



ISL	INJECTION POINT LOCATION	CONTAINMENT PENETRATION SLEEVE No.	ISI DIAGRAM	LINE DESCRIPTION	INJECTION POINTS (SEE NOTE 6)	REMARKS
9	PIPE TRENCH	J	F-27503, F-27513	RESIDUAL HEAT REMOVAL LOOP IN	AC-HOV-744	N% INJ.
10	PIPE TRENCH	K	F-27503, F-27513	RESIDUAL HEAT REMOVAL LOOP OUT	AC-732	N% INJ.
11	PIPE TRENCH	NOE	F-27517	SWP PUMP DISCHARGE OUT	AC-HOV-743 & AC-HOV-1870	N% INJ.
12	PIPE TRENCH	N	F-27503, F-27513	R.C. PUMPS COOLING WATER IN	AC-731 & AC-735	
13	PIPE TRENCH	O	F-27503, F-27513	R.C. PUMPS COOLING WATER OUT	AC-HOV-784	
14	PIPE TRENCH	P	F-27503, F-27513	R.C. PUMPS COOLING WATER OUT	AC-FCY-625	
15	PIPE TRENCH	Q	F-27503, F-27513	CONTAINMENT SPRAY HEADER	SI-8408	
16	PIPE TRENCH	R	F-27503, F-27503	SAFETY INJECTION LINE FROM BORON INJECTION TANK	SI-HOV-1435A	N% INJ.
17	PIPE TRENCH	S	F-27503	R.C. PUMP SEAL WATER RETURN	CH-HOV-222	
18	PIPE TRENCH	T	F-27503, F-27513	EXCESS LETDOWN HEAT EXCH. COOLING WATER RETURN	AC-HOV-793 & AC-HOV-796	
19	PIPE TRENCH	U	F-27503	CHANGING LINE	CH-HOV-205 & CH-HOV-226	
20	PIPE TRENCH	V	F-27503, F-27513	EXCESS LETDOWN HEAT EXCH. COOLING WATER SUPPLY	AC-HOV-791 & AC-HOV-798	
21	PIPE TRENCH	W	F-27513	CONTAINMENT VENT HEADER	HO-HOV-1766 & HO-HOV-1787	
22	PIPE TRENCH	X	F-27517	P.C.T. GAS ANALYZER LINE	CH-HOV-244 & CH-HOV-245	
23	PIPE TRENCH	Y	F-27503, F-27513	PREISOLATOR STEAM SAMPLE	SP-ADV-958A & SP-ADV-958B	
24	PIPE TRENCH	Z	F-27503, F-27513	PREISOLATOR LIQUID SAMPLE	SP-ADV-958C & SP-ADV-958D	
25	PIPE TRENCH	AA	F-27503	LETDOWN LINE	CH-HOV-200 & CH-HOV-202	
26	PIPE TRENCH	AB	F-27513	P.C. DRAIN TANK GAS ANALYZER LINE	HO-HOV-1788 & HO-HOV-1789	
27	PIPE TRENCH	AC	F-27503, F-27513	S.I.S. TEST LINE	SI-809A & SI-809C	
28	PIPE TRENCH	AD	F-27503, F-27513	P.C.T. MAKE-UP LINE	AC-HOV-816 & AC-HOV-802	
29	PIPE TRENCH	AE	F-27503	STATION AIR	SA-24-1 & SA-24-2	
30	PIPE TRENCH	AF	F-27513	R.C. DRAIN TANK PUMP DISCHARGE	HO-HOV-1702 & HO-HOV-1705	
31	PIPE TRENCH	AG	F-27503	R.C. PUMP 31 SEAL INJECTION SUPPLY	CH-HOV-441 & CH-HOV-200A	
32	PIPE TRENCH	AH	F-27503	R.C. PUMP 32 SEAL INJECTION SUPPLY	CH-HOV-442 & CH-HOV-200B	
33	PIPE TRENCH	AI	F-27503	R.C. PUMP 33 SEAL INJECTION SUPPLY	CH-HOV-443 & CH-HOV-200C	
34	PIPE TRENCH	AJ	F-27503	R.C. PUMP 34 SEAL INJECTION SUPPLY	CH-HOV-444 & CH-HOV-200D	
35	PIPE TRENCH	AK	F-27503	STEAM GENERATOR 31 BLOWDOWN LINE	BD-PCY-1215 & BD-PCY-1215A	
36	PIPE TRENCH	AL	F-27503	STEAM GENERATOR 32 BLOWDOWN LINE	BD-PCY-1216 & BD-PCY-1216A	
37	PIPE TRENCH	AM	F-27503	STEAM GENERATOR 33 BLOWDOWN LINE	BD-PCY-1217 & BD-PCY-1217A	
38	PIPE TRENCH	AN	F-27503	STEAM GENERATOR 34 BLOWDOWN LINE	BD-PCY-1218 & BD-PCY-1218A	
39	PIPE TRENCH	AO	F-27503, F-27503	CONTAINMENT SPRAY HEADER	SI-8404	
40	PIPE TRENCH	AP	F-27503, F-27503	SAFETY INJECTION LINE FROM BORON INJECTION TANK	SI-HOV-1808	N% INJ.
41	PIPE TRENCH	AQ	F-27503	SAFETY INJECTION LINE FROM SAFETY INJECTION PUMPS	SI-8404	
42	PIPE TRENCH	AR	F-27503, F-27503	SAFETY INJECTION LINE FROM SAFETY INJECTION PUMPS	SI-HOV-850A & SI-HOV-850C	
43	PIPE TRENCH	AS	F-27503, F-27503	REACTOR COOLANT SAMPLE LINE	SP-ADV-958E & SP-ADV-958F	
44	PIPE TRENCH	AT	F-27503, F-27503	RESIDUAL HEAT EXCH. TO SAFETY INJECTION PUMPS	SI-HOV-888A	N% INJ.
45	PIPE TRENCH	AU	F-27503, F-27503	RESIDUAL HEAT EXCH. TO SAFETY INJECTION PUMPS	SI-HOV-888B	N% INJ.
46	PIPE TRENCH	AV	F-27503, F-27503	ACUMULATOR SAMPLE LINE	SP-ADV-958G & SP-ADV-958H	
47	PIPE TRENCH	AW	F-27513	R.C. PUMP DISCHARGE	HO-HOV-1702 & HO-HOV-1705	
48	PIPE TRENCH	AX	F-27503, F-27503	STEAM GENERATOR 21 BLOWDOWN SAMPLE	BD-PCY-1223 & BD-PCY-1223A	
49	PIPE TRENCH	AY	F-27503, F-27503	STEAM GENERATOR 22 BLOWDOWN SAMPLE	BD-PCY-1224 & BD-PCY-1224A	
50	PIPE TRENCH	AZ	F-27503, F-27503	STEAM GENERATOR 23 BLOWDOWN SAMPLE	BD-PCY-1225 & BD-PCY-1225A	
51	PIPE TRENCH	BA	F-27503, F-27503	STEAM GENERATOR 24 BLOWDOWN SAMPLE	BD-PCY-1226 & BD-PCY-1226A	
52	PIPE TRENCH	BB	F-27503, F-27503	HEPIC PUMP DISCHARGE SAMPLE	SP-HOV-998A & SP-HOV-998B	N% INJ.
53	PIPE TRENCH	BC	F-27503, F-27513	RESIDUAL HEAT REMOVAL LOOP SAMPLE	AC-HOV-958 & SP-ADV-959	N% INJ.

- REFERENCES:
- DEFINITION OF SYMBOLS - SEE SPEC. G.675176 REV.2
 - INSTRUMENT & CONTROL, STD. -- G.27503 & G.27513 FOR INSTR. G.I.A.D. SECTION 1.1, ISSUED AUG.12, 1964
 - INSTALLATION, SECTION 3.0 ISSUED JUN. 1964
 - MATERIAL SPEC. & FITTINGS - SEE SPEC. G.369666 REV.2

- REFERENCE DRAWINGS:
- 9321-F-27473 NUCLEAR LINE SCHEDULE
 - 9321-F-27473 REACTOR COOLANT SYSTEM SHEET NO.2
 - 9321-F-27473 CONDENSER SYSTEM SHEET NO.1
 - 9321-F-27473 WASTE DISPOSAL SYSTEM SHEET NO.1 CONTAINMENT
 - 9321-F-27473 SYSTEM SHEET NO.1
 - 9321-F-27473 SAMPLE SYSTEM
 - 9321-F-27473 STEAM COND. BLOWDOWN SYSTEM SHEETS NO.1 & 2
 - 9321-F-27473 STEAM & COND. DISTRIBUTION HEADERS SHEET NO.2
 - 9321-F-27473 AUXILIARY COOLANT SYSTEM SHEET NO.2
 - 9321-F-27473 PRIMARY MAKE-UP WATER SYSTEM
 - 9321-F-27473 ISOLATION VALVE SEAL WATER PIPING SHEET NO.1
 - 9321-F-27473 ISOLATION VALVE SEAL WATER PIPING SHEET NO.2

- GENERAL NOTES:
- ALL PIPING TO BE 3/8" S. O. D. TUBING (LINE DESIGNATIONS) 3/8-IV-2505 EXCEPT AS NOTED.
 - ADDITIONAL VENTS AND DRAINS MAY BE INSTALLED. SEE PIPING LAYOUT.
 - THE INDIVIDUAL SEAL WATER LINES ARE ROUTED TO THE CONTAINMENT ISOLATION POINTS BY THE VALVE NUMBERS INDICATED.
 - VALVES ADV-1410 & ADV-1413 & SOV-4200 & SOV-4201 ARE OPENED AUTOMATICALLY BY A PHASE "A" CONTAINMENT ISOLATION SIGNAL.
 - ALL VALVE ND'S ARE PRECEDED BY "IV" AS THE SYSTEM DESIGNATION, EXCEPT AS NOTED.
 - SEAL WATER IS INJECTED BETWEEN THE SEATS AND STEM PACKING OF STEAM VALVES AND STEAM PIPING BETWEEN THE SEATS AND ONE AND TWO VALVE ND'S ARE THEREFORE FURNISHED RESPECTIVELY.
 - CONTAINMENT NUMBER (REF. F.S.A.R.)
 - THIS DWG. SHALL BE USED ONLY FOR DETERMINING THE EXTENT OF THE UNSERVICE INSPECTION BOUNDARIES.
 - BOUNDARIES SHOWN TO INCLUDE BOUNDARY VALVES WHERE APPROPRIATE THE ACTUAL PROVISIONS FOR LEAKAGE AND HYDROSTATIC TESTING EXTEND ONLY TO VALVE TERMINALS THAT COMPRISE THE EFFECTIVE ORBITATOR ASSEMBLY.
 - ALL CONTAINMENT PENETRATIONS ARE ISI CLASS II.
 - ISI BOUNDARY ENDS AT FIRST WELD INSIDE OR OUTSIDE CONTAINMENT BUILDING UNLESS OTHERWISE NOTED.

- LEGEND:
- PN - PRIMARY WATER
 - FC - FAIL CLOSED
 - FO - FAIL OPEN
 - CH - CITY WATER
 - LD - LOCKED OPEN
 - LO - LOCKED CLOSED
 - LC - LOCKED CLOSED
 - - SEISMIC CLASSIFICATION

NOTE: ALL PIPING ON THIS DWG. IS SEISMIC CLASS I EXCEPT AS NOTED.

NO.	DESCRIPTION	DATE	BY	CHKD.
10	REVISION			
9	UPDATED TO 9321-F-27463, REV.23			
8	UPDATED TO 9321-F-27463, REV.22			
7	UPDATED PER 1999 EDITION OF ASME SECT XI			
6	UPDATED TO 9321-F-27463, REV.21 & AS PER INSTRUMENTATION SHEET			
5	UPDATED TO 9321-F-27463, REV.20			

ISI DRAWING
THIS DRAWING WAS CREATED FROM 9321-F-27463

INDIAN POINT NO.3 NUCLEAR POWER PLANT
FLUID DIAGRAM
ISOLATION VALVE SEAL WATER PIPING

SCALE: NONE
DWG NO: ISI-27463
REV: 10

DATE: _____

THIS IS A COMPUTER GENERATED DRAWING. A RECORD OF THE ORIGINAL DRAWING IS KEPT IN THE "AS BUILT" DRAWING FILE.

INFORMATION ONLY

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