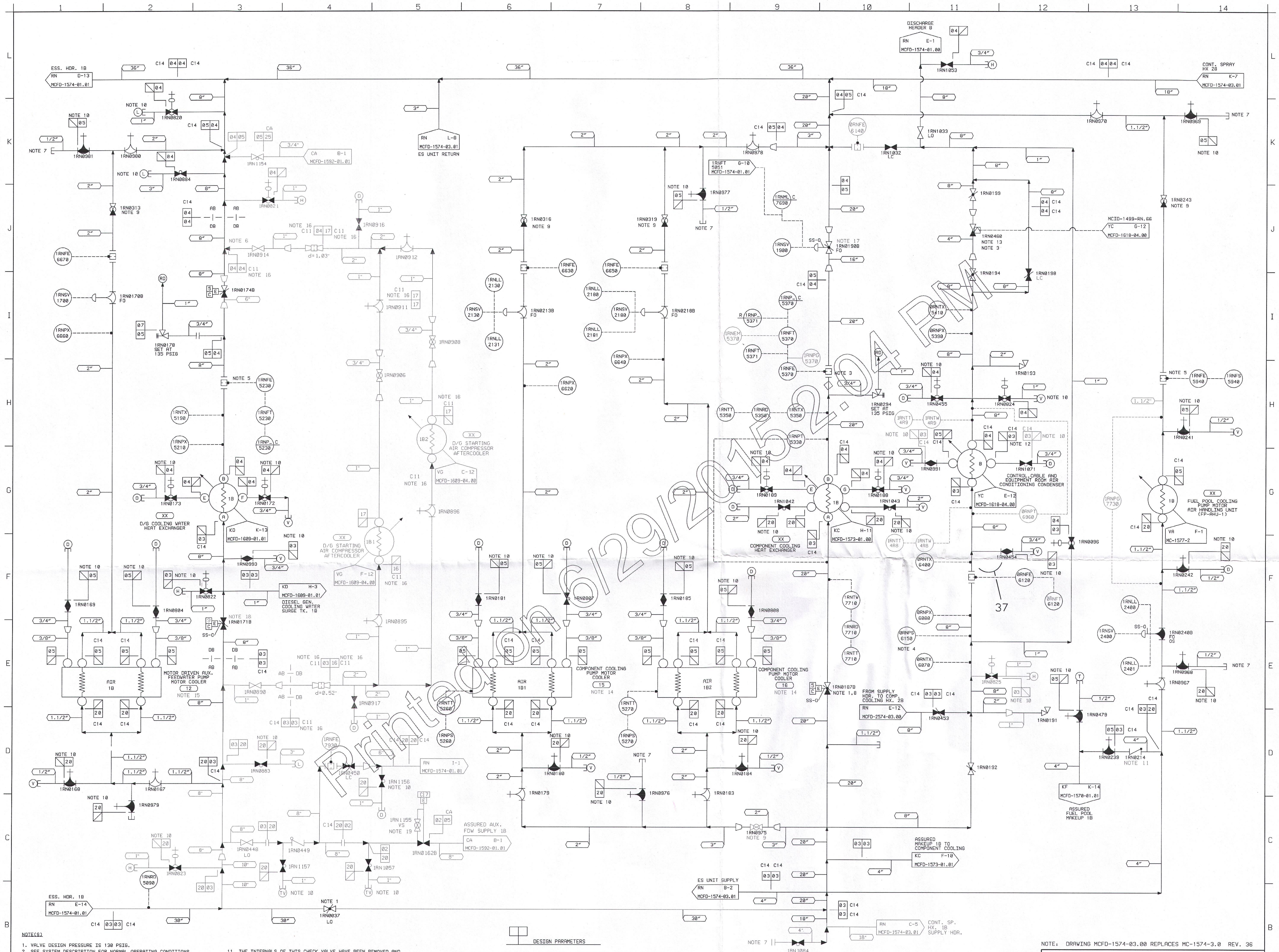

NOTE(S)

1. VALVE DESIGN PRESSURE IS 130 PSIG.
2. SEE SYSTEM DESCRIPTION FOR NORMAL OPERATING CONDITIONS.
3. CONTROL VALVES SHOULD BE LOCATED BELOW ELEVATION 769 FEET.
4. INDICATING DIFFERENTIAL PRESSURE SWITCH SUPPLIED BY HVAC.
5. LOCATE FLOW INDICATOR NEAR DOWNSTREAM THROTTLING VALVE TO FACILITATE THROTTLING.
6. CONNECTIONS ARE MADE BY WET TAP USING 11/16 INCH DIA. DRILL.
7. CLEANOUT CONNECTION.
8. 1RN0187B IS AUTOMATICALLY THROTTLED TO REDUCE CAVITATION ON 1RN0190B. THROTTLE POSITION ESTABLISHED BY RN SYSTEM FLOW BALANCE.
9. THE STEM LOCKNUT ON THIS VALVE MUST BE LOOSENED BEFORE THE VALVE CAN BE REPOSITIONED.
10. VENT AND DRAIN ASSEMBLIES ARE TO BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MCS-1206.00-02-0002 USING ENGINEERING SPECIFICATION MDG-ES-1A, 1B, 1C AND 1D.
11. THE INTERNALS OF THIS CHECK VALVE HAVE BEEN REMOVED AND THE CHECK VALVE BODY REMAINS IN PLACE.
12. DRAIN VALVE PIPING TO BE SCHEDULE 80.
13. CONTROL VALVE IS CONTROLLING YC CONDENSER PRESSURE BY A REFRIGERANT SENSING LINE.
14. FOR COMPONENT COOLING PUMPS " 1B1" & " 1B2" SEE MCFD-1573-01.00.
15. FOR AUX. FEEDWATER PUMP " 1B" (MOTOR DRIVEN) SEE MCFD-1592-01.01.
16. PIPING IN TRENCH IS NOT INSULATED.
17. 1RN190B IS PREVENTED FROM FULL CLOSURE AS AN ADDITIONAL MEANS OF PROVIDING PUMP MINIMUM FLOW RATE PROTECTION. REFER TO MCM-1205.06-0519.001 AND PT/0/A/4200/056 FOR ADDITIONAL INFORMATION AND DETAIL.
18. VALVE MAXIMUM STROKE TIME IS 50 SECONDS PER MCTC-1574-RN.V023-01
19. VALVE BONNET EQUALIZATION LINE. IF NECESSARY TO CLOSE, DO NOT OVER TIGHTEN. ADMINISTRATIVELY LOCKED OPEN.

ERN: MC0041X2

DESIGN PARAMETERS

LINE LISTING	PIPE SPEC.	PRESSURE	TEMPERATURE	CLASS	MATERIAL
CA05	PS 150.3	135 PSIG	160 F	C	CS
RN02	PS 150.3	135 PSIG	95 F	C	CS
RN03	PS 150.3	135 PSIG	102 F	C	CS/SS
RN04	PS 150.3	135 PSIG	150 F	C	CS/SS
RN05	PS 151.3	135 PSIG	150 F	C	SS
RN07	PS 150.4	135 PSIG	150 F	G	CS
RN16	PS 151.4	135 PSIG	102 F	G	SS
RN17	PS 151.4	135 PSIG	150 F	G	SS
RN20	PS 151.3	135 PSIG	102 F	C	SS
CA25	PS 151.3	135 PSIG	160 F	C	SS

37

NOTE: DRAWING MCFD-1574-03.00 REPLACES MC-1574-3.0 REV. 36

NO.	REVISIONS	DRN	DATE	CHKD	DATE	APPR	DATE	CIVIL	ELEC.	MECH.
37	AS-BUILT PER EC108853	ARK	2-10-15	JRC	2-11-15	GLM	2-11-15	-W-	-W-	-W-
36	AS-BUILT PER EC109235	DBW	1-12-15	JRC	1-12-15	GLM	1-12-15	-W-	-W-	-W-
35	PER M-14-10943/EXEMPT CODE G.18	CJZ	12-2-14	JRC	12-2-14	PJR	12-2-14	-W-	-W-	-W-
34	AS-BUILT PER EC101080	CJZ	9-22-14	JRC	9-23-14	MDH	9-23-14	-W-	-W-	-W-
33	PARTIAL AS-BUILT PER EC101080	ARK	8-27-14	EPR	8-27-14	PJR	8-27-14	-W-	-W-	-W-
32	AS-BUILT PER EC42128/MGMM14555	DRP	9-24-12	JRC	9-24-12	PJR	9-24-12	-W-	-W-	-W-
31	AS-BUILT PER EC106402	DBW	1-24-12	DRP	1-24-12	PJR	1-24-12	-W-	-W-	-W-
30	M-09-02774 EXEMPT CODE G.21	DAD	7-14-09	DRP	7-14-09	RDM	7-14-09	-W-	-W-	-W-
ORIG.	ORIGINAL DRAWING RETIRED									

INSPECTED

QA CONDITION 1

DUKE ENERGY
MCGUIRE NUCLEAR STATION UNIT 1

FLOW DIAGRAM OF NUCLEAR SERVICE WATER SYSTEM (RN)

DESIGNER JW ROBBINS DATE 10-26-94 INSP. HV DINH DATE 10-28-94
DRAWN IW WILLIAMS DATE 10-10-94 INSP. DJ WILLIAMS DATE 11-10-94
CHECKED MJ PLESO DATE 10-10-94 APPR. RA HARRIS DATE 11-11-94
SCALE
DWG. NO. MCFD-1574-03.00 REV. 37

D04