



- NOTE(S)
1. VALVE ADDED BY CONSTRUCTION FOR TESTING.
 2. SEE SYSTEM DESCRIPTION FOR NORMAL OPERATING CONDITIONS.
 3. LOCATE FLOW INDICATOR NEAR DOWNSTREAM THROTTLING VALVE TO FACILITATE THROTTLING.
 4. VALVE DESIGN PRESSURE IS 130 PSIG.
 5. INSULATE ALL PIPING ON THIS DRAWING.
 6. DRAIN LINES INSTALLED USING A 1 INCH WET TRAP.
 7. CLEANOUT CONNECTION.
 8. CONNECTION FOR FUTURE CHEMICAL METERING PUMP.
 9. CONNECTION FOR DEMINERALIZED WATER MAKEUP.
 10. RIG CONNECTION FOR H.X. CLEANING.

11. THE STEM LOCKOUT ON THIS VALVE MUST BE LOOSENED BEFORE THE VALVE CAN BE REPOSITIONED.
12. VENT AND DRAIN ASSEMBLIES ARE TO BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MCS-1206-00-02-9002 USING ENGINEERING SPECIFICATION MGS-ES-1A, 1B, 1C AND 1D.
13. VALVE 1RN8223B HAS NO ELECTRICAL OR PNEUMATIC CONTROL CIRCUITS. IT NO LONGER PERFORMS ANY SYSTEM FUNCTION.
14. FOR CENTRIFUGAL CHARGING PUMP "1B" SEE MCFD-1554-03.01.
15. FOR SAFETY INJECTION PUMP "1B" SEE MCFD-1562-03.00.

DESIGN PARAMETERS					
LINE LISTING	PIPE SPEC.	PRESSURE	TEMPERATURE	CLASS	MATERIAL
RN03	PS 150.3	135 PSIG	102 F	C	CS/SS
RN04	PS 150.3	135 PSIG	150 F	C	CS/SS
RN05	PS 150.3	135 PSIG	150 F	C	SS
RN07	PS 150.3	135 PSIG	150 F	G	CS
RN20	PS 151.3	135 PSIG	102 F	C	SS
RN21	PS 150.3	135 PSIG	150 F	C	CS/SS
RN22	TS 2701.1	135 PSIG	150 F	H	ST
RN23	TS 2701.1	150 PSIG	150 F	H	ST
RN26	PS 151.4	150 PSIG	150 F	H	SS
RN29	PS 150.4	150 PSIG	150 F	H	CS

REVISIONS									
NO.	DATE	CHKD	DATE	APPR	DATE	BY	REVISION	DATE	BY
11	AS-BUILT PER EC108853	ARK	11/11	JRC	11/11	GLM	11/11	-W-	-W-
10	PIP M-05-03960 / EX. CODE G, 18	ARK	11/14	EPR	11/14	RCM	11/14	-W-	-W-
9	AS-BUILT PER MD100356	RDR	06/16	MWP	06/16	RCM	06/16	-W-	-W-
8	AS-BUILT PER MD-100354	PSC	06/15	JRC	06/15	RCM	06/15	-W-	-W-
7	AS-BUILT PER MCM-15145	RDR	05/15	PSC	05/15	PJR	05/15	-W-	-W-
6	AS-BUILT PER MCM-14098	EPR	03/07	RLI	03/15	WMS	03/22	-W-	-W-

QA CONDITION 1

DUKE ENERGY
MCUIRE NUCLEAR STATION UNIT 1

FLOW DIAGRAM OF
NUCLEAR SERVICE WATER
SYSTEM (RN)

DESIGNER: J.W. ROBBINS DATE 10-28-94 INSP: H.V. DINH DATE 10-28-94
DRAWN: J.W. WILLIAMS DATE 10-24-94 INSP: D.J. WILLIAMS DATE 11-10-94
CHECKED: JAL/PLESO DATE 10-24-94 APPR: RA. HARRIS DATE 11-11-94
CIVIL ELEC. MECH. SCALE DWG. NO. MCFD-1574-03.01

ERN:MC0041X3

DO 5