



- NOTES:**
1. ALL EQUIPMENT NUMBERS ON THIS DRAWING ARE PREFIXED BY QIES1 UNLESS OTHERWISE NOTED.
  2. THIS P&ID REDRAWN FROM G.E. P&ID No. 1850419 REV. 3 RCIC SYSTEM.
  3. ALL INSTRUMENT NUMBERS ON THIS DRAWING ARE PREFIXED BY IES1 UNLESS OTHERWISE NOTED.
  4. MAXIMUM PIPING RUN BETWEEN ENDS OF VACUUM BREAKER LINE SHALL NOT EXCEED 60 FEET.
  5. DELETED.
  6. ALL PIPING 2" AND SMALLER FOR M-1083A IS CLASSIFIED AS I-"C", II-"C", III-"A", OR III-"B" RADIATION LEVEL.
  7. CONTAINMENT PENETRATION No. 28 IS A 6" STAINLESS STEEL ASTM A312, TYPE 304 PIPE WITH A WALL THICKNESS OF 1.025 INCHES.
  8. START-UP STRAINERS SHALL BE REPLACED BY RING SPACERS IN ACCORDANCE WITH THE LATEST REVISION OF 9645-M5-83 GENERAL NOTE #17.
  9. VALVE F078-B SHALL BE INSTALLED SUCH THAT THE FLOW INDICATOR IS POINTED TOWARDS THE CONTAINMENT WALL.
  10. ALL PIPING 2" AND SMALLER FOR M-1083B IS CLASSIFIED AS II-"C", II-"D", OR III-"B" RADIATION LEVEL FOR CONDITIONS WHEN THE RCIC PUMP IS OPERATING UNDER NORMAL OPERATION CONDITIONS FOR THE REACTOR. ALL LINES 2" AND SMALLER WILL BE ZONE III-"B" RADIATION LEVEL.
  11. THE EXHAUST OUTLET FLANGE SHALL BE A 380° R.F. FLANGE.
  12. VALVE F076-B SHALL BE INSTALLED SUCH THAT THE FLOW INDICATOR IS POINTED AWAY FROM THE CONTAINMENT WALL.
  13. VALVE F081 SHALL BE INSTALLED SUCH THAT IT IS THE HIGHEST POINT IN THE VACUUM BREAKER LINE AND ALL PIPING TO SLOPE DOWNWARD FROM THAT POINT.
  14. SPARGER MATERIALS, DESIGN AND FABRICATION SHALL BE EQUIVALENT TO PIPE CLASS HCB. PRESSURE TESTING AND CODE STAMPING NOT REQUIRED.
  15. PIPING IS USED FOR THIS INSTRUMENT SENSING LINE WITHIN THE STEAM TUNNEL. INSTRUMENT ROOT VALVES SHALL BE LOCATED AS CLOSE AS PRACTICAL TO THE STEAM TUNNEL WALL ON THE AUXILIARY BUILDING SIDE. INSTRUMENT LUBING SHALL BE RUN BETWEEN THE ROOT VALVES AND THE INSTRUMENT.
  16. TRANSITION PIECES TO BE SEAMLESS ASME SA-106, GRADE C SCHEDULE 12B.
  17. CLAND SEAL SYSTEM DETAILS ARE CONTAINED IN MP&L MANUAL 46000102.
  18. SPOOL PIECE SHALL BE REMOVED WHEN PIPING IS NOT USED. A BLIND FLANGE SHALL BE PROVIDED FOR USE DURING NORMAL PLANT OPERATION.
  19. FIRE HOSE CONNECTION INSTALLED FOR USE AS REACTOR VESSEL MAKEUP FROM PG4 SYSTEM DURING ACCIDENT CONTIION.

- COMPONENTS SUBJECT TO AMR**
- REACTOR CORE ISOLATION COOLING SYSTEM AMM09
  - NON-SAFETY RELATED SYSTEMS & COMPONENTS AFFECTING SAFETY RELATED SYSTEMS AMM20
  - CONDENSATE AND REFUELING WATER STORAGE AND TRANSFER SYSTEM AMM23

034	AS-BUILT PER EC 19863	WE	N/A	N/A	SP	TH	2-5	-10
033	AS-BUILT PER DRN 05-357	WE	N/A	N/A	SP	TH	07	-05
032	AS-BUILT PER DRN 7191	WE	N/A	N/A	SP	TH	09	-20
REVISIONS								
NO.	DATE	BY	ENG	CHK	APP			

GRAND GULF NUCLEAR STATION  
 UNIT 1  
 NUCLEAR PLANT ENGINEERING  
**UPDATED FINAL SAFETY ANALYSIS REPORT**  
 FIGURE NUMBER - 5.4-010  
 P & I DIAGRAM  
 REACTOR CORE ISOLATION COOLING SYSTEM-UNIT 1

0	10-13-2011							
REVISIONS								
<b>LRA-M-1083A</b>								
GDFILE: m1083a.DGN								
MASTERFILE								

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