



- NOTES:
1. ALL EQUIPMENT NUMBERS ON THIS DRAWING ARE PREPARED BY IN21 UNLESS OTHERWISE NOTED.
  2. ALL INSTRUMENT NUMBERS ON THIS DRAWING ARE PREPARED BY IN21 UNLESS OTHERWISE NOTED.
  3. FLOW ELEMENTS FE N001A, B FLANGED ENDS ORIGINALLY PROVIDED BY BECTEL. FLOW ELEMENTS HAVE BEEN MODIFIED TO REMOVE DOWNSTREAM FLANGES FOR BUTT-WELDED INSTALLATION OF NEW FLOW MEASUREMENT SPOOLS.
  4. ALL PIPING 2" AND SMALLER IS CLASSIFIED AS III-"B" RADIATION LEVEL.
  5. ALL START-UP STRAINERS SHALL BE REPLACED BY RING SPACERS IN ACCORDANCE WITH THE LATEST REVISION OF MS-83, SECTION 4.7.
  6. ALL INSTRUMENT LINES PENETRATING THE STEAM TUNNEL SHALL HAVE ROOT VALVES LOCATED OUTSIDE OF THE STEAM TUNNEL. INSTRUMENT TUBING SHALL BE RUN BETWEEN THE ROOT VALVES AND INSTRUMENTS LOCATED OUTSIDE THE STEAM TUNNEL.
  7. FOR IHD-2/P17/P172 INFO SEE DWG J-909.0 SERIES.
  8. THE LEADING EDGE FLOW MONITOR (LEFM) TRANSDUCERS ARE NON-INTRUSIVE ULTRASONIC FLOW SENSORS. LEFM METERING SECTION C34N008A FOR FEEDWATER LINE "A" HOUSES TRANSDUCERS C34N008A-1 THRU C34N008A-8. LEFM METERING SECTION C34N008B FOR FEEDWATER LINE "B" HOUSE TRANSDUCERS C34N008B-1 THRU C34N008B-8.
  9. LEADING EDGE FLOW MONITOR (LEFM) CHECK PLUS SPOOL PIECE IC34N018A FOR FEEDWATER LINE "A" HOUSES TRANSDUCERS IC34N018A-1 THRU IC34N018A-16. LEFM SPOOL PIECE IC34N018B-1 THRU IC34N018B-16.
  10. EQUIPMENT WASHDOWN CONNECTION DRAINS HAVE BEEN CONFIGURED FOR A 2 1/2" FIREHOSE CONNECTION SEE DRAWINGS FSK-5-1054-001-A AND FSK-5-1054-002-A.

COMPONENTS SUBJECT TO AMR  
 NON-SAFETY RELATED SYSTEMS &  
 COMPONENTS AFFECTING SAFETY  
 RELATED SYSTEMS AM20

038	AS-BUILT PER EC 24452	WC	N/A	N/A	SP	dh	9-9-10
037	AS-BUILT PER EC 2431	WC	N/A	N/A	SP	MM	9-11-08
036	AS-BUILT PER EC 5085	WC	N/A	N/A	SP	MM	4-28-08

GRAND GULF NUCLEAR STATION  
 UNIT 1  
 NUCLEAR PLANT ENGINEERING  
 UPDATED FINAL SAFETY  
 ANALYSIS REPORT  
 FIGURE NUMBER - 10.4-013  
 P & I DIAGRAM  
 FEEDWATER SYSTEM

NO.	DATE	DESCRIPTION	BY	ENGR	CHK	APP
REVISIONS						
LRA-M-1054						
GDFR m1054.DGN						
DATEFILE						

MPL No. IN21 1015M  
 SCALE: NONE  
 DRAWING No. M-1054  
 REV. 038  
 HYBRID DFN: m1054.dgn

D141