description

### VI. Miscellaneous Circuits

- Turbine Supervisory Instrumentation
- Power/Load Unbalance Module
- Logging Functions
- Protection Module
- Flame Detection
- Power Supply Card