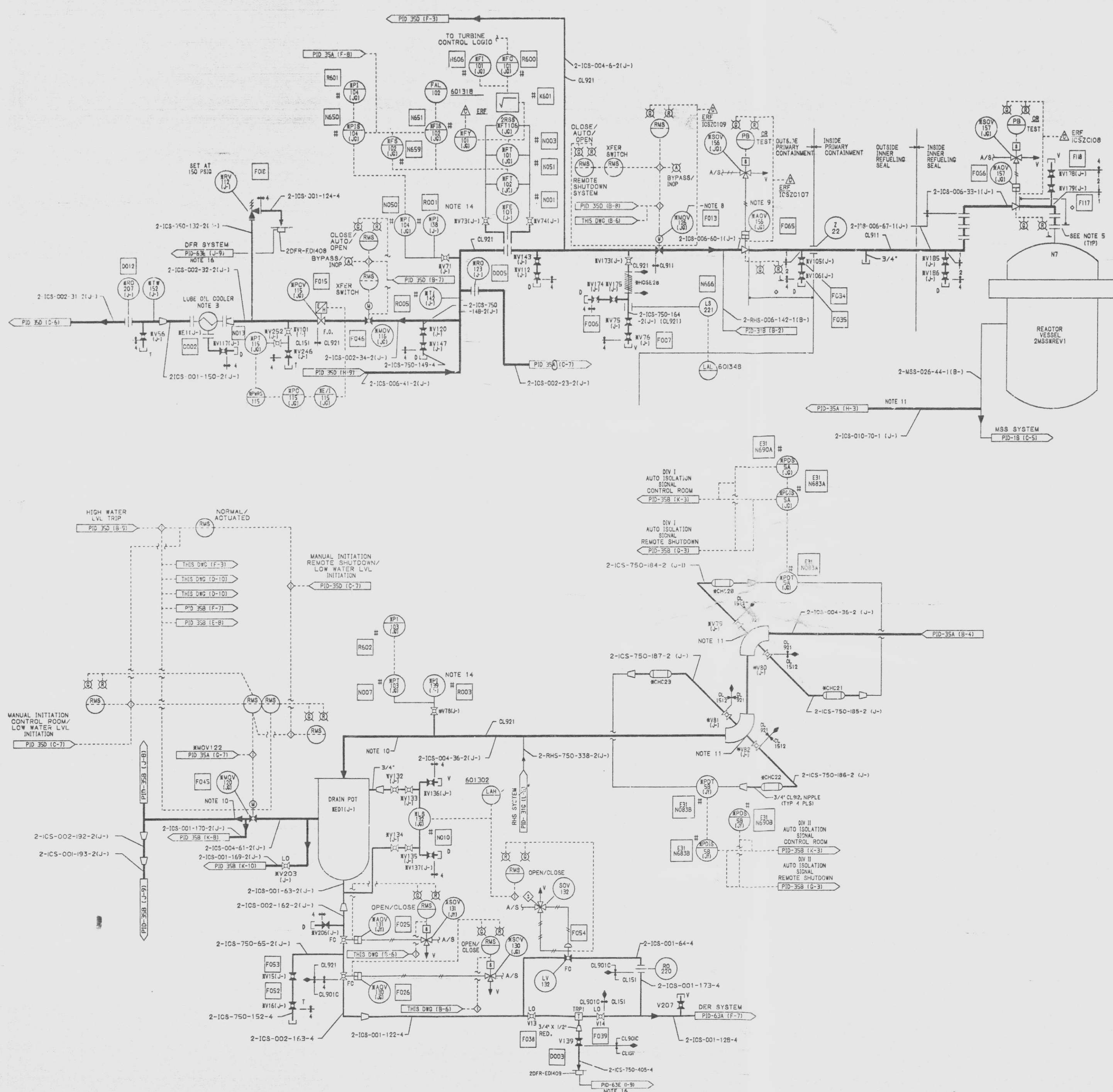




MARK NUMBER	WAVE DESCRIPTION	SIZE	HC, SP VAL/VE
V56,155,157	VOH90-E-1MO	6"	2
V102	VOH90-N-4G	6"	2
MOV16	VOH10-E-F-20	2"	1
MOV120	VOH90-E-C-20	4"	1
MOV10	VOH90-F-12G	4"	1
V174	VOH10-B-4	1"	1
V15,16,17,34,74,75, V76,78,79,80, V81,82,112,120,136, V143,147,153, V174,175	VOH10-F-2	3/4"	2
V56,101,117,246,252	VOH60-D-2	3/4"	5
V105,106,178,179	VOH10-F-1	3/4"	8
V132,133,134,175, V171,203	VOH10-F-2	1"	6
V105	VOH10-B-4	3/4"	1
VY05	VOH60-D-2	3/4"	1
V207	VOH60-C-4	3/4"	1

- NOTES:
1. ALL INSTRUMENT AND EQUIPMENT NUMBERS TO BE PREFIXED WITH AN "X" EXCEPT WHEN THE INSTRUMENT OR EQUIPMENT NUMBER IS PRECEDED BY AN APOSTROPHE ('). AN APOSTROPHE (') WILL REPLACE THE DASH (-) IN THE PREFIX FOR EQUIPMENT OR INSTRUMENTS WHICH ARE A PART OF THE REACTOR CORE SAFETY SYSTEM.
 2. GENERAL ELECTRIC IDENTIFICATION NUMBERS SHOWN IN SQUARES, (TO BE PREFIXED BY 51 UNLESS OTHERWISE PREFIXED).
 3. INSTRUMENT OR EQUIPMENT SHOWN WITHIN A PART OF THE WPL 551-0002.
 4. LINES ONE INCH AND SMALLER WHICH ARE PART OF THE REACTOR COOLANT PRESSURE BOUNDARY SHALL BE SAFETY CLASS 2.
 5. ALL INSTRUMENTS CONNECTED TO THE REACTOR SHALL BE FLANGED TO FACILITATE VESSEL HEAD REMOVAL.
 6. ALL LOCAL PRESS AND TEST CONVENTIONS, DRAINS, AND FLOW TAPS ABOVE THE LEVEL OF THE REACTOR SHALL BE SAFETY CLASS 2.
 7. CONNECTIONS ARE 1-1/4" SOCKETS UNLESS OTHERWISE NOTED.
 8.  INDICATES TO LOCATE AS CLOSE AS POSSIBLE FOR INSTALLATION.
 9. ADV125 IS LOCATED AS CLOSE AS POSSIBLE TO THE CONTAINMENT AND ON THE HIGH POINT OF THE WPL.
 10. ADV156 IS LOCATED AS HIGH ON THE CONTAINMENT AS POSSIBLE.
 11. ROIC IN STEAM LINE REQUIRES DOWN SLOPING OF AT LEAST 1/8" PER FOOT OF HORIZONTAL PIPE RUNS TO DRAIN POTS, WEDI FROM REACTOR AND FLOW FROM KEDI TO ROIC RUNS.
 12. ELBOW TAP SHALL BE LOCATED IN HORIZONTAL RUN OF PIPE.
 13. ALL INSTRUMENT LINES LOCATED IN THE PRIMARY CONTAINMENT ARE TO BE 3/4" CLASS 1516, INSTRUMENT LINES OUTSIDE PRIMARY CONTAINMENT ARE 3/4" CLASS 1602 UNLESS OTHERWISE NOTED.
 14. IF THE REACTOR IS SHUT DOWN FOR NORMAL OPERATION OF THE PLANT, THE SYSTEM IS ON STANDBY, READY TO START ON REACTOR WATER LOW LEVEL.
 15. ALL INSTRUMENT REQUIRES SEISMIC QUALIFICATION AND MAY BE PURCHASED, INSTALLED, TESTED AND CALIBRATED TO QUALITY ASSURANCE CATEGORY REQUIREMENTS.
 16. # DENOTES EQUIPMENT SUPPLIED BY GE-NED.
 17. NO FLAG SHOWN ON CORRESPONDING LOCATION.
 18. COORDINATES PROVIDE INTERIOR LOCATION.

THIS DRAWING CREATED ELECTRONICALLY

07-141-9L

NUCLEAR SAFETY RELATED
QA CAT I, II

PIPING & INSTRUMENTATION DIAGRAM
REACTOR CORE ISOLATION COOLING

NINE MILE POINT NUCLEAR STATION-UNIT 2
NIAGARA MOHAWK POWER CORPORATION
STONE & WEBSTER ENGINEERING CORPORATION
CHERRY HILL, N. J.

12177-PID-35C-11

DESIGNED BY T. J. GESERICK
E. E. CURRAN

12
DRAWN BY T.J.GESER
CHECKED BY E.F.CURRA

2177-PID-	
RICK	APR 83
N	

350-11	
LEVEL 5	WIDE ENG

RE UP	EMER	MADDEN
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Dupe of 9304290239-2

MARK NUMBER	VALVE DESCRIPTION	SIZE	NO. OF VALVES
LV154, 157	VS050-E-1MO	6"	2
LV132	VS050-M-4Q	1"	1
MOV116	VS050-F-20	2"	1
MOV125	VS050-C-2TO	4"	1
MOV125	VS050-F-12Q	6"	1
V13, 14	VS050-B-4	1"	2
V15, 16, 17, 73, 74, 75, 76, 77, 80, 81, 82, 112, 120, 136, 143, 147, 173, 174, 175	VS050-F-2	3/4"	20
V54, 101, 117, 246, 252	VS050-D-2	3/4"	5
V105, 106, 118, 179, V185, 186	VS050-F-1	3/4"	6
V132, 133, 134, 135, V137, 203	VS050-F-2	1"	6
V139	VS050-B-4	3/4"	1
V206	VS050-C-2	3/4"	1
V207	VS050-D-4	3/4"	1

- NOTES:
- ALL INSTRUMENT AND EQUIPMENT NUMBERS TO BE PREFIXED WITH "2ICS-" EXCEPT WHERE A DIFFERENT PREFIX IS SHOWN. AN ASTERISK (*) WILL REPLACE THE DASH (-) IN THE PREFIX FOR EQUIPMENT OR INSTRUMENTS WHICH ARE A PART OF THE NUCLEAR SAFETY FEATURES SYSTEM.
 - GENERAL ELECTRIC IDENTIFICATION NUMBERS SHOWN IN SQUARES. (TO BE PREFIXED BY ESI UNLESS OTHERWISE PREFIXED).
 - THIS EQUIPMENT IS SUPPLIED AS PART OF GE MPL ESI-C002.
 - LINE ONE INCH AND SMALLER WHICH ARE PART OF THE REACTOR COOLANT PRESSURE BOUNDARY SHALL BE SAFETY CLASS 2.
 - PIPING CONNECTED TO VESSEL HEAD SHALL BE FLANGED TO FACILITATE VESSEL HEAD REMOVAL.
 - ALL LOCAL PRESS AND TEST CONN. VENTS, DRAINS, AND FLOW TAPS ARE 3/4". LEVEL SWITCH CONN. ARE 1" INCH. AND TEMPERATURE CONNECTIONS ARE 1-1/4" SOCKETS UNLESS OTHERWISE NOTED.
 - MOV125 IS LOCATED AS CLOSE AS POSSIBLE TO THE CONTAINMENT AND ON THE HIGH POINT IN THE PIPING.
 - ADV156 IS LOCATED AS HIGH ON THE CONTAINMENT AS POSSIBLE.
 - RCO (103) STEAM LINE REQUIRES DOWN SLOPING OF AT LEAST 1/8" PER FOOT OF HORIZONTAL PIPE RUNS TO DRAIN POTS, RED1 FROM REACTOR AND FROM RED1 TO RCO TURB.
 - ELBOW TAP SHALL BE LOCATED IN HORIZONTAL RUN OF PIPE.
 - ALL INSTRUMENT LINES INSIDE THE PRIMARY CONTAINMENT ARE TO BE 3/4" CLASS 1516. INSTRUMENT LINES OUTSIDE PRIMARY CONTAINMENT ARE 3/4" CLASS 1502 UNLESS OTHERWISE NOTED.
 - VALVE POSITIONS ARE SHOWN FOR NORMAL OPERATION OF THE PLANT. THE SYSTEM IS ON STANDBY, READY TO START ON REACTOR WATER LOW LEVEL.
 - THIS INSTRUMENT REQUIRES SEISMIC QUALIFICATION AND MAY BE PURCHASED, INSTALLED, TESTED AND CALIBRATED TO QUALITY ASSURANCE CATEGORY II REQUIREMENTS.
 - ## DENOTES EQUIPMENT SUPPLIED BY GE-NEC.
 - NO FLAG SHOWN ON CORRESPONDING DOCUMENT. COORDINATES PROVIDE INTERFERENCE LOCATION.

SI
APERTURE
CARD

NUCLEAR SAFETY RELATED
QA CAT I, II

PIPING & INSTRUMENTATION DIAGRAM
REACTOR CORE ISOLATION COOLING
NINE MILE POINT NUCLEAR STATION-UNIT 2
NIAGARA MOHAWK POWER CORPORATION
STONE & WEBSTER ENGINEERING CORPORATION
CHERRY HILL, N.J.

12177-PID-35C-11

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