G-191174

REACTOR CORE ISOLATION COOLING SYSTEM FLOW DIAGRAM

VERMONT YANKEE NUCLEAR POWER CORPORATION
VERMONT YANKEE NUCLEAR POWER STATION
VERNON, VERMONT

GENERAL SERVICES INCORPORATED NEW YORK

SCALE NONE — APPROVED — DATE APR 29 '75

DW MECH. — DR ELECTRICAL — CH ENGINEER

G-191174 SHEET 1 OF 2

REVISIONS

REV	DESCRIPTION	BY	CHKD.	APPD.
42	REVISED PER VYDC 2001-003, JO 2001-107, WO 01-4558	WD	JK	MAB
41	REVISED PER ER 2000-0545	1-21-03	1-21-03	1-23-03
		MS	WD	JWL
40	REVISED PER CU ER 2002-0784_01	8-7-02	8-7-02	8-8-02
		JK	JNV	WCL

NO.	DATE	DESCRIPTION	BY	ENG CHK	APP
0	4-14-05	.	-	-	-

LRA-G-191174-SH-01-0

CAD FILE: LRA-G-191174-SH-01_42.DGN
RASTER FILE: G-191174-SH-01_42.TIF

D-33

PIPING LINE LIST

LINE NO.	LINE SIZES	PIPE SCH	PIPE MAT'L	DESIGN PRESS PSIG	DESIGN TEMP °F	CODE SPEC PART NO.	LOCTN
	RCIC-1	4"	120	CS-5	1900	175	1.2	H-8
	RCIC-2	4"	120	CS-5	1900	140	1	F-10
***	RCIC-3	6"	STD	CS-1	150	175		N-12
	RCIC-4	8"	STD	CS-1	150	325		J-9
	RCIC-5A	8"	STD	CS-1	150	325		SHTS 10,11
	RCIC-5B	8"	STD	CS-1	150	325		SHTS 10,11
	RCIC-6	3"	STD	CS-1	150	325		J-9
	RCIC-7	6"	STD	CS-1	150	175		F-14
**	RCIC-8B	4"	120	CS-5	1900	140		H-8
	RCIC-9	2"	160	CS-5	1500	175		I-11
	RCIC-10	2"	80	CS-1	150	175		J-14
	RCIC-11	2"	160	CS-5	1500	175		G-7
	RCIC-12, 14	2", 1½"	80	CS-1	150	175		SEE SHT
	RCIC	2" & SM.	160	CS-5	1900	400		—
	RCIC	2" & SM.	80	CS-1	150	325		
	RCIC-8A	4"	120	CS-5	1900	450	1.1	G-10
	RCIC-5B	6"	STD	CS-1	150	325	1.7	SHTS 10,11
	RCIC-15	1"	160	CS-5	1500	175	—	G-11
	CST-3	6"	40S	SS-1	150	175	1.6	B-8
	RCIC-16	1", 2"	80	CS-1	150	325	1.2	K-6
****	RCIC-13	2"	80	CS-1	150	175	1	K-11
	MS-5A	3"	160	CS-5	1250	575	1.1	D-8
	MS-5B	3", 2"	160	CS-5	1250	575	1.2	D-15
	MSD	2" & SM.	80	CS-1	150	325	1.6	
	MSD	2" & SM	160	CS-5	1250	575	1.2	
	MSD	1"	80	A335,P11	1250	375	1&R	—

NOTES: (CONTINUED SEE (I-18)

4. FOR INSTRUMENTS WITHOUT RACK NUMBERS SEE INSTRUMENTATION INSTALLATION DETAILS FOR MOUNTING.
5.
6. ALL INSTRUMENTATION IS POWERED FROM STATION BATTERY VIA VITAL AC SYSTEM.
7. # DESIGNATES ITEM SUPPLIED BY GE/APED.
8. —o— DENOTES ROOT VALVE.
9. ### RCIC 8B IS DESIGNED TO 450°F FROM CHECK VALVE V-22 TO MOV-21. THE REMAINDER OF 4" RCIC 8B IS DESIGNED TO 140°F.
10. PERFORATED DEBRIS SHIELD EVALUATED UNDER CAC 93-039.
11. V13-15 LEAK-OFF LINE REMOVED PER W.O.# 94-7510-02 and MINOR MOD. # 95-018.
12. *** 6" RCIC-3 IS DESIGNED TO 185# FROM THE TORUS TO V13-61. THE REMAINDER OF THE LINE IS DESIGNED TO 175#.
13. **** 2"-RCIC-13 IS DESIGNED TO 185# FROM THE TORUS TO V13-38. THE REMAINDER OF THE LINE IS DESIGNED TO 175#.

LEGEND
A-ERFIS COMPUTER DATA SYSTEM

NOTES
-UNLESS OTHERWISE NOTED ALL VALVE AND INSTRUMENT NUMBERS TO BE PREFIXED BY SYSTEM NUMBER 13.
FOR EXAMPLE: FOR VALVE V-19
ACTUAL TAGGING SHALL BE V 13-19
VALVE IDENTIFICATION
SYSTEM NO.
VALVE IDENTIFICATION NO.
FOR INSTRUMENT NO. FI-69
ACTUAL TAGGING SHALL BE FI-13-69
TYPE OF INSTRUMENT
SYSTEM NO.
INSTRUMENT DESIGNATION NO.
FOR SPECIALTY SR-40
ACTUAL TAGGING SHALL BE SR-13-40
TYPE OF SPECIALTY
SYSTEM NO.
SPECIALTY IDENTIFICATION
2. UNLESS OTHERWISE NOTED ALL OPEN DRAINS AND VENTS SHALL BE CS-1 1.7 PIPING
3. UNLESS OTHERWISE NOTED, ALL BRANCH CONNS FOR DRAINS, VENTS AND TEST SHALL BE OF SAME MATERIAL & SPECIFICATION AS THE HEADER UP TO AND INCLUDING SECOND SHUT-OFF VALVE.
(FOR CONTINUATION OF NOTES SEE (A-15))

REFERENCE DRAWINGS:

LIST OF DRAWINGS	A-191184
VALVE & SPECIALTY LIST	A-191187
PIPING & INSTRUMENT SYMBOLS	G-191185
FLOW DIAGRAM CONDENSATE & DEMIN. WATER TRANSFER SYSTEM	G-191176
REACTOR CORE ISOLATION COOLING PIPING - PLAN	G-191208
FLOW DIAGRAM - NUCLEAR BOILER	G-191167
FLOW DIAGRAM - REACTOR HIGH PRESSURE COOLANT INJECTION SYSTEM	G-191169
FLOW DIAGRAM - RESIDUAL HEAT REMOVAL SYSTEM	G-191172
FLOW DIAGRAM REACTOR WATER CLEAN-UP SYSTEM	G-191178
DIAGRAM - NUCLEAR BOILER VESSEL INSTRUMENTATION	G-191267
PROCESS DIAGRAM REACTOR CORE ISOLATION COOLING SYSTEM	5920-605
FCD REACTOR CORE ISOLATION COOLING SYSTEM (3 SHEETS)	5920-25, 5920-26, 5920-49C
GE-APED MASTER PARTS LIST	FCF194X844(2)
RCIC TURBINE OIL PIPING DIAGRAM	5720-1047

AS BUILT
DATE 12-12-72 APPROVED

REPRODUCED FROM GE DWG 728E941 SHEET 1 REV. 3

COMPONENTS SUBJECT TO AMR

- REACTOR CORE ISOLATION COOLING SYSTEM AMRM-06
- MAIN CONDENSER AND MSIV LEAKAGE PATHWAY AMRM-26
- REACTOR VESSEL AMRM-31
- REACTOR COOLANT SYSTEM PRESSURE BOUNDARY AMRM-33

SYSTEM INTENDED FUNCTION BOUNDARY

THIS IS AN FSAR DRAWING