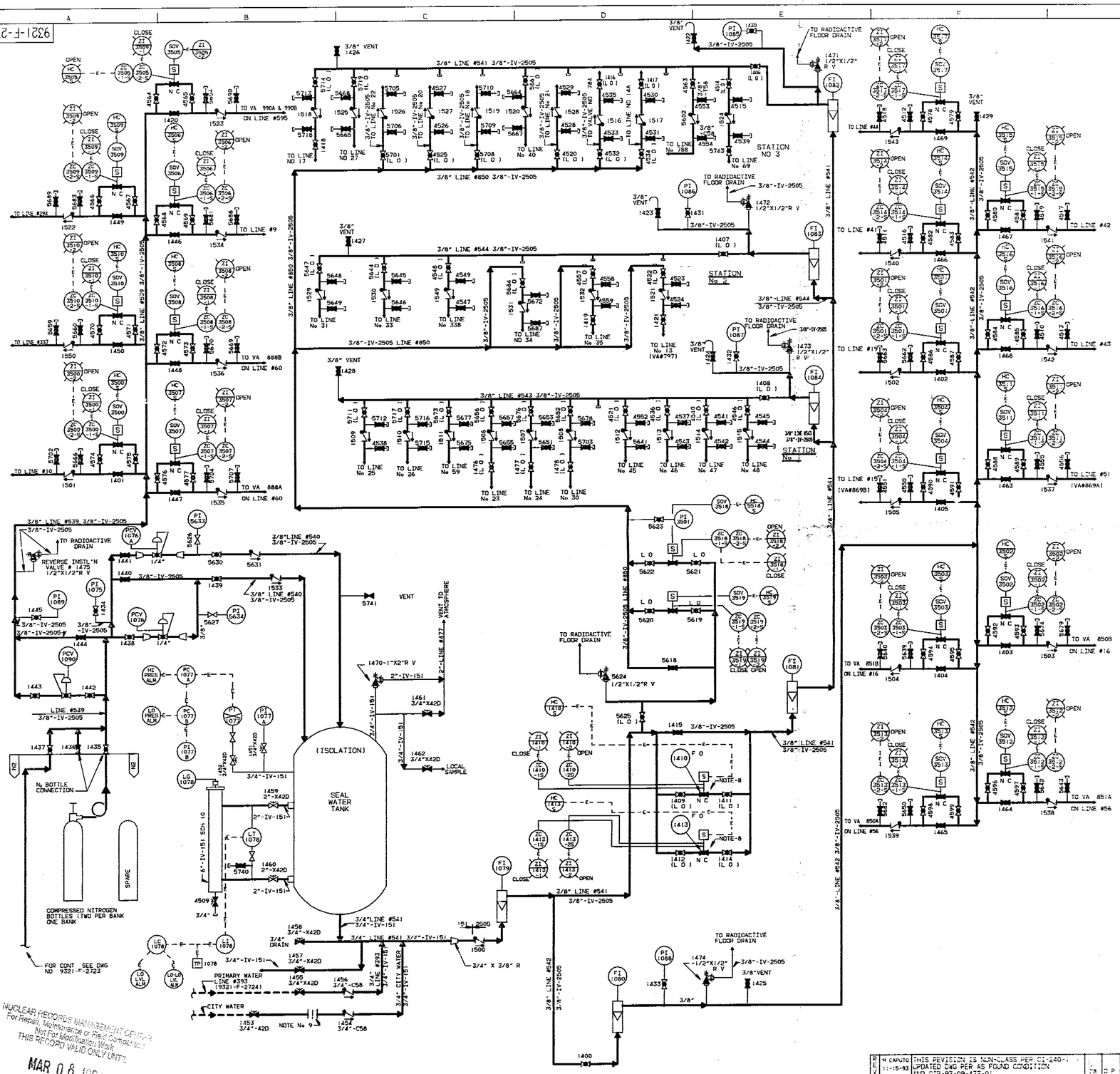
9321-F-2746



NUCLEAR RECORDS MANAGEMENT OFFICE
For Repair, Maintenance or Field Comparison
Not for Modification Work
THIS RECORD VALID ONLY UNTIL
MAR 08 199

PENETRATION LIST

SEAL CONN TO LINE NO	INJECTION POINTS	CONTAINMENT PENETRATION SLEEVE	LINE DESCRIPTION	REMARKS
9	VALVE #744		RESIDUAL HEAT REMOVAL LOOP IN	NITROGEN INJ
10	VALVE #732	K	DITTO	DITTO
337	IN LINE #337	NONE	DITTO	DITTO
3	VALVE #797	N	R.C. PUMPS COOLING WATER IN	
12	VALVE #784	O	DITTO OUT	
12A	VALVE FCV #626	O	DITTO OUT	
15	VALVE #8605	P	CONTAINMENT SPRAY HEADER	
16	VALVE #8508	Q	SAFETY INJECTION LINE	IN P A B
16	VALVE #851B	Q	DITTO	DITTO
17	VALVE #822	R	R.C. PUMPS SEAL WATER RETURN	
18	IN LINE #18	P	EXCESS LETDOWN HT. EXCH. PURTING WTR RET	
19	IN LINE #19	R	CHARGING LINE	
20	VALVE #3142	S	AUXILIARY STEAM	
21	VALVE #3246	T	AUXILIARY STEAM CONDENSATE	
22	IN LINE #22	U	EXCESS LETDOWN HT. EXCH. PURTING WTR SUPPLY	
23	IN LINE #23	V	CONTAINMENT VENT HEADER	
24	IN LINE #24	V	P.R.V. GAS ANALYZER LINE	
25	IN LINE #25	W	PRESSURIZER STEAM SAMPLE	
26	IN LINE #26	W	DITTO LIQUID DITTO	
27	IN LINE #27	X	LETDOWN LINE	
30	IN LINE #30	Y	P.R.V. GAS TANK GAS ANALYZER LINE	
31	IN LINE #31	Y	S.I.S. TEST LINE	
33	IN LINE #33	Y	P.R.V. MAKE-UP LINE	
34	IN LINE #34	Y	SERVICE AIR	
35	IN LINE #35	Y	CITY WATER	
40	IN LINE #40	Z	R.C. DRAIN TANK PUMP DISCHARGE	
41	IN LINE #41	Z	R.C. PUMP SEAL WATER SUPPLY	
42	IN LINE #42	Z	DITTO	
43	IN LINE #43	Z	DITTO	
44	IN LINE #44	Z	DITTO	
45	IN LINE #45	AA	STEAM GENERATOR BLOWDOWN LINE	
46	IN LINE #46	BB	DITTO	
47	IN LINE #47	CC	DITTO	
48	IN LINE #48	DD	DITTO	
51	VALVE #8693	DD	CONTAINMENT SPRAY HEADER	
294	IN LINE #294	NONE	RESIDUAL HEAT REMOVAL LOOP SAMPLE	NITROGEN INJ
56	VALVE #851A	NN	SAFETY INJECTION LINE	IN P A B
56	VALVE #850A	NN	DITTO	DITTO
59	IN LINE #59	W	REACTOR COOLANT SAMPLE LINE	
60	VALVE #8888	QQ	RESIDUAL HT.EXCH. TO SAFETY INJ PUMPS	NITROGEN INJ
60	VALVE #8888	QQ	DITTO	DITTO
69	IN LINE #69	RR	ACCUMULATOR SAMPLE LINE	
338	IN LINE #338	Y	SUMP PUMP DISCHARGE	
364	IN LINE #364	W	STEAM GENERATOR BLOWDOWN SAMPLE	REMOVED
365	IN LINE #365	W	DITTO	REMOVED
366	IN LINE #366	W	DITTO	REMOVED
367	IN LINE #367	W	DITTO	REMOVED
595	IN LINE #595	TT	PRIMARY PUMP MISCH SAMPLE	NITROGEN INJ
788			GAS RETURN TO VC SUMP	

REFERENCES

1 PROCESS FLOW DIAGRAM---------- (W)
2 DEFINITIONS OF SYMBOLS ---------- (W) SPEC G675176 REV D
3 INSTRUMENT & CONTROL STD --------- (W) SYMBOLS & APPLICATIONS FOR INST DIAGRAMS SECTION - I I.ISSUED AUG 12 1966
(W) INST INSTALLATION SECT 3 0 ISSUE
4 MATERIAL SPEC & FITTINGS --------- (W) SPEC G 569866 REV 2
(W) SPEC G 676398 REV 0

REFERENCE DRAWINGS

UE & C. DWGS
9321-F-2738 ---------- REACTOR COOLANT SYSTEM
9321-F-2736 ---------- CHEMICAL VOLUME CONTROL SH 1
9321-F-2737 ---------- CHEMICAL VOLUME CONTROL SH 2
CHEMICAL VOLUME CONTROL SH 3
9321-F-2719 ---------- WASTE DISPOSAL SYSTEM SH 1
9321-F-2730 ---------- WASTE DISPOSAL SYSTEM SH 2
9321-F-2735 ---------- SAFETY INJECTION SYSTEM
9321-F-2745 ---------- SAMPLE SYSTEM
9321-F-2729 ---------- STEAM GEN BLOWDOWN SYSTEM
9321-F-2720 ---------- AUXILIARY COOLANT
9321-F-2724 ---------- PRIMARY WATER MAKE-UP SYSTEM
9321-F-2768 ---------- ISOLATION SEAL WATER PIPING ARRGT
9321-F-2769 ---------- ISOLATION SEAL WATER PIPING ARRGT
9321-C-2016 ---------- FLOW DIAGRAM SYMBOLS
B209776 ---------- I V S W S INJECTION LINE TEST CONNECTIONS

GENERAL NOTES

1 ALL PIPING TO BE 3/8" S.S. O.D. TUBING (LINE DESIGNATION 3/8"-IV-2505 (EXCEPT AS NOTED)
2 ALL GLOBE VALVES INSTALLED WITH FLOW UNDER SEAT. EXCEPT NO S 1402-1405 1416-1418 1421, 1463-1469
3 ALL GLOBE VALVES ARE TYPE 3/8" T58 EXCEPT NO S 1434-1448 (NITROGEN-SUPPLY) WHICH ARE TYPE 3/8" T585(SOFT SEATS AND LARGE ORIFICES)
4 ALL CHECK VALVES ARE TYPE 3/8"-C58.EXCEPT NO S 1454,1456 & 1533 TO 1536 VALVE 1533-1536 ARE TYPE 3/8"-C585 (SOFT SEAT)
5 ALL GLOBE & CHECK VALVES ARE EQUIPPED WITH SWAGELOK FITTINGS.EXCEPT CHECK VALVES 1454 & 1456
6 ADDITIONAL VENTS AND DRAINS MAY BE REQUIRED
7 THE INDIVIDUAL SEAL WATER LINES ARE ROUTED TO THE CONTAINMENT ISOLATION POINTS BY THE LINE NUMBERS INDICATED
8 VALVES 1410 & 1413 ARE OPENED AUTOMATICALLY BY A PHASE A CONTAINMENT ISOLATION SIGNAL
9 FLANGES AND BLANK OFF DISC

LEGEND

PW----------PRIMARY WATER
FC----------FAIL CLOSE
----------NORMALLY CLOSED
CW----------CITY WATER
LO----------LOCKED OPEN

ANSTEC APERTURE CARD

THIS DRAWING CONTAINS ITEMS WHICH MUST BE CONTROLLED WITHIN CON EDISON AS "CLASS A" ITEMS PER CI-240-1

REVISIONS		
2	M CAPUTO 11-15-93 DES	THIS REVISION IS NON-CLASS PER CI-240-1 UPDATED DWG PER AS FOUND CONDITION AND CIR-93-09-433-01. DWG #8653 RELEASED AS BUILT
1	ENG	P N 699[illegible]

TITLE: FLOW DIAGRAM ISOLATION VALVE SEAL WATER SYSTEM

Con Edison — STATION: INDIAN POINT — DWG NO: 9321-F-2746-30 — MY

Docket # 50-247
Accession # 9403310170
Date 3/4/94 of Ltr
Regulatory Docket File