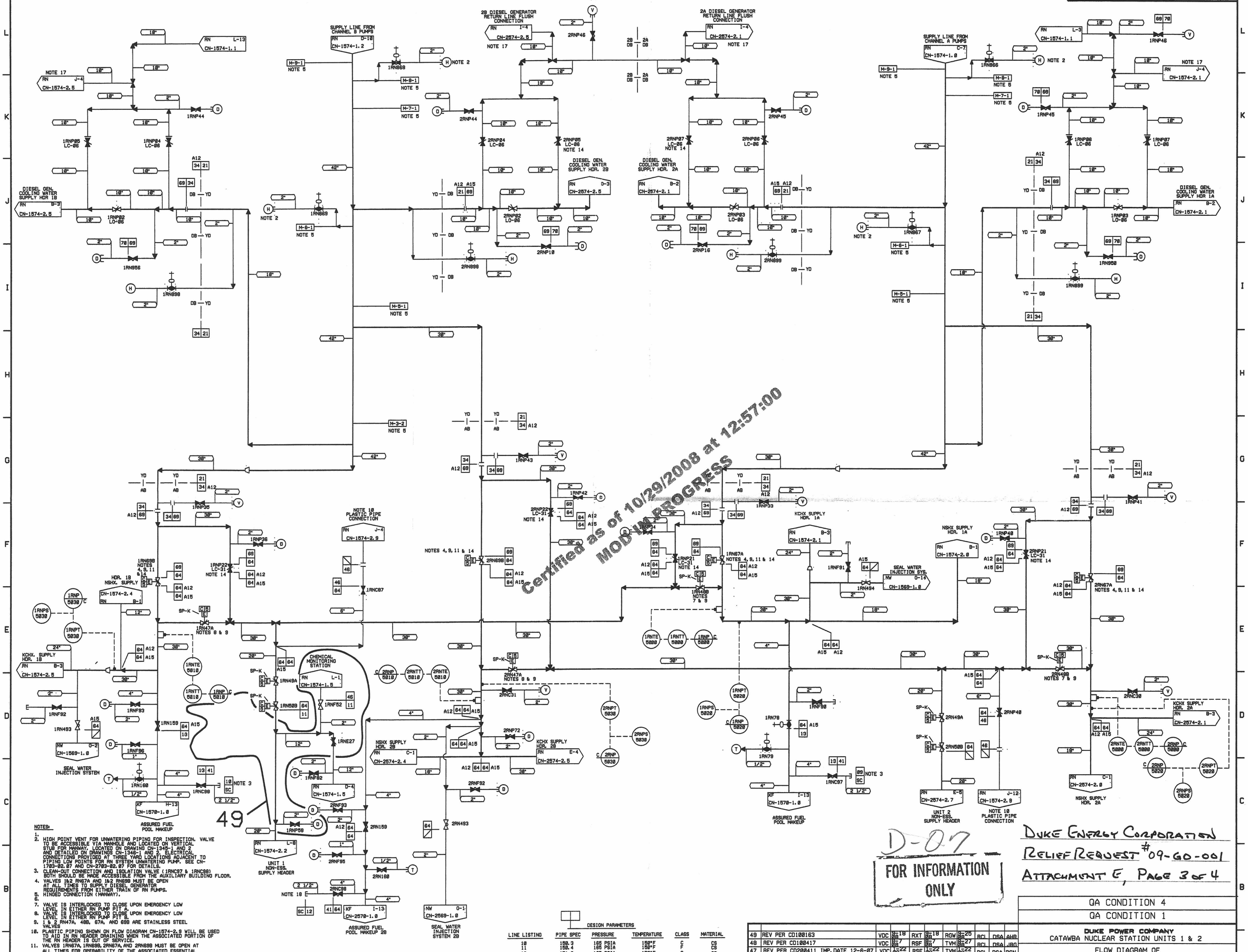

Certified as of 10/29/2008 at 12:57:00
MOD IN PROGRESS

NOTES:

1.
2. HIGH POINT VENT FOR UNWATERING PIPING FOR INSPECTION. VALVE TO BE ACCESSIBLE VIA MANHOLE AND LOCATED ON VERTICAL STUB FOR MANWAY. LOCATED ON DRAWING CN-1345-1 AND 2 AND DETAILED ON DRAWINGS CN-1346-1 AND 2. ELECTRICAL CONNECTIONS PROVIDED AT THREE YARD LOCATIONS ADJACENT TO PIPING LOW POINTS FOR RN SYSTEM UNWATERING PUMP. SEE CN-1703-82.07 AND CN-2703-82.07 FOR DETAILS.
3. CLEAN-OUT CONNECTION AND 150LATION VALVE (1RNC97 & 1RNC98) BOTH SHOULD BE MADE ACCESSIBLE FROM THE AUXILIARY BUILDING FLOOR.
4. VALVES 1&2 RN67A AND 1&2 RN69B MUST BE OPEN AT ALL TIMES TO SUPPLY DIESEL GENERATOR REQUIREMENTS FROM EITHER TRAIN OF RN PUMPS.
5. HINGED CONNECTION (MANWAY).
6.
7. VALVE IS INTERLOCKED TO CLOSE UPON EMERGENCY LOW LEVEL IN EITHER RN PUMP PIT A.
8. VALVE IS INTERLOCKED TO CLOSE UPON EMERGENCY LOW LEVEL IN EITHER RN PUMP PIT B.
9. 1 & 2 RN47A, 48B, 67A, AND 68B ARE STAINLESS STEEL VALVES
10. PLASTIC PIPING SHOWN ON FLOW DIAGRAM CN-1574-2.9 WILL BE USED TO AID IN RN HEADER DRAINING WHEN THE ASSOCIATED PORTION OF THE RN HEADER IS OUT OF SERVICE.
11. VALVES 1RN67A, 1RN68B, 2RN67A, AND 2RN68B MUST BE OPEN AT ALL TIMES FOR OPERABILITY OF THE ASSOCIATED ESSENTIAL TRAIN OF COMPONENTS.
12. THE RN DISCHARGE HEADER PIPING INFORMATION (WHICH WAS SHOWN ON THIS FLOW DIAGRAM THROUGH REVISION 27) HAS BEEN TRANSFERRED TO CN-1574-1.2.
13.
14. VALVE INSTALLED IN REVERSE OF FLOW DIRECTION.
15.
16.
17. WHEN THIS FLUSH LINE IS IN SERVICE THE ASSOCIATED DIESEL GENERATOR MUST BE DECLARED INOPERABLE AND THE ENGINE MUST BE DISABLED TO PREVENT ANY AUTOSTART SINCE JACKET WATER COOLING FLOW WILL NOT BE SUFFICIENT.
18. CLEAN-OUT CONNECTIONS AND VALVE 2RNC98 SHOULD BE ACCESSIBLE FROM THE AUXILIARY BUILDING FLOOR.

DESIGN PARAMETERS

LINE LISTING	PIPE SPEC	PRESSURE	TEMPERATURE	CLASS	MATERIAL
10	150.3	165 PSIA	150°F	C	CS
11	150.4	165 PSIA	150°F	F	CS
13	151.3	165 PSIA	150°F	C	SS
18	150.4	165 PSIA	150°F	G	CS
21	150.5	115 PSIA	150°F	C	CS
34	150.3	138 PSIA	150°F	C	CS
41	151.4	165 PSIA	150°F	H	SS
46	151.4	165 PSIA	150°F	G	SS
49	151.4	165 PSIA	150°F	F	SS
69	151.9	138 PSIA	150°F	G	NI
78	151.4	138 PSIA	150°F	G	SS
64	151.9	165 PSIA	150°F	C	NI

NO.	REVISIONS	DRN	DATE	CHKD	DATE	APPR	DATE	CIVIL	ELEC.	MECH.
49	REV PER CD100163	VDC	8-18	RXT	8-18	RGW	8-25	RCL	DSA	AHR
48	REV PER CD100417	VDC	8-7	RSF	8-7	TVM	8-27	RCL	DSA	JRG
47	REV PER CD200411 IMP. DATE 12-6-07	VDC	8-22	RSF	8-22	TVM	8-22	RCL	DSA	RSN
46	REV PER CD200154 IMP. DATE 8-15-07	VDC	8-29	RSF	8-29	RGW	8-29	RCL	DSA	WPJ
45	REV PER CD100106 IMP. DATE 7-2-07	VDC	8-12	RSF	8-12	RGW	8-12	RCL	DSA	WPJ
44	REV PER CD100431 IMP. DATE 4-16-07	VDC	8-3	RSF	8-3	RGW	8-3	W	W	W
43	REV PER CD100139 IMP. DATE 1-2-07	VDC	8-16	RSF	8-16	RGW	8-17	W	W	W
-	REV PER CD100415 IMP. DATE 1-2-07									
ORIG.	ORIGINAL DRAWING RETIRED	VDC	8-16							

INSPECTED

D-07

FOR INFORMATION ONLY

DUKE ENERGY CORPORATION
RELIEF REQUEST #09-GO-001
ATTACHMENT E, PAGE 3 OF 4

QA CONDITION 4
QA CONDITION 1

DUKE POWER COMPANY
CATAWBA NUCLEAR STATION UNITS 1 & 2

FLOW DIAGRAM OF
NUCLEAR SERVICE WATER
SYSTEM (RN)

DESIGNER RC BURY	DATE 2-18-74	INSP. WAIVED	DATE --
DRAWN W. PATTON	DATE 2-28-74	INSP. RH WALTMAN	DATE 8-16-74
CHECKED RW HATLEY	DATE 8-15-74	APPR. JF WYKE	DATE 8-16-74

SCALE | DWG. NO. CN-1574-1.1 | REV. 49

ERN: CN000HOX