

Combined Cycle Steam Systems

Early Warning of Key Equipment Failure Modes

BALANCE OF PLANT	Performance	Bearing Failures	Lube	Mechanical Damage/Wear	Leakage/Seal Failures	Fouling	Process Deviations	Electrical	Motor/Drive	Fuel System Diagnostics	Fuel Supply & Gas Control Valves	Cooling
Steam Turbine	X	X	X	X	X	X	X		X			
Boiler Feed Pump	X	X	X	X	X	X	X		X			
Generator		X	X	X	X		X	X				
Condensator	X			X	X	X	X					
Feed Water Heater	X			X	X	X	X					
Transformers							X	X				
Centrifugal Pumps & Fluid Transport	X	X	X	X	X	X	X		X			
Control Valves				X			X					
Gear Boxes		X	X	X			X					
EQUIPMENT TYPES												
Heat Recovery Steam Generator (HRSG)	X				X	X	X					
Fuel Delivery				X	X	X	X					
Combustion Turbine	X	X	X	X	X	X	X			X	X	X
CT STARTUP MONITORING												
Compressor	X			X	X	X	X					
Fuel System	X						X			X	X	
Combustion	X						X					
Mechanical		X	X	X			X					
Wheel Space							X					X