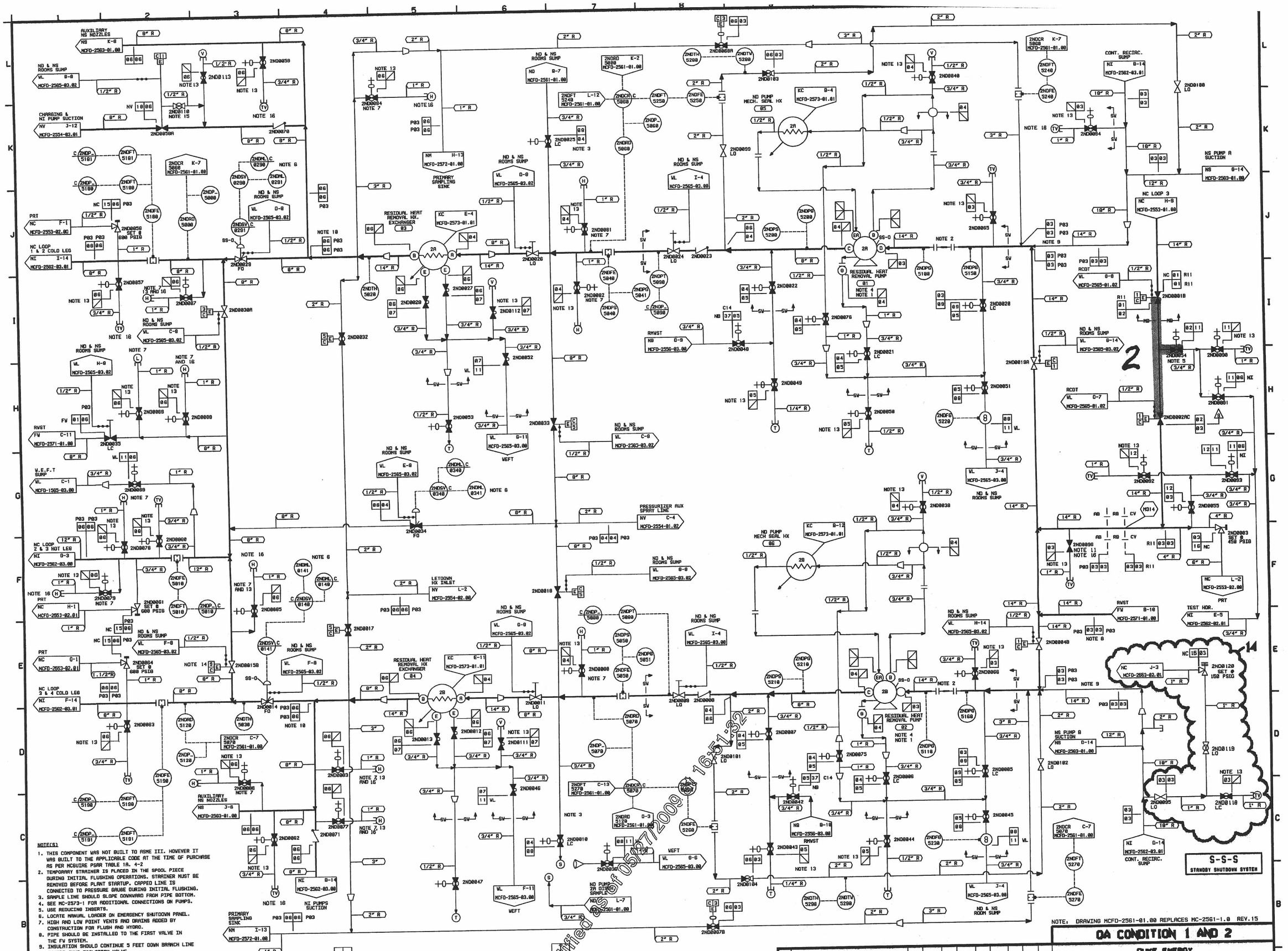

NOTES:

1. THIS COMPONENT WAS NOT BUILT TO ASME III. HOWEVER IT WAS BUILT TO THE APPLICABLE CODE AT THE TIME OF PURCHASE AS PER MCGUIRE PSAR TABLE 1A. 4-2
2. TEMPORARY STRAINER IS PLACED IN THE SPOOL PIECE DURING INITIAL FLUSHING OPERATIONS. STRAINER MUST BE REMOVED BEFORE PLANT STARTUP. CAPPED LINE IS CONNECTED TO PRESSURE GAUGE DURING INITIAL FLUSHING.
3. SAMPLE LINE SHOULD SLOPE DOWNWARD FROM PIPE BOTTOM.
4. SEE MC-2573-1 FOR ADDITIONAL CONNECTIONS ON PUMPS.
5. USE REDUCING INSERTS.
6. LOCATE MANUAL LORDER ON EMERGENCY SHUTDOWN PANEL.
7. HIGH AND LOW POINT VENTS AND DRAINS ADDED BY CONSTRUCTION FOR FLUSH AND HYDRO.
8. PIPE SHOULD BE INSTALLED TO THE FIRST VALVE IN THE FW SYSTEM.
9. INSULATION SHOULD CONTINUE 5 FEET DOWN BRANCH LINE TOWARD SUMP ISOLATION VALVE.
10. INSULATION SHOULD CONTINUE 5 FEET DOWN 8 INCH BRANCH LINE.
11. LOCATE TEST VENT 2ND096 ON 14 INCH 90 DEGREES ELBOW NEAR CONTAINMENT PENETRATION.
13. 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.
14. THIS VALVE HAS A NON-STANDARD OPERATING TIME OF 20 SEC. MAXIMUM.
15. VALVE BONNET EQUALIZATION LINE. ADMINISTRATIVELY LOCKED OPEN. IF NECESSARY TO CLOSE, DO NOTE OVER TIGHTEN.
16. THE PIPE CAP ON THE VENT ASSEMBLY MAY BE REPLACED WITH A QUICK-CONNECT INSTRUMENT FITTING. TOTAL WEIGHT OF THE FITTING AND ITS COMPONENTS SHALL NOT EXCEED 3 LBS. THE TOTAL DEVELOPED LENGTH OF THE VENT CONFIGURATION SHOULD NOT EXCEED 18" FROM THE OUTSIDE DIAMETER OF THE HEADER PIPE UNLESS OTHERWISE NOTED.

LINE LISTING	PIPE SPEC.	PRESSURE	TEMPERATURE	CLASS	MATERIAL
FW01	PS 151.2	50 PSIG	110 F	B	SS
NB37	PS 151.4	150 PSIG	100 F	E	SS
NB41	PS 151.4	30 PSIG	100 F	E	SS
NC01	PS 2501.1	2485 PSIG	650 F	A	SS
NC15	PS 151.2	100 PSIG	350 F	B	SS
NC16	PS 151.4	100 PSIG	303 F	E	SS
ND01	PS 2501.1	2485 PSIG	650 F	A	SS
ND02	PS 2501.1	2485 PSIG	650 F	A	SS
ND03	PS 401.2	450 PSIG	350 F	B	SS
ND04	PS 601.2	600 PSIG	350 F	B	SS

LINE LISTING	PIPE SPEC.	PRESSURE	TEMPERATURE	CLASS	MATERIAL
ND05	PS 601.4	600 PSIG	350 F	E	SS
ND06	PS 601.2	600 PSIG	350 F	B	SS
ND07	PS 601.4	600 PSIG	350 F	E	SS
ND08	PS 151.4	50 PSIG	200 F	E	SS
ND09	PS 601.2	600 PSIG	350 F	B	SS
ND11	PS 1501.4	2485 PSIG	630 F	E	SS
ND12	PS 401.4	450 PSIG	350 F	E	SS
NI06	PS 2501.4	2485 PSIG	650 F	E	SS
NV10	PS 151.2	220 PSIG	189 F	B	SS
VL11	PS 151.4	50 PSIG	200 F	E	SS
WL60	PS 601.4	600 PSIG	350 F	E	SS

NO.	REVISIONS	DRN	DATE	CHKD	DATE	APPR	DATE	INSPECTED CIVIL	ELEC.	MECH.
14	AS-BUILT PER EC97697001/MD201662	DRP	4-30-03	HKS	4-30-03	PJR	4-30-03	-W-	-W-	-W-
13	PER M-07-06353/EXEMPT CODE G.8	CJZ	08-28-08	HKS	08-28-08	RDM	08-31-08	-W-	-W-	-W-
12	REVISED PER EXEMPT CODE G-7	JRC	04-17-04	RDR	04-17-04	RDM	04-21-04	LSW	MAB	BSH
11	AS-BUILT PER MGMM-14390	RDR	04-17-04	EPR	04-17-04	WMS	04-17-04	LSW	MAB	JWR
10	AS-BUILT PER MGMM-13782	PSC	10-03-03	DRP	10-03-03	WMS	10-03-03	TAP	FFF	RMR
9	AS-BUILT PER MGMM-12975	PSC	11-06-02	HKS	11-06-02	RDM	11-06-02	TF	MDM	BSH
8	AS-BUILT PER MGMM-11625	EKK	12-05-02	JRC	12-05-02	RDM	12-05-02	ARS	MAB	BSH

SCALE

DWG. NO. MCFD-2561-01.00 REV. 14

QA CONDITION 1 AND 2

DUKE ENERGY
MCGUIRE NUCLEAR STATION UNIT 2

FLOW DIAGRAM OF
RESIDUAL HEAT REMOVAL
SYSTEM (ND)

DESIGNER JW AYRD DATE 11-28-92 INSP. LF PARISH DATE 12-3-92
DRAWN D TROUTMAN DATE 11-19-92 INSP. AR SHAH DATE 12-7-92
CHECKED DB DOUGLAS DATE 11-19-92 APPR. RA HARRIS DATE 12-18-92

ERN: MC003YBP

Duke Energy Corporation
Relief Request # 09-MN-005
Attachment 2, Page 13 of 18

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