

NDT RECOMMENDATIONS LIST
MAIN STEAM

Item No.	SA Node	Description	V	MT	UT	T	R	Priority	S&W Stress/NDE Ref. Node	Notes
1	5055	SRV West - Branch Connection and Valve Weld	X	X	X	X	X	1	A5	Include dimensional checks and thickness to verify design.
2	6095	SRV East - Branch Connection and Valve Weld	X	X	X	X	X	1	A55	Include dimensional checks and thickness to verify design.
3	3130	West Superheater to External Piping Tee	X	X	X		X	1	A3	Field Weld
4	5110	East Superheater to External Piping Tee	X	X	X		X	1	A60	Field Weld
5	3040	Elbow, US	X	X	X		X	1	A15	Replication noted isolated creep cavities in 1994. US end at 3 o'clock
6	50	Shear Lugs at MSH-3	X	X				1	M53	Replication performed in 1994
7	120	Shear Lugs at MSH-4	X	X				1	M54	
8	160	Bend, DS Weld	X	X	X		X	1	B45	Field Weld
9	215	Circ Weld	X	X	X			1	B53	Cut-Short Location, Field Weld
10	290	Wye Block, US Side	X	X			X	1	B80	Replication performed in 1994
11	2000	Wye Block, DS E Side	X	X			X	1	D1	Replication performed in 1994
12	1160	Circ Weld	X	X	X		X	1	C40	Field Weld
13	9010	Steam Chest Lead Pipe Take-off, S	X	X	X			1	N5	Include steam chest diameter and thickness to verify design.
14	9030	Steam Chest Lead Pipe Take-off, S	X	X	X			1	M5	
15	8010	Steam Chest Lead Pipe Take-off, N	X	X	X			1	U5	
16	8030	Steam Chest Lead Pipe Take-off, N	X	X	X			1	T5	
17	12030	Steam Turbine Lead Tie-Pt, Below	X	X	X			1	T25	Indication noted in 1994.
18	3010	Tee weld, East Side	X	X	X		X	2	A32	Replication performed 1994
19	10	Reducer, BOP to Bir Pipe Tie-Point	X	X	X			2	B5	Field Weld
20	140	Bend, US Weld	X	X	X			2	B35	
21	1000	Wye Block, DS W Side	X	X				2	B90	
22	1110	Circ Weld	X	X	X			2		Field Weld, Cold pull location
23	2100	Circ Weld	X	X	X			2		Field Weld
24	1180	Drip Pot	X	X	X			2	C50	
25	2160	Drip Pot	X	X	X			2	D50	
26	1240	ST Tie-Point S	X	X	X			2	D100	Field Weld
27	2220	ST Tie-Point N	X	X	X			2	C100	Field Weld

V: Visual, MT: Magnetic Particle, UT: Ultrasonic Shear, T: Ultrasonic Thickness, R: Replication

Note: Boiler internal piping is not included in the scope. POWER recommends internal inspections including moment restraints adjacent to the external piping tie-points.

NDT RECOMMENDATIONS LIST
HOT REHEAT

Item No.	SA Node	Description	V	MT	UT	T	R	Priority	S&W Stress/NDE Ref. Node	Notes
1	7000	SRV West - Branch Connection and Outlet Welds	X	X	X	X	X	1	415	Include dimensional checks and thickness to verify design.
2	8000	SRV East - Branch Connection and Outlet Welds	X	X	X	X	X	1	295	Include dimensional checks and thickness to verify design.
3	3060	West Superheater to External Piping Tee	X	X	X		X	1	420	Field Weld
4	5060	East Superheater to External Piping Tee	X	X	X		X	1	300	Field Weld
5	2160	Wye Outlet	X	X	X		X	1	275	High AF Exp Stress
6	2150	Bend, BOP to Blr Pipe Tie-Point	X	X	X		X	1	270	Field Weld. Replication performed in 1994
7	2130	Shear Lugs at HRH-3	X	X				1	HRH3	
8	2090	Circ Weld	X	X	X			1	240	Field Weld. High AF Sus Stress
9	2080	Shear Lugs at HRH-4	X	X				1	HRH4	
10	2060	Bend, DS Side	X	X	X			1	220	Field Weld. Cut Short Location. High AF Sus Stress
11	1199	Wye Inlet	X	X	X		X	1	80	
12	75	Wye Outlet, West	X	X	X			1	75	
13	100	Wye Outlet, East	X	X	X		X	1	100	Field Weld. Cut Short Location. High AF Sus Stress
14	70	Bend, DS Side	X	X	X			1	35	Replication noted isolated creep cavities in 1994
15	20	Bend, DS Side	X	X	X			1	15	Field Weld. High AF Sus Stress
16	10	Valve Tie-Point	X	X	X		X	1	5	High AF Exp Stress
17	1070	Horizontal Bend, US Side	X	X	X			1	125	Indication found and replication recommended in 1994
18	1080	Vertical Bend, US Side / Drip Pot	X	X	X		X	1	135/140	Field Weld. High AF Sus Stress
19	1090	Vertical Bend, DS Side	X	X	X		X	1	140	High AF Sus Stress. Replication performed in 1994
20	1130	Valve Tie-Point	X	X	X		X	1	160	Indication found and replication recommended in 1994
21	10030	South Valve Outlet	X	X	X			1	715	
22	20030	North Valve Outlet	X	X	X			1	865	
23	20070	ST Tie-Point, Below	X	X	X			1	880	
24	5000	Elbow, DS Side	X	X	X		X	2	400	Replication performed in 1994
25	3585	Wye, West Inlet	X	X	X		X	2	275	Replication performed in 1994
26	1110	Bend, DS Side	X	X	X		X	2	150	Replication performed in 1994
27	60	Drip Pot	X	X	X			2	30	
28	10100	South Valve Outlet	X	X	X			2	760	
29	20100	North Valve Outlet	X	X	X			2	910	
30	10070	ST Tie-Point, Below	X	X	X			2	730	

V: Visual, MT: Magnetic Particle, UT: Ultrasonic Shear, T: Ultrasonic Thickness, R: Replication

Note: Boiler internal piping is not included in the scope. POWER recommends internal inspections including moment restraints adjacent to the external piping tie-points.

NDT RECOMMENDATIONS LIST
COLD REHEAT

Item No.	SA Node	Description	V	MT	UT	T	R	Priority	S&W Stress/NDE Ref. Node	Notes
1	2020	4" SRV West - Branch Connection	X	X	X	X		1	610	Include dimensional checks
2	3300	4" SRV West - Branch Outlet	X	X	X	X		1	615	Include dimensional checks
3	540	4" SRV East - Branch Connection	X	X	X	X		1	270	Include dimensional checks
4	3200	4" SRV East - Branch Outlet	X	X	X	X		1	275	Include dimensional checks
5	2000	West Superheater to External Piping Tee	X	X	X	X		1	640	Field Weld. Verify pipe thickness on US side
6	560	East Superheater to External Piping Tee	X	X	X	X		1	300	Field Weld. Verify pipe thickness on US side
7	2120	Attemperator DS Weld, West	X	X	X			1	-	
8	440	Attemperator DS Weld, East	X	X	X			1	-	
9	2180	Elbow Lug at CRH-13	X	X				1	CR13	
10	380	Elbow Lug at CRH-4	X	X				1	CR4	
11	300	Bend, bottom of east riser, US side	X	X	X			1	115	Field Weld. High AF stress. Restricted expansion.
12	2030	6" SRV West A - Branch Connection	X	X	X	X		2	580	Include dimensional checks
13	3400	6" SRV West A - Branch Outlet	X	X	X	X		2	585	Include dimensional checks
14	2070	6" SRV West B - Branch Connection	X	X	X	X		2	545	Include dimensional checks
15	3060	6" SRV West B - Branch Outlet	X	X	X	X		2	550	Include dimensional checks
16	530	6" SRV East A - Branch Connection	X	X	X	X		2	240	Include dimensional checks
17	3130	6" SRV East A - Branch Outlet	X	X	X	X		2	245	Include dimensional checks
18	490	6" SRV East B - Branch Connection	X	X	X	X		2	205	Include dimensional checks
19	3000	6" SRV East B - Branch Outlet	X	X	X	X		2	210	Include dimensional checks
20	4000	Extraction Weldolet, West Branch	X	X	X			2	380	
21	4100	Extraction Weldolet, East Branch	X	X	X			2	50	
22	4040	Extraction Tee	X	X	X			2	1020	

V: Visual, MT: Magnetic Particle, UT: Ultrasonic Shear, T: Ultrasonic Thickness, R: Replication

Note: Boiler internal piping is not included in the scope. POWER recommends internal inspections including moment restraints adjacent to the external piping tie-points.

Item No.	SA Node	Description	V	MT	UT	T	R	Priority	S&W Stress/NDE Ref. Node	Notes
1	10	Bend, US side	X	X	X			1	10	
2	25	Drip Pot	X	X	X			1	25	
3	78	Tee, branch weld	X	X	X			1	55H	
4	120	Bend, US side	X	X	X			1	120	
5	120	Bend, DS side	X	X	X			1	120	
6	135	Branch w/ Repad	X	X	X			1	135	Confirm branch design
7	205	Tee, US side	X	X	X			1	205	
8	305	Reducer, DS side	X	X	X			1	305	
9	325	Bend, US side	X	X	X			1	325	

V: Visual, MT: Magnetic Particle, UT: Ultrasonic Shear, T: Ultrasonic Thickness, R: Replication