DWG. NO. MCFD-1562-02.01 REV. 4

NITROGEN SUPPLY HEADER NI J-3 MCFD-1562-02.00

REACTOR COOLANT DRAIN TANK PUMP VL C-1 MCFD-1565-01.01

REACTOR COOLANT DRAIN TANK PUMP VL B-1 MCFD-1565-01.01

PRIMARY SAMPLE SINK NM K-10 MCFD-1572-01.01

PRIMARY SAMPLE SINK NM K-11 MCFD-1572-01.01

ACCUMULATOR TANK 07

ACCUMULATOR TANK 08

1C

1D

1NI0072 FC OS NOTE 7

1NI0073 NOTE 7

1NI0074 SET AT 700 PSIG NOTE 7

1NI0083 FC NOTE 7

1NI0084 FC OS NOTE 7

1NI0085 NOTE 7

1NI0086 SET AT 700 PSIG NOTE 7

1NI0228 LC

1NI0238 LC

1NI0227

1NI0229

1NI0075 LC

1NI0087 LC

1NI0330 NOTE 7

1NI0331 NOTE 7

1NI0878A

1NI0888

1NI0889

CONTAINMENT FLOOR AND EQUIPMENT SUMP 1A VL J-6 MCFD-1565-01.02

CONTAINMENT FLOOR AND EQUIPMENT SUMP 1B VL I-3 MCFD-1565-01.02

NOTE 5

NOTE 1

1NI0878 FC OS

1NI0890 FC OS

CONTAINMENT FLOOR AND EQUIPMENT SUMP 1A VL L-6 MCFD-1565-01.02

CONTAINMENT FLOOR AND EQUIPMENT SUMP 1B VL J-3 MCFD-1565-01.02

CHECK VALVE 1NI0157 TEST NI F-3 MCFD-1562-03.00

CHECK VALVE 1NI0168 TEST NI B-6 MCFD-1562-03.00

1NI0826

1NI0825

CHECK VALVE TEST NI C-7 MCFD-1562-01.00

CHECK VALVE 1NI0156 AND 1NI0159 TEST NI E-4 MCFD-1562-03.00

1NI0285

1NI0289 SET AT 2485 PSIG

1NI0436 NOTE 7

1NI0435 NOTE 7

1NI0889A NOTE 7

1NI0831

1NI0832

CHECK VALVES 1NI0175, 1NI0176 TEST NI H-10 MCFD-1562-03.01

NI ACCUMULATOR FILL NI I-7 MCFD-1562-03.00

1NI0846

1NI0868 NOTE 7

ACCUM. FILL AND CHECK VALVE TEST NI L-11 MCFD-1562-02.00

1NI0415

1NI0827

1NI0829

1NI0828

GATE VALVES 1ND0001B AND 1ND0002A TEST ND E-14 MCFD-1561-01.00

CHECK VALVES 1NI0165, 1NI0167 1NI0169, 1NI0171 TEST NI J-9 MCFD-1562-03.01

1NI0414

1NI0412

1NI 0835

1NI 0836

1NI0833

1NI0834

CHECK VALVES 1NI0169, 1NI0181 TEST NI E-16 MCFD-1562-03.01

CHECK VALVES 1NI0124, 1NI0128 TEST NI K-4 MCFD-1562-03.00

1NI0830

1NI0879 FC OS

1NI0880 FC OS

1NI0891

1NI0892

1NI0893 NOTE 2

1NI0894 NOTE 2

1NI0882 NOTE 2

NI PUMP DISCH. NI F-1 MCFD-1562-03.01

NI PUMP DISCH. NI D-1 MCFD-1562-03.01

NC LOOP 3 NC J-16 MCFD-1553-01.00

NC LOOP 4 NC D-9 MCFD-1553-01.00

DEMIN. WATER STORAGE TANK BB L-6 MCFD-1580-01.02

V.E.F.T. VL F-11 MCFD-1565-03.00

1NI0886 LC

1NI0887

1NI0186

1NI0098

1NI0187

1NI0097

TEST HEADER NI I-14 MCFD-1562-04.00

1NI0899

FW J-3 MCFD-1571-01.00 R.W.S.T.

S-S-S STANDBY SHUTDOWN SYSTEM

NOTE: DRAWING MCFD-1562-02.01 REPLACES MC-1562-02.01 REV. 16

QA CONDITION 1 AND 2

NOTE(S)

1. PIPING SCHEDULE 140 MUST BE ADHERED TO DUE TO SAFETY ANALYSIS FLOW REQUIREMENTS.
2. LOCATE VALVES AS CLOSE TOGETHER AND AS CLOSE TO REACTOR COOLANT PIPING AS POSSIBLE.
3. 18 INCH x 6 INCH TEE ROTATE PER NSM NO. MG-679 AND NSM NO. MG-688.
4. DELETED
5. ARRANGE TELL-TALE FOR EASY DRAINAGE INTO HAND CARRIED VESSEL.
6. DELETED
7. VALVE PROVIDED WITH SOFT SEAT.
8. VENTS AND DRAINS ADDED BY CONSTRUCTION DEPT. FOR FLUSH AND HYDRO.
9. VENT AND DRAIN ASSEMBLIES ARE TO BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MCS-1206.00-02-0002 USING ENGINEERING SPECIFICATION MDB-ES-1A, 1B, 1C AND 1D.

DESIGN PARAMETERS

LINE LISTING	PIPE SPEC.	PRESSURE	TEMPERATURE	CLASS	MATERIAL
BB14	PS 151.4	150 PSIG	120 F	B	SS
FW13	PS 151.4	150 PSIG	114 F	E	SS
NC06	PS 2501.1	2485 PSIG	650 F	B	SS
NI06	PS 2501.4	2485 PSIG	650 F	B	SS
NI13	PS 400.4	700 PSIG	160 F	B	CS
NI14	PS 681.2	700 PSIG	300 F	B	SS
NI15	PS 2501.2	2485 PSIG	650 F	B	SS
NI16	PS 681.4	700 PSIG	300 F	E	SS
NI17	PS 2501.1	2485 PSIG	650 F	A	SS
NI19	PS 2501.2	2485 PSIG	650 F	B	SS
NI20	PS 2501.2	2485 PSIG	300 F	B	SS
NI21	PS 2501.4	2485 PSIG	300 F	E	SS
NM09	PS 681.2	700 PSIG	300 F	B	SS
WL05	PS 681.4	700 PSIG	300 F	E	SS
WL11	PS 151.4	50 PSIG	200 F	E	SS
WL43	TS 2701.1	100 PSIG	200 F	E	ST

NO.	REVISIONS	DRN	DATE	CHKD	DATE	APPR	DATE
4	AS-BUILT PER MDMM-13404	PSC	10-06-95	JRC	10-06-95	RDM	10-07-95
3	AS-BUILT PER MDMM-13405	RDR	05-29-95	HKS	05-29-95	RDM	05-30-95

INSPECTED: CIVIL ELEC. MECH.

DUKE POWER COMPANY
MCGUIRE NUCLEAR STATION UNIT 1

FLOW DIAGRAM OF SAFETY INJECTION SYSTEM (NI)

DESIGNER RW REVELS DATE 08-24-95 INSP. R ELAND DATE 08-30-95
DRAWN JW WILLIAMS DATE 08-23-95 INSP. MN DICKS DATE 10-26-95
CHECKED MJ PLESO DATE 08-23-95 APPR. BA HARRIS DATE 11-02-95

SCALE DWG. NO. MCFD-1562-02.01 REV. 4

ERN: MC009082

Certified as of 05/28/2009 at 14:39:06

Duke Energy Corporation
Relief Request # 09-MN-005
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