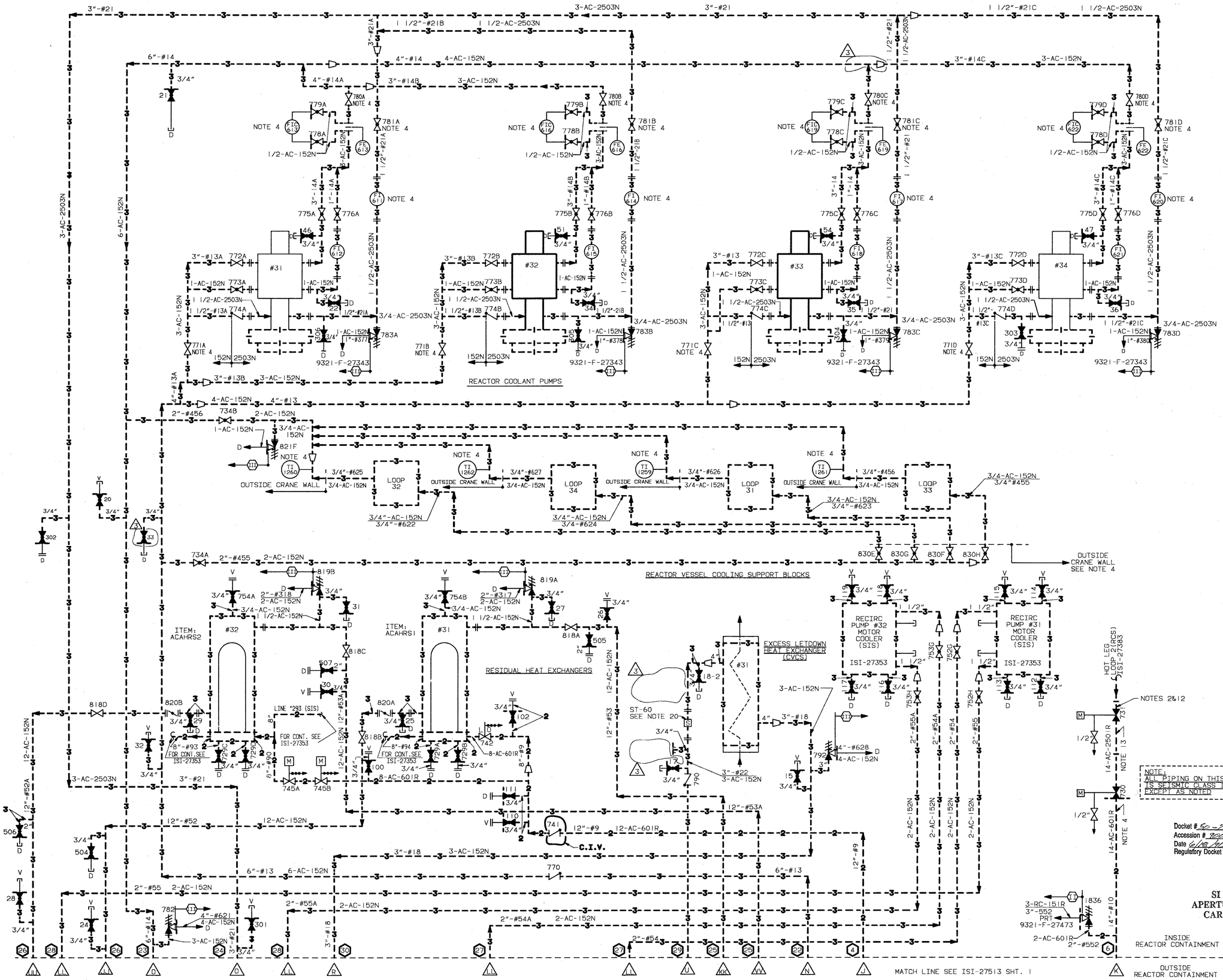

REFERENCES

1. PROCESS FLOW DIAGRAM SHEET #1 (W) DWG. 540-F-889
2. DEFINITION OF SYMBOLS
   (W) E. SPEC. G675176 REV. 2 AND
   (W) E. SPEC. G676164 REV. 0
3. INSTALLATION OF INSTRUMENTATION
   (W) PROC. SPEC. CAP 294367 REV. 1
4. MATERIAL SPEC. PIPE AND FITTINGS
   (W) E. SPEC. G569866 REV. 2 AND
   (W) E. SPEC. G676398 REV. 0

REFERENCE DRAWINGS

9321-F-27513	AC	AUXILIARY COOLANT SYSTEM SHEET 1 & 2
9321-F-27193	WD	WASTE DISPOSAL SYSTEM SHEET 1
9321-F-27303	WD	WASTE DISPOSAL SYSTEM SHEET 2
9321-F-27353	SI	SAFETY INJECTION SYSTEM SHEET 1
9321-F-27503	SI	SAFETY INJECTION SYSTEM SHEET 2
9321-F-27383	RC	REACTOR COOLANT SYSTEM SHEET 1
9321-F-27283	NED	NUCLEAR EQUIPMENT DRAINS
9321-F-27243	PW	PRIMARY MAKEUP WATER
9321-F-27453	SP	SAMPLING SYSTEM
9321-F-27463	IV	ISOLATION VALVE SEAL WATER SYSTEM
9321-C-27413		NUCLEAR LINE SCHEDULE

NOTES:

1. VALVES ARE NORMALLY INSTALLED WITH FLOW UNDER SEAT: EXCEPTIONS ARE VALVES, 831A & 831B
2. LOCATE SUCTION CONNECTION IN BOTTOM HALF OF REACTOR COOLANT PIPING ON 45° ANGLE TO VERTICAL
3. SPRING LOADED CHECK VALVE
4. LOCATE IN ANNULAR RING BETWEEN SECONDARY SHIELD AND CONTAINMENT WALL
5. LOCATE VALVE CLOSE TO FUEL PIT WALL
6. VACUUM BREAKER SUPPLIED WITH TANK
7. PRESSURE TAP LOCATED PER (W) I & C STANDARDS
8. PENETRATE WALL 6FT. ABOVE FUEL ASSEMBLIES
9. TERMINATE PIPE 6FT. ABOVE FUEL ASSEMBLIES
10. VENT AND DRAIN REQIREMENTS DEPENDENT UPON PIPING LAYOUT TO BE SPECIFIED BY A.E.
11. ELEVATION OF SURGE TANK NORMAL WATER LEVEL TO BE HIGHEST POINT COMPONENT COOLING SYSTEM
12. REACTOR COOLANT PRESSURE INTERLOCK PREVENTS ISOLATION VALVE OPENING ABOVE SET PRESSURE
13. SCHEDULE 140 PIPE
14. NOT IN (W) SCOPE
15. ELBOW FLOW WATER
16. ONLY IF PLOCAP IS INSTALLED
17. EMERGENCY SERVICE WATER CONNECTION
18.
19. ALL VALVE NOS. ARE PRECEDED BY "AC" AS THE SYSTEM DESIGNATION, EXCEPT AS NOTED
20. TEMPORARY STAINER (ST-19, ST-21, ST-22, ST-23, ST-60, ST-61, ST-62, ST-63, ST-64, ST-65, ST-66 & ST-67) IS PLACED IN THE FLANGED SPOOL PIECE DURING INITIAL FLUSHING OPERATIONS. STRAINER MUST BE REMOVED BEFORE PLANT START-UP. CAPPED LINE IS CONNECTED TO PRESSURE GAUGE DURING INITIAL FLUSHING FOR STRAINERS ST-65 & ST-66 USE EXISTING DRAIN AND FLUSH CONNECTIONS FOR PRESSURE GAUGES.
21. RCV-017A & RCV-017B HAVE HAD AIR & CONTROL SIGNAL REMOVED AND ARE NORMALLY CLOSED.
22. (XX)=PENETRATION NUMBER(REF.F.S.A.R.)
23. THIS DWG.SHALL BE USED ONLY FOR DETERMINING THE EXTENT OF THE INSERVICE INSPECTION BOUNDARIES.
24. 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.

LEGEND

RWST	REFUELING WATER STORAGE TANK
ECC	EMERGENCY COOLING CONNECTION
DH	DRAIN HEADER
L.O.	LOCKED OPEN
F.O.	FAIL OPEN
F.C.	FAIL CLOSED
T	TRIP OR CLOSE ON HIGH CONTAINMENT PRESSURE
V	LOCAL VENT
D	LOCAL DRAIN
S	SAFETY INJECTION SIGNAL
ST	TEMPORARY STRAINER
△	CONTAINMENT PENETRATION
⬡	SEISMIC CLASSIFICATION

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

Docket # 50-286
Accession # 7006270285
Date 6/28/90 of Ltr
Regulatory Docket File

WORK THIS DWG.WITH DWG.ISI-27513 SHT.NO.1 & 2

ISI LEGEND
---1---1--- ISI CLASS I
---2---2--- ISI CLASS II
---3---3--- ISI CLASS III
C.I.V. = CONTAINMENT ISOLATION VALVE

SI APERTURE CARD

THIS ISI DWG.IS BASED ON U.E.& C.DWG. #9321-F-27203,REV.19

REV NO	DATE	DESCRIPTION	DWN CHK	DS	DE DM	PROJ APP.
3		UPDATED TO 9321-F-27203, REV.19.				

REVISIONS

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

INDIAN POINT NO.3 NUCLEAR POWER PLANT

FLOW DIAGRAM
AUXILIARY COOLANT SYSTEM
INSIDE CONTAINMENT
SHT.NO.1

NewYorkPower Authority

SCALE
DWG NO ISI-27203
REV 3
SHEET OF