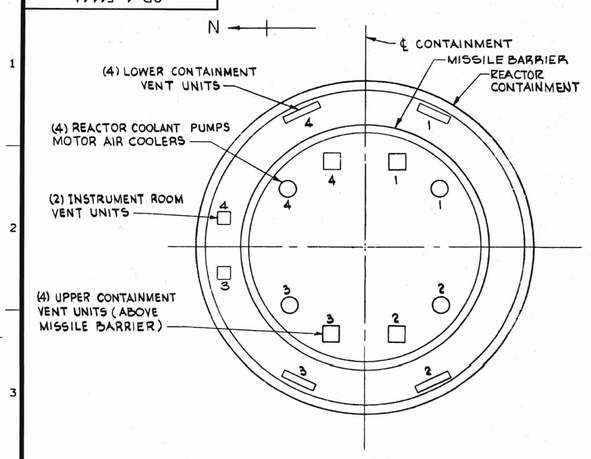
DWG. NO. OP-1-5114A



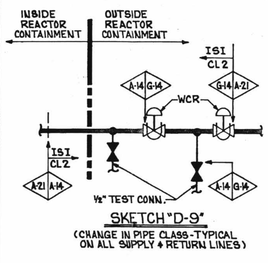
LOCATION PLAN

UNIQUE VALVE NUMBERS (UVN) AT LOWER CONTAINMENT VENTILATION UNITS

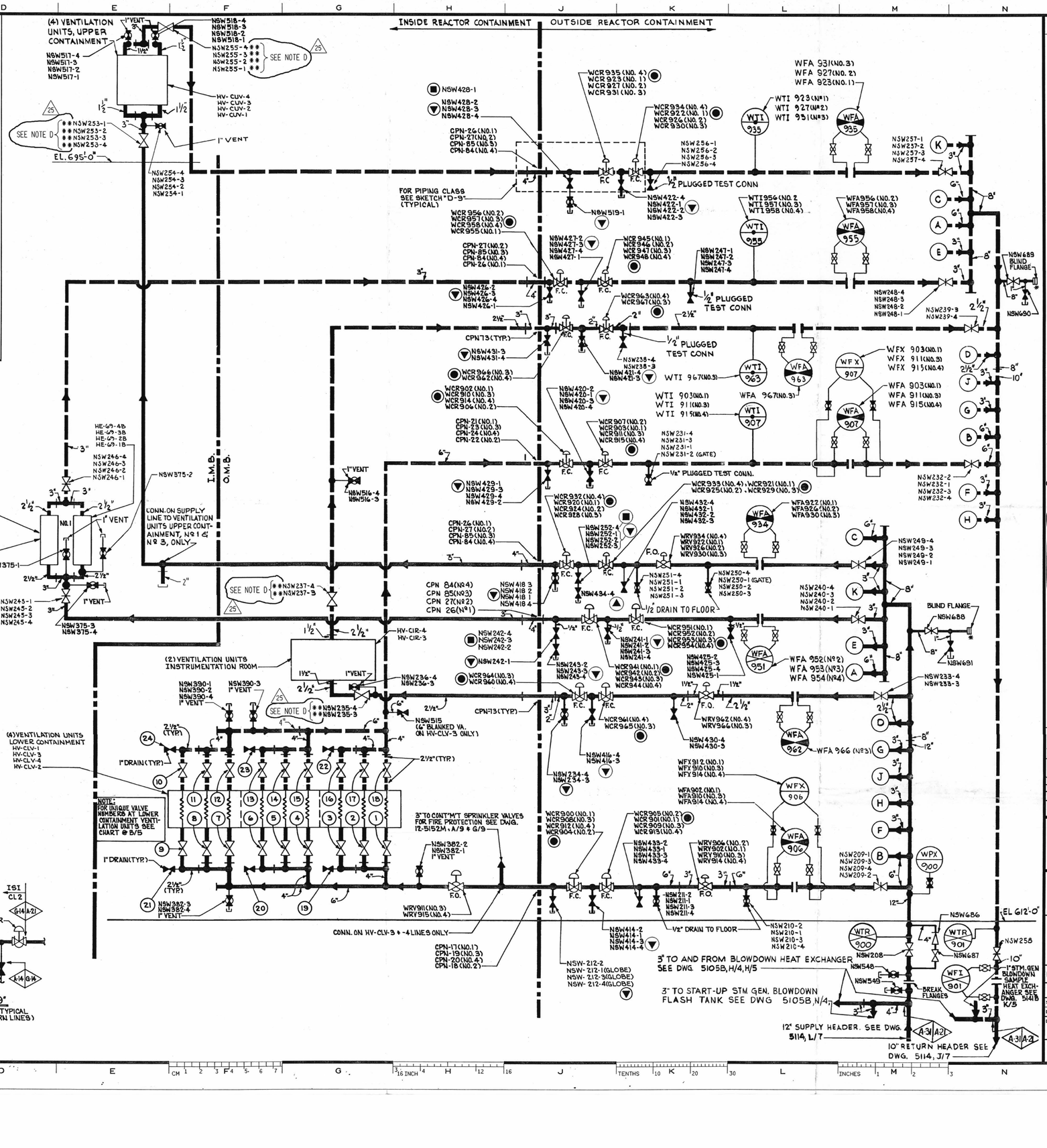
BANK NO. 1		BANK NO. 2		BANK NO. 3	
SYMBOL	UVN	SYMBOL	UVN	SYMBOL	UVN
(1)	NSW213-1 NSW213-2 NSW213-3 NSW213-4	(4)	NSW216-1 NSW216-2 NSW216-3 NSW216-4	(7)	NSW219-1 NSW219-2 NSW219-3 NSW219-4
(2)	NSW214-1 NSW214-2 NSW214-3 NSW214-4	(5)	NSW217-1 NSW217-2 NSW217-3 NSW 217-4	(8)	NSW220-1 NSW220-2 NSW220-5 NSW220-4
(3)	NSW215-1 NSW215-2 NSW215-3 NSW215-4	(6)	NSW218-1 NSW218-2 NSW218-3 NSW218-4	(9)	NSW221-1 NSW221-2 NSW221-5 NSW221-4
(16)	NSW228-1 NSW228-2 NSW228-3 NSW228-4	(13)	NSW225-1 NSW225-2 NSW225-3 NSW225-4	(10)	NSW222-1 NSW222-2 NSW222-3 NSW222-4
(17)	NSW229-1 NSW229-2 NSW229-3 NSW229-4	(14)	NSW226-1 NSW226-2 NSW226-5 NSW226-4	(11)	NSW223-1 NSW223-2 NSW223-3 NSW223-4
(18)	NSW230-1 NSW230-2 NSW230-3 NSW230-4	(15)	NSW227-1 NSW227-2 NSW227-3 NSW 227-4	(12)	NSW224-1 NSW224-2 NSW224-3 NSW224-4
INLET (19) DRAIN	NSW521-1 NSW521-2 NSW521-3 NSW521-4	INLET (20) DRAIN	NSW522-1 NSW522-2 NSW522-3 NSW 522-4	INLET (21) DRAIN	NSW523-1 NSW523-2 NSW523-3 NSW523-4
OUTLET (22) DRAIN	NSW526-1 NSW526-2 NSW526-3 NSW526-4	OUTLET (23) DRAIN	NSW525-1 NSW525-2 NSW525-3 NSW525-4	OUTLET (24) DRAIN	NSW524-1 NSW524-2 NSW524-3 NSW524-4

CHART TO CO-ORDINATE SUPPLY AND RETURN LINES TO EQUIPMENT NOT SHOWN

SYMBOL	EQUIP. NUMBER	EQUIPMENT
(A)	1	TO AND FROM VENTILATION UNITS, LOWER CONTAINMENT
(B)	3	
(C)	4	
(D)	3	TO AND FROM VENTILATION UNITS, INSTRUMENTATION ROOM
(E)	1	TO AND FROM VENTILATION UNITS IN UPPER CONTAINMENT
(F)	2	TO AND FROM VENTILATION UNITS UPPER CONTAINMENT
(G)	3	TO AND FROM VENTILATION UNITS IN UPPER CONTAINMENT
(H)	2	TO AND FROM REACTOR COOLANT PUMPS. MOTOR AIR COOLER
(J)	3	
(K)	4	



SKETCH "D-9"
(CHANGE IN PIPE CLASS-TYPICAL ON ALL SUPPLY & RETURN LINES)



GENERAL NOTES

- UNLESS OTHERWISE NOTED ON THIS DRAWING:
- REFER TO DRAWING 12-5104 FOR "HAND OPERATED VALVE IDENTIFICATION NUMBERS" NOTES.
- THE UNIT PREFIX DESIGNATION FOR EACH COMPONENT IDENTIFICATION NO. IS " 1 ".

LEGEND
- SUPPLY PIPING
- RETURN PIPING
- AUXILIARY PIPING

FOR VALVE, INSTRUMENT, SAMPLING, PIPE MATERIAL AND OTHER SYMBOLS NOT EXPLAINED ON THIS DWG., AND FOR MARK NUMBER CODES, SEE DWGS 12-5103 & 12-5104

* TEMPORARY CONNECTION FOR CONTAINMENT COOLING SKID (TYPICAL 2 PLACES)

A. ALL EQUIPMENT SEISMIC CLASS II EXCEPT AS NOTED Δ SEE SKETCH "D-9".

B. FOR CODE CLASS 2 INST. CONN'S. THE ISI BOUNDARY EXTENDS TO * INCLUDES THE FIRST ROOT VALVE.

C. FOR CODE CLASS 2 VENTS AND DRAINS, THE ISI BOUNDARY EXTENDS TO * INCLUDES THE FIRST NORMALLY CLOSED VALVE.

D. VALVE NOS. INDICATED WITH "**" PREFIX ARE CLASS 300# CAST STEEL VALVES PER GL 96-06 ANALYSIS.

E. ALL NESW VALVES INSIDE CTMT. ARE WITHIN THE SCOPE OF GL 96-06. REPLACEMENT OF EXISTING VALVES WITH ALTERNATE DESIGN OR MATERIALS REQUIRES REVIEW UNDER GL 96-06. REFER TO ENGINEERING REPORT MPR-2169.

DATE	NO.	DESCRIPTION	APPD.
11/16/00	25	ADDED: "SEE NOTE D" AT D-E/2, F-G/1, F/6, G/7; NOTE D & E AT D/5-6 PER I-DCP-4845 REV E. ISSUED FOR RECORD. GM/GNW	WLM
10-31-99	24	REVISED NOTE FOR SYMBOL E AND G AT A/8-9 PER C/R 99-1591, DCR 99-0127. GR/SK 10-15-99	JMM

REVISIONS

FILENAME: op-1-5114A.025
(raster file): op-1-5114A 25.cit

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INDIANA MICHIGAN POWER COMPANY
DONALD C. COOK
NUCLEAR PLANT
BRIDGMAN MICHIGAN

FLOW DIAGRAM
NON-ESSENTIAL SERVICE WATER

DWG. NO. OP-1-5114A-25

ARCH	ELEC	MECH	STR

SCALE: DR:
DATE: CHK:

DESIGN ENGINEERING DIVISION:
REFER TO ORIG. & D. ISSUE MICROFILM FOR SIGNATURES

AEP AMERICAN ELECTRIC POWER
AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

IGS0694

D-51