DWG.NO.ISI-27463 IVSWS

INSIDE CONTAINMENT | OUTSIDE CONTAINMENT

LINE #31 — L.C. 859A — L.C. 859B — 3/4-SI-1501R — C.I.V. — C.I.V.

FI 929B — SI-205 — SI-207 — PI 928 — 860 — SI-206 — FI 929A — 862 — LOCAL SAMPLE

3/4-SI-150R LINE #31 — 859B

2"B.F.WITH 1 1/4" S.S.COUPLING — TC 1116-S — 3/4"-SI-151R — LIC 921 — 840A — 2"

LC 922 — 24" MANWAY WITH MUSHROOM VENT

REFUELING WATER STORAGE TANK — PRIMARY WTR. INITIAL FILL — PW 84

12"-252 — HOOD — 14" X 10" RED. — 10" X 6" RED. — 6"-#252 — TO SUMP IN WASTE HOLDUP TANK PIT AREA 9321-F-27283

12-SI-151R OVERFLOW — 3/4"-SI-151R — 840B — LT 920 — 155 — LOCAL SAMPLE — STEAM — 862

6"-#56 — 4"-#678 — 1/4"-#678

6" — 16" — 12" — 16" X 14" — 16" X 14"

2" DRAIN — 870 — 4-SI-151R, LINE #205 — CHARGING PUMP 290 SUCTION(CVCS) ISI-27363 — 5 PSIG 9321-F-27273

2"-#253 FROM BORIC ACID BLENDER (CVCS) ISI-27363 — CH-350 2-CH-151R

3"-#197 FROM REACTOR COOLANT DRAIN TANK PUMPS (WDS) ISI-27193 SHT.1 — WD-1733 3-WD-151R

REFUELING WATER PURIFICATION PUMP (ACS) ISI-27513 SHT.2 — TRAP ASSEMBLY — COND. 9321-F-27273 — 958 — 957 — 3/4" — 863 — 639

2-SI-151R LINE #183 — 16-SI-151R — 6"-#153 — 3-SI-151R — 3"-#161

FROM REFUELING CAVITY DRAIN SYS. 9321-F-27193 SH.2 — WD-506 — 3/4"-104

2-SI-151R, LINE #161 — 3"-#3057 — SI-151R — 3"-#3055

RWST RECIRCULATION PUMP — PI 10 — 3/4"-845 — 3" — 735 — 861 — WD-474 — ST-15 — 734 — 3/4"-16 — 3/4"-108 — 9321-F-27193 SH.2 — TO REFUELING CAVITY DRAIN SYS. 9321-F-27193 SH.2

150IR 151IR — 843 842 — 2-SI-151R, LINE 161 — 2-SI-151R LINE 154 — 841

SPENT FUEL PIT DEMINERALIZER (ACS) 9321-F-27513 SH.2 — 1-SI-301R — 3/4"-SI-301R — LINE 164 — 1813 — F.C — 2" CONTROL VALVES WITH 1" ENDS

FROM B. A. TRANSFER PUMPS 9321-F-27363 — 2-SI-151R LINE #284 — LINE #56 6-SI-150R — LINE #270 3/4-SI-150R — LINE #600 1-SI-151R — 6-SI-150R — 6"-#56 — C.I.V. — 1833A — 1833B — 1835A NOTE-R — 1835B NOTE-R — M S — DWG.NO. ISI-27463 — IVSWS — SEE DWG.NO. ISI-27463 — 4-SI-150R — 821 — V — 1823 3/4"X 1" — TW 917 — TIC 918 — TW 918 — LOCAL SAMPLE — 1847 — 106

HEATERS — BORON INJECTION TANK ITEM NO. INTSIATSI — HEATERS — 2-SI-150R — 1842 — 1843 — 6" x 4" — 4" — 1852A — 1852B — 1844 — 6-SI-150R 6" LINE #550 — 4-SI-150R — 105 — 1840 — 1822 — 2-SI-150R — 4-SI-150R LINE #16 — 3/4"-SI-150R — DWG.NO. ISI-27463 — 871 — 872A — PI 931 — 872B — LINE #578 NITROGEN 9321-F-27233

PT 853B — 3/4"-SI-150R 4-SI-150R — 4"-#550 — 103 — 1"X 3/4" — 2" X 1" — 8503 — 849B — NOTE R — 2 1/2" — CCW (ACS) — ITEM SI PMP 33 INT SIAPS13 — 1 1/2"+3/4" — 884C — 1807C — 3/4"-SI-150R LINE #434 — 1819C — 6-SI-151R LINE #60 — 1829 — PT 947 — 6-SI-151R LINE #277 — 8-SI-151R LINE #189 — 847 — 898 — 1810 — 6-SI-151R LINE #518 — 8-SI-151R LINE #60 — 1824A — 1824B — FI 950

2-SI-150R LINE #594 — 2"LINE #594 — 1844 — 3/4" — 1848 — FI 916 — 2-SI-150R LINE #595 — PRIMARY WATER 9321-F-27243 — II — 1825 — PW-151N CH-151R — SI-150R CH-151R — 1846 — 1849 — LC — 2-CH-151R LINE #595 — 3/4-CH-151R LINE #875 — TO CVCS HOLD-UP TANKS 9321-F-27373 — TO BORIC ACID TANKS 9321-F-27363 — S FC — 1851A — 1851B

3"-LINE #331 — 3-SI-301R — VACUUM BREAKERS — FILL LINE — SI-13 — SI-14 — 1-SI-301R — 1"-SI-151R — 1" LINE 548 — TO FLOOR DRAIN — 3/4"-SI-151R — 2"X 1" — 1" — LI 932 — 874A — 874C — ITEM SPRAY ADDITIVE TANK 31 — INTSIATSA1 — 2-SI-301R — 2"-SI-301R — 874B — 874D — 829J — 829K — LOCAL SAMPLE — 3"X 2" — 2" — 875 — 152 — 3/4-SI-301R — 3-SI-151R LINE #710 — 3-SI-151R LINE #187 — 3" LINE 187 — 2-SI-151R — 841 — LO — 873A — NOTE L — 3"-SI-151R — 3/4"-SI-301R — 6"-#334 6-SI-301R — LI 931 — 3/8-SI-250(TYP.) — LINE 370 CONDENSATE POT (TYP.) — NOTE-E (TYP.) LINE 369 — MATCH LINE DWG. ISI-27353

C.I.V. — 1814A — 1814B — 1814C — L.O. — 3/4"-368, SI-151R(TYP.) — PT 948A — PT 949A — PT 1422 — PT 948B — PT 949B — PT 1421 — PT 948C — PT 949C — 1816B — 1816A — 3/8

8-SI-151R,LINE 60 — 2" ROTAMETER 1500# FLG'G ENDS — FI 933 — 2"X3/4"RED — 2"X1"RED. — 3/4"LINE 164 — 3/4-SI-301.R — 1-SI-301R LINE 164

FI 930 — 872C — 872D — 3-SI-151R — 3"-#187 — LC 873B — FE 930 — 8-SI-301R — 8"LINE 5 — 866A NOTE-R — 876A — 876B — 876C — 1800 — NOTE N — 133 — 867A — 878A — 3"-SI-151R — 3/4"-SI-301R — 3/4"LINE 246 — 3/4-SI-301R — 3/4"LINE#246 — 8-SI-301R — 8"LINE 15 — 866B NOTE-R — 867B — 878B — 135 — 868B — 3/4"-SI-301R AIR TEST — 134 — 868A — 136 — 869A — 869B — 8"-#51 — 8"-#15 — 8-SI-301R — 8-SI-601R — 8"-LINE 60 — 8-SI-151R — 888A — 888B — 8"x6" — 6-SI-151R — 60IR 151R (TYP.) (TYP.) — DWG.NO. ISI-27463 — IVSWS — LINE#294 — SS ISI-27453 — AC-958 — 3"-#437 — LINE 9 — AC-744 — AC-1870 — AC-743 — AC-758A — AC-758B — FE 642 — FI 642 — AC-732 — LINE 10 — NOTE H — CONTAINMENT SUMP — 885A NOTE-R — 885B — 14"-#57 — 14-SI-601R — 18-SI-151R LINE#57

CONTAINMENT PRESSURE SENSING

3-SI-301R — NO.31 EDUCTOR — 1806A — 1838A — 1845A — #31 — 3"-#188 — SI-50 SEE NOTE 2 — 10-SI-151R — 10"-#314 — 865A — 202 — 12"-#181 — 12"-SI-151R — ITEM SPRAY PMP 31 INTSIAPCS1 — 1839A — 1845B — 3-SI-151R LINE #187 — 1845C — #32 — 10"-#181 — 10"-SI-151R — 865B — ST-51 SEE NOTE 2 — ITEM SPRAY PMP 32 INTSIAPCS2 — 1806B — 1838B — 1845D — 3"-#579 — 3-31-301R — NO.32 EDUCTOR — 3-SI-301R — 2-SI-151R,LINE 580 — CONTAINMENT SPRAY PUMPS — 12" — LINE 155 — 12-SI-151R

REFUELING CAVITY DRAIN SYSTEM 9321-F-27193 — 865 — 866 — 1863 — 8"-SI-151R,LINE 190 — 883 — 601R — LINE#654 — AC-739B — AC-738B — AC-735B — CCW (ACS) — RESIDUAL HEAT REMOVAL PUMPS (ACS) — AC-739A — AC-738A — AC-735A — 12-AC-601R — 881 882 — LINE#10 — LINE #10

RESTRICTING ORIFICE SUPPLIED BY W — FEX 999 — PCT 922 — 853C — 853A — 852A — 850C — 850A — 849A — 4"-#56 4-SI-150R — ITEM SI PMP 31 INT SIAPS11 — 1 1/2"+3/4" — 884A — 1807A — 3/4"-SI-150R LINE #161 — 1819A — 3/4"-#467 — SI-47 SEE NOTE 2 — SAFETY INJECTION PUMPS — 4"-#145 — 4"-SI-150R — 851A — 851B — 101 — 3/4"-SI-150R — 1 1/2"+3/4" — 884B — 1807B — 3/4"-SI-150R LINE #399 — 8"X 6" — 203 — 6-SI-151R LINE #60 — 1829 — 887A — 887B — NOTE K — 204 — 1810 — 3/4"-SI-150R — 100 — 852A — 1 1/2"+3/4" — 884A — 1807A — 3/4"-SI-150R LINE #161 — 1819A — 3/4"-#467 — SI-47 SEE NOTE 2 — 4"-#56 4-SI-150R — 850C — 850A — 849A — 853C — 853A — 2" X 1 1/2" — 2 1/2" — CCW (ACS) — ITEM SI PMP 32 INT SIAPS12 — DWG.NO ISI-27463 — IVSWS — 851A — 851B — 101 — 3/4"-SI-150R — 1 1/2"+3/4" — 884B — 1807B — 3/4"-SI-150R LINE #399 — 8"X 6" — 203 — 6-SI-151R LINE #60 — 1829 — 887A — 887B — NOTE K — 204 — 1810 — 3/4"-SI-150R — 102 — 853B — 3/4"-SI-150R — 4-SI-150R — 4"-#550 — 103 — 1"X 3/4" — 2" X 1" — 8503 — 849B — NOTE R — 2 1/2" — CCW (ACS) — ITEM SI PMP 33 INT SIAPS13 — 1 1/2"+3/4" — 884C — 1807C — 3/4"-SI-150R LINE #434 — 1819C — 6-SI-151R LINE #60 — 1829 — PT 947 — 6-SI-151R LINE #277 — 8-SI-151R LINE #189 — 847 — 898 — 1810 — 6-SI-151R LINE #518 — 8-SI-151R LINE #60 — 1824A — 1824B — FI 950

DENOTES SIESMIC CLASSIFICATION

WORK THIS DWG.WITH DWG.ISI-27353.

NOTES

1. ALL PIPING ON THIS DRAWING IS SEISMIC CLASS I EXCEPT AS NOTED.
2. TEMPORARY STRAINERS ST-47 THRU ST-51 ARE PLACED IN THE FLANGED SPOOL PIECE DURING INITIAL FLUSHING OPERATIONS. STRAINERS MUST BE REMOVED BEFORE PLANT START-UP.
3. ALL VALVE NOS. ARE PRECEDED BY "SI" AS THE SYSTEM DESIGNATION EXCEPT AS NOTED.
4. (XX) =PENETRATION NUMBER(REF.F.S.A.R.)
5. THIS DWG.SHALL BE USED ONLY FOR DETERMINING THE EXTENT OF THE INSERVICE INSPECTION BOUNDARIES.
6. BOUNDARIES SHOWN TO INCLUDE BOUNDARY VALVES WHERE APPROPRIATE. THE ACTUAL PRESSURE RETAINING I.S.I. BOUNDARIES FOR LEAKAGE AND HYDROSTATIC TESTING EXTEND ONLY TO VALVE INTERNALS THAT COMPRISE THE EFFECTIVE OBTURATOR ASSEMBLY.

ISI LEGEND

---1---1--- ISI CLASS I
---2---2--- ISI CLASS II
---3---3--- ISI CLASS III
CIV = CONTAINMENT ISOLATION VALVE

Docket # 50-286
Accession # 9004270055
Date 4/19/90 of Ltr
Regulatory Docket File

THIS ISI DWG.IS BASED ON U.E.& C. DWG.#9321-F-27503,REV.20..

SI APERTURE CARD

REV NO	DATE	DESCRIPTION	DWN	CHK	DS	DE	DM	PROJ APP.
3	5/17/90	UPDATED TO 9321-F-27503,REV.20.	PM					

REVISIONS

DWN / CHK'D	
DES SUPV	
DISCIPLINE ENG	
DISCIPLINE MGR.	
PROJ APPROVAL	
DATE	

INDIAN POINT NO.3 NUCLEAR POWER PLANT

FLOW DIAGRAM SAFETY INJECTION SYSTEM SHEET NO.2

NewYorkPower Authority

SCALE

DWG NO ISI-27503 SHEET OF

REV 3