



Power Plant Control Room Operator Training Series is geared towards the control room operator point of view. This is a brand new series that covers detailed information on controls and the start up and shut down of the system. This series can be retrofitted to fit your facilities specific needs.

POWER PLANT CONTROL OPERATOR TRAINING PROGRAM

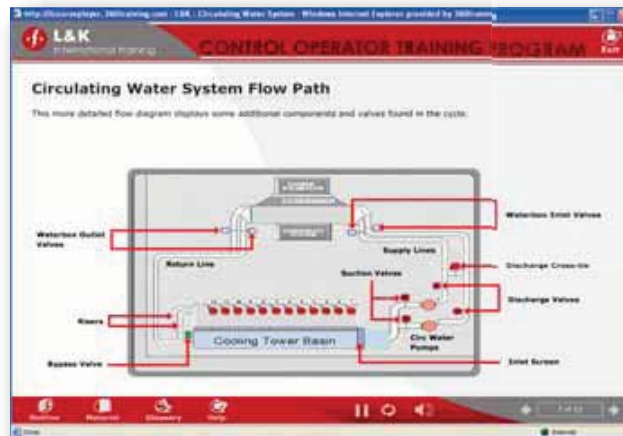
Plant Control System	Circulating Water System	Condensate System	Feedwater System	Boiler Feed Pumps
Boiler Water and Steam System	Combustion Air and Flue Gas System	Boiler Fuel System	Air Pollution Control Systems	Turbine and Auxiliaries System Operation and Control
Generator and Auxiliaries System Operation and Control	Unit Integrated Startup and Shutdown	Efficient, Reliable and Environmentally Sensitive Operations	Abnormal Plant Conditions	Heat Rate Improvement

Contact us at:



901- Plant Control System

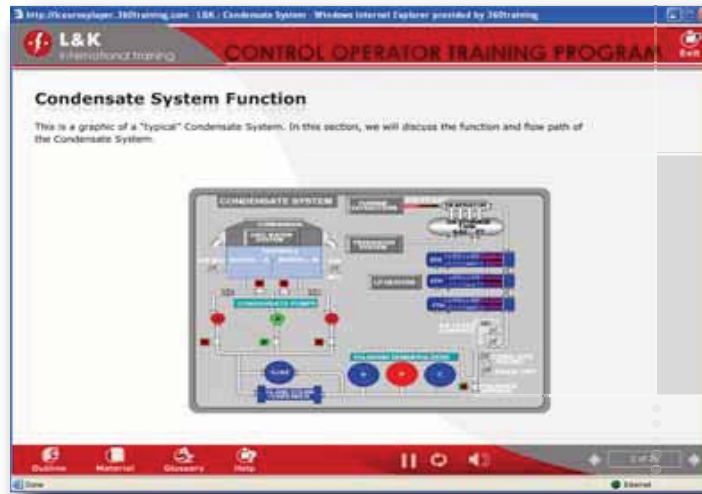
- Typical Distributed Control System capabilities
- How power plant processes are accessed and controlled from the DCS I/A controllers
- How DCS control system diagrams are used to interpret control system loops
- Basic Unit loading and control features



902- Circulating Water System

- Function of the Circulating Water System
- Flow paths and major components associated with the Circulating Water System
- Circulating Water System process control loops and associated methods of control
- Steps required to prepare for and startup of the Circulating Water System
- Steps taken during normal operation of the Circulating Water System
- Steps required to shut down the Circulating Water System

Contact us at:



903- Condensate System

- Function of the Condensate System
- Flow paths and major components associated with the Condensate System
- Condensate System process control loops and associated methods of control
- Steps required to prepare for and startup of the Condensate System
- Steps taken during normal operation of the Condensate System
- Steps taken to shut down the Condensate System

904- Feedwater System

- Function of the Feedwater System
- Flow paths and major components associated with the Feedwater System
- Feedwater System process control loops and associated methods of control
- Steps required to prepare for and startup of the Feedwater System
- Steps taken during normal operation of the Feedwater System
- Steps required to shut down the Feedwater System

905- Boiler Feed Pumps

- Function of the Boiler Feed Pumps and associated Auxiliary Equipment
- Flow paths and major components associated with the Boiler Feed Pumps and associated Auxiliary Equipment
- Boiler Feed Pumps process control loops and associated methods of control
- Steps required to prepare for and startup of the Boiler Feed Pumps
- Steps required to shut down the Boiler Feed Pumps
- Unit Trip Recovery

Contact us at:



906- Boiler Water and Steam System

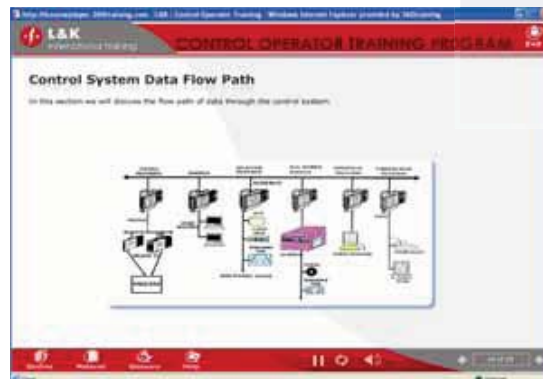
- Function of the Boiler Water and Steam System
- Flow paths and major components associated with the Boiler Water and Steam System
- Boiler Water and Steam System process control loops and associated methods of control
- Steps required to prepare for and startup of the Boiler Water and Steam System
- Steps taken during normal operation of the Boiler Water and Steam Systems
- Steps required to shut down the Boiler Water and Steam System

907- Combustion Air and Flue Gas System

- Function of the Combustion Air and Flue Gas System
- Flow paths and major components associated with the Combustion Air and Flue Gas System
- Combustion Air and Flue Gas System process control loops and associated methods of control
- Steps required to prepare for and startup of the Combustion Air and Flue Gas System
- Steps taken during normal operation of the Combustion Air and Flue Gas System
- Steps required to shut down the Combustion Air and Flue Gas System

908- Boiler Fuel System

- Function of the Boiler Fuel System
- Flow paths and major components associated with the Boiler Fuel System
- Boiler Fuel System process control loops and associated methods of control
- Steps required to prepare for and startup of the Boiler Fuel System
- Steps taken during normal operation of the Boiler Fuel System
- Steps required to shut down the Boiler Fuel System



909- Air Pollution Control Systems

- Pollution Control System Function
- Pollution Control System Description
- Pollution Control System Flow Paths
- Pollution Control System Parameters
- Pollution Control System Major Components
- Pollution Control System Operation

Contact us at:



910- Turbine Auxiliaries System Operation and Control

- Function of the Turbine Auxiliaries Systems
- Flow paths and major components associated with the Turbine Auxiliaries System
- Turbine Auxiliaries Systems process control loops and associated methods of control
- Steps required to prepare for and startup of the Turbine Auxiliaries Systems
- Steps taken during normal operation of the Turbine Auxiliaries System
- Steps required to shut down the Turbine Auxiliaries System

911- Generator and Auxiliaries System Operation and Control

- Function of the Generator and Auxiliaries System
- Flow paths and major components associated with the Generator and Auxiliaries System
- Generator and Auxiliaries System process control loops and associated methods of control
- Steps required to prepare for and startup of the Generator and Auxiliaries System
- Steps taken during normal operation of the Generator and Auxiliaries System
- Steps required to shut down the Generator and Auxiliaries System

912- Unit Integrated Startup and Shutdown

- Pre-Start Checklist
- Startup Procedures
- Pre-Shutdown Checklist
- Shutdown Procedures
- Perform Complete Unit Start-up
- Perform troubleshooting of Unit Integrated Operation Systems/Components during Normal Operation
- Perform complete Unit Shut-down
- Perform all Unit System Valve Line-ups

913- Efficient, Reliable & Environmentally Sensitive Operations

- Basic Efficiency Principles
- Boiler Efficiency
- Turbine Efficiency
- Condesnser Efficiency
- Feedwater Heaters
- Auxiliary Power Consumption
- Boiler Reliability
- Environmentally Sensitive Operations

Contact us at:



914- Abnormal Plant Conditions

- Abnormal Conditions Knowledge of the Hierarchy of Alarms
- Identify Systems/Equipment in Alarm/Alarm Status
- Interpret and print an Alarm List
- Appropriately respond to Alarms
- Respond appropriately to the loss of a Condensate Pump
- Respond appropriately to the loss of a Feedwater Pump
- Respond appropriately to the loss of a Fan Pair
- Respond appropriately to Drum Level Hi/Lo
- Respond appropriately to Turbine High Vibration
- Respond appropriately to Turbine Differential Expansion
- Respond appropriately to Turbine Thrust

915- Heat Rate Improvement

- Addresses Losses and loss correction/improvement for the following major system components:
 - Boiler
 - Turbine (Using Heat Balance and Turbine Performance Curves)
 - Heat Exchangers
 - Cooling Tower

Contact us at: