



- NOTES:
1. VALVE ADDED BY CONSTRUCTION FOR TESTING.
  2. INSULATE ALL PIPING ON THIS DRAWING.
  3. LOCATE FLOW INDICATOR NEAR DOWNSTREAM THROTTLING VALVE TO FACILITATE THROTTLING.
  4. VALVE DESIGN IS 130 PSIG.
  5. VALVE INSTALLED BY WET TAP.
  6. 1RNF7019 PROVIDES NECESSARY DELTA P FOR 1EMP45R.
  7. CLEANOUT CONNECTION.
  8. ACCESS PORT.
  9. CONNECTION FOR FUTURE CHEMICAL METERING PUMP.
  10. CONNECTION FOR DEMINERALIZED WATER MAKEUP.
  11. AIR CONNECTION FOR H.X. CLEANSING.

12. THE STEM LOCKOUT ON THIS VALVE MUST BE LOOSENED BEFORE THE VALVE CAN BE REPOSITIONED.
13. VENT AND DRAIN ASSEMBLIES ARE TO BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MCS-1206-00-02-0002 USING ENGINEERING SPECIFICATION MOD-ES-1A, 1B, 1C AND 1D.
14. FOR CENTRIFUGAL CHARGING PUMP "1A" SEE MCFD-1554-03.01.
15. FOR SAFETY INJECTION PUMP "1A" SEE MCFD-1562-03.00.

LINE LISTING	PIPE SPEC.	PRESSURE	TEMPERATURE	CLASS	MATERIAL
RN03	PS 150.3	135 PSIG	150 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 150.3	135 PSIG	150 F	C	SS
RN20	PS 151.3	135 PSIG	150 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

NOTE: DRAWING MCFD-1574-02.01 REPLACES MC-1574-2.1 REV. 19

QA CONDITION 1

DUKE ENERGY  
MCGUIRE NUCLEAR STATION UNIT 1  
FLOW DIAGRAM OF  
NUCLEAR SERVICE WATER  
SYSTEM (RN)

NO.	REVISIONS	DRN	DATE	CHKD	DATE	APPR	DATE	INSPECTED
11	AS-BUILT PER EC100853	ARK	7-11	JRC	7-11	GLM	7-11	-W- -W- -W-
10	PIP M-05-03960 / EX. CODE G.18	ARK	6-10	EPR	6-10	RDH	6-10	-W- -W- -W-
9	AS-BUILT PER MD100356	PSC	10-27	DRP	10-27	PJR	10-27	-W- -W- -W-
8	AS-BUILT PER MD100354	RDR	8-27	MMP	8-27	ROM	8-27	-W- -W- -W-
7	AS-BUILT PER MDM-15118	CJZ	8-21	PSC	8-21	ROM	8-21	-W- -W- -W-
6	AS-BUILT PER MDM-15145	RDR	6-26	HKS	6-26	ROM	6-26	-W- -W- -W-
5	AS-BUILT PER MDM-14038	EPR	8-07	RLI	8-15	WMS	8-22	-W- -W- -W-

DESIGNER: J.W. ROBBINS DATE 10-28-94 INSP: D.J. WILLIAMS DATE 10-28-94  
DRAWN: J.W. WILLIAMS DATE 10-24-94 INSP: D.J. WILLIAMS DATE 11-10-94  
CIVIL/ELEC/MECH CHECKED: M.J. FLESO DATE 10-24-94 APPR: B.A. HARRIS DATE 11-11-94  
SCALE: DWG. NO. MCFD-1574-02.01 REV. 11

ERN:MC0041X1

D03