FOR REVIEW AS TO PROPRIETARY MARKING AND CONTENT
BEFORE RELEASING THIS DOCUMENT TO THE PUBLIC
WE WILL NEED TO REVIEW AND REMOVE ANY
PROPRIETARY MARKINGS AND CONTENT

REACTOR PRESSURE VESSEL P&ID M-141 1S401

DRYWELL HIGH PRESSURE PS-E11-1N011A, B, C, D REF 2

REACTOR LOW LEVEL LIS-B21-1N031A, B, C, D REF 2

HPCI AUTO ISOLATION SIGNAL (REF 2 SHT 1) SEE NOTE 5

TURB. EXH. DIAPH. HIGH PRESSURE N-156-1 A1

TURB. EXH. DIAPH. HIGH PRESS.

TO HPCI TURBINE TRIP

TO HV-155-F042

REACTOR BLDG.

SEE REF 10

CONDENSATE STORAGE TANK OT522

TO CORE SPRAY

TO RCIC

FROM CONDENSATE STORAGE TANK M-108-2 B5

TO PT-E41-1N016 M-156-1 B3

TO PT-E41-1N019 M-156-1 B1

MAIN STEAM LINE 'B'

PRIMARY CONTAINMENT DRYWELL

SUPPRESSION POOL

SUCTION STRAINERS 1F402A

STEAM SPARGER

FROM FEEDWATER M-141-2 F2

FROM RCIC TEST LINE M-149 C5

FROM INSTR GAS SYSTEM M-126-1 E9

ISOLATION SIGNAL REF. 2 & 19

HPCI TURBINE CONTROL LOGIC REF. 2

TO SY-15682 M-156-2 E 7

FROM AUX. STEAM M-121-1 A10

VC-176-1 E8 TO UNIT COOLER

VALVE NOT FULLY OPEN

TO HV-156-F059 VACUUM PUMP & AUX. OIL PUMP M-156-1 H3

HIGH PRESSURE PS-E11-1N011A, B, C&D REF. 2

REACTOR LOW LEVEL LIS-B21-1N031A, B, C&D REF. 2

TO SV-15625 AND SV-15626 M-156-1 G4

REMOVABLE SPOOL

PUMP SUCTION M-156-1 C1

STEAM SUPPLY M-156-1 B8

PUMP DISCHARGE M-156-1 D2

FOR TURBINE-PUMP DETAIL SEE M-156

TURBINE EXHAUST M-156-1 D2

FROM HPCI TURBINE STOP VALVE M-156-1 B6

FROM CONDENSATE TRANSFER SYSTEM M-108-2 F3

HPCI TURB STEAM LINE DRAIN POT

TO MAIN STEAM LINE DRAIN M-141-1 E9

TO HV-155-F011, HV-155-F008 & HV-155-F004 A5 B9

INTERLOCK SIGNALS B A4

COND. STORAGE TANK LOW LEVEL M-108-1 A6

TO LT-15775A M-157-8 E1

TO LT-15775A M-157-8 E2

NOTES:

1. PENETRATION LOCATION TO BE A MAXIMUM OF 3 FEET ABOVE NORMAL WATER LEVEL WITH PIPING EXTENDED 4 FEET BELOW LOW WATER LEVEL (ZONE GZ).
2. AC POWER FOR HPCI INSTRUMENTS SHALL BE DERIVED FROM THE PLANT DC POWER SYSTEM, VIA AN INVERTER. THE DC SOURCE IS TO BE SEPARATE FROM THAT WHICH SUPPLIES THE RCIC SYSTEM.
3. THE GE MPL NUMBER FOR THIS SYSTEM IS E-41.
4. FILLING LINE FROM CONDENSATE SYSTEM SHOULD BE CONNECTED TO HIGH POINT OF PUMP DISCHARGE PIPING.
5. HPCI ISOLATION IS INITIATED BY ANY OF THE FOLLOWING EVENTS:
   - A. EQUIPMENT ROOM VENTILATING AIR INLET & OUTLET HIGH DIFFERENTIAL TEMPERATURE.
   - B. EMERGENCY AREA COOLER INLET HIGH TEMPERATURE.
   - C. PIPE ROUTING AREA VENTILATING AIR INLET & OUTLET HIGH DIFFERENTIAL TEMPERATURE.
   - D. STEAM LINE HIGH PRESSURE DROP (STEAM LINE BREAK)
   - E. HIGH TURBINE EXHAUST DIAPHRAGM PRESSURE.
   - F. PIPE ROUTING AREA HIGH TEMPERATURE.
   - G. MANUAL INITATION OF ISOLATION PUSH BUTTON.
   - H. LOW STEAM SUPPLY PRESSURE (REACTOR PRESSURE).
6. NOTE REMOVED.
7. NOTE REMOVED.
8. VALVES 155015 AND 155039 SHALL BE LOCATED OUTSIDE THE STEAM TUNNEL. VALVE 155014 SHALL BE LOCKED OPEN AFTER HYDRO TEST OF THE VENT LINE.
9. HANDWHEEL OF HV-155-F100 HAS BEEN REMOVED TO PREVENT POSSIBLE OVERRIDE OF PRIMARY CONTAINMENT ISOLATION SIGNALS.
10. NOTE REMOVED.
11. REMOVABLE SPOOL IS INSTALLED WHEN OPERATING HPCI ON AUX STEAM (I.E. TESTING). OTHERWISE BLIND FLANGES ARE INSTALLED DURING NORMAL OPERATIONS.

REF NO	AE DRAWING NO.	PPL DRAWING NO. (GE NO)
19	M1-E41-69	FF-127250 (791E420WJ)
18	M-161	E106267
17	C-277, C279	E105290, E105292 (22A2537)
16		
15		
14		(22A1362 & 22A136AW)
13		
12	M1-E41-4	(761E270A)
11		
10	M-108	E106213
9	M-105	E106210
8	M-101	E106206
7	M-121	E106226
6	M-149	E106254
5	M-152	E106257
4	M-100	E106205
3	M-156	E106261
2	M1-E41-2(1, 2, 3, 4)	(729E627)
1	M-141	E106246

REFERENCE DRAWINGS

REV	DESCRIPTION	APPROVED
45	INCORPORATED PHANTOM LINES FOR CLARITY & ENHANCEMENT	DRAWING APPROVAL ATTACHED TO NIMS MEDIA AS "APPROVAL HISTORY"

SUSQUEHANNA S. E. S.
UNIT 1
P&ID
HIGH PRESSURE COOLANT INJECTION

AREA	N/A	ELEV	N/A	SCALE	NONE

PPL CORP.

PPL DRAWING NO.	SHEET NO.	REV. NO.
E106260	1 OF 1	45
AE DRAWING NO.	SHEET NO.	
M-155	1 OF 1	

For Information Only

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