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