

INSPECTION PROTOCOL - FOSSIL STEAM PLANT

Equipment/Component	Damage Mechanism	Inspection Techniques
Main Steam Piping (1)	<ul style="list-style-type: none"> Creep Fatigue 	<ul style="list-style-type: none"> Dimensional Wet Fluorescent MT Automated UT Replications Hardness
Hot Reheat Piping (1)	<ul style="list-style-type: none"> Creep Fatigue 	<ul style="list-style-type: none"> Dimensional Wet Fluorescent MT Automated UT Replications Hardness
Cold Reheat Piping (1)	<ul style="list-style-type: none"> Thermal Fatigue Cracking 	<ul style="list-style-type: none"> Wet Fluorescent MT Automated UT
Feedwater Piping & Assoc. Drains (1)	<ul style="list-style-type: none"> Flow Accelerated Corrosion 	<ul style="list-style-type: none"> Computed RT UT Grid Mapping
Deareator & Associated Piping (1)	<ul style="list-style-type: none"> Fatigue Cracking Thermal Fatigue Cracking Flow Accelerated Corrosion 	<ul style="list-style-type: none"> Wet Fluorescent MT UT Grid Mapping Computed RT
Attemperator Piping (1)	<ul style="list-style-type: none"> Liner Cracking Downstream Quench Cracking FAC (Feedwater Supply) 	<ul style="list-style-type: none"> Remote Visual Computed RT UT Grid Mapping
Drums (2)	<ul style="list-style-type: none"> Ligament Cracking Downcomer Bore Cracking Fatigue Cracking 	<ul style="list-style-type: none"> Direct Visual Remote Visual Wet Fluorescent MT
High Temperature Headers (2)	<ul style="list-style-type: none"> Creep (Seams & Sockets) Fatigue (Seams & Sockets) Creep-Fatigue Ligament Cracking Oxide Cavitation (Sockets) 	<ul style="list-style-type: none"> Wet Fluorescent MT Remote Visual Automated UT Volumetric UT (Sockets) Replications Hardness
Water Touched Tubing (including Supply & Link Piping) (1)	<ul style="list-style-type: none"> Corrosion Fatigue Cracking 	<ul style="list-style-type: none"> Remote Visual Inspection Computed RT
Air Receivers (1)	<ul style="list-style-type: none"> Corrosion Inoperable Relief Valve 	<ul style="list-style-type: none"> Visual Ultrasonic Thickness
High Pressure Air Piping (1)	<ul style="list-style-type: none"> Corrosion 	<ul style="list-style-type: none"> Computed RT UT Thickness
Steam Cooled Boiler Tubing (2)	<ul style="list-style-type: none"> Thermal Fatigue Coal Ash Corrosion Erosion (sootblower, etc) Oxide Build-up Mechanical (Fretting, etc) 	<ul style="list-style-type: none"> UT Thickness UT Oxide Measurements Comprehensive Visual

(1) - Inspections recommended primarily due to Safety related concerns

(2) - Inspections recommended primarily due to Reliability related concerns