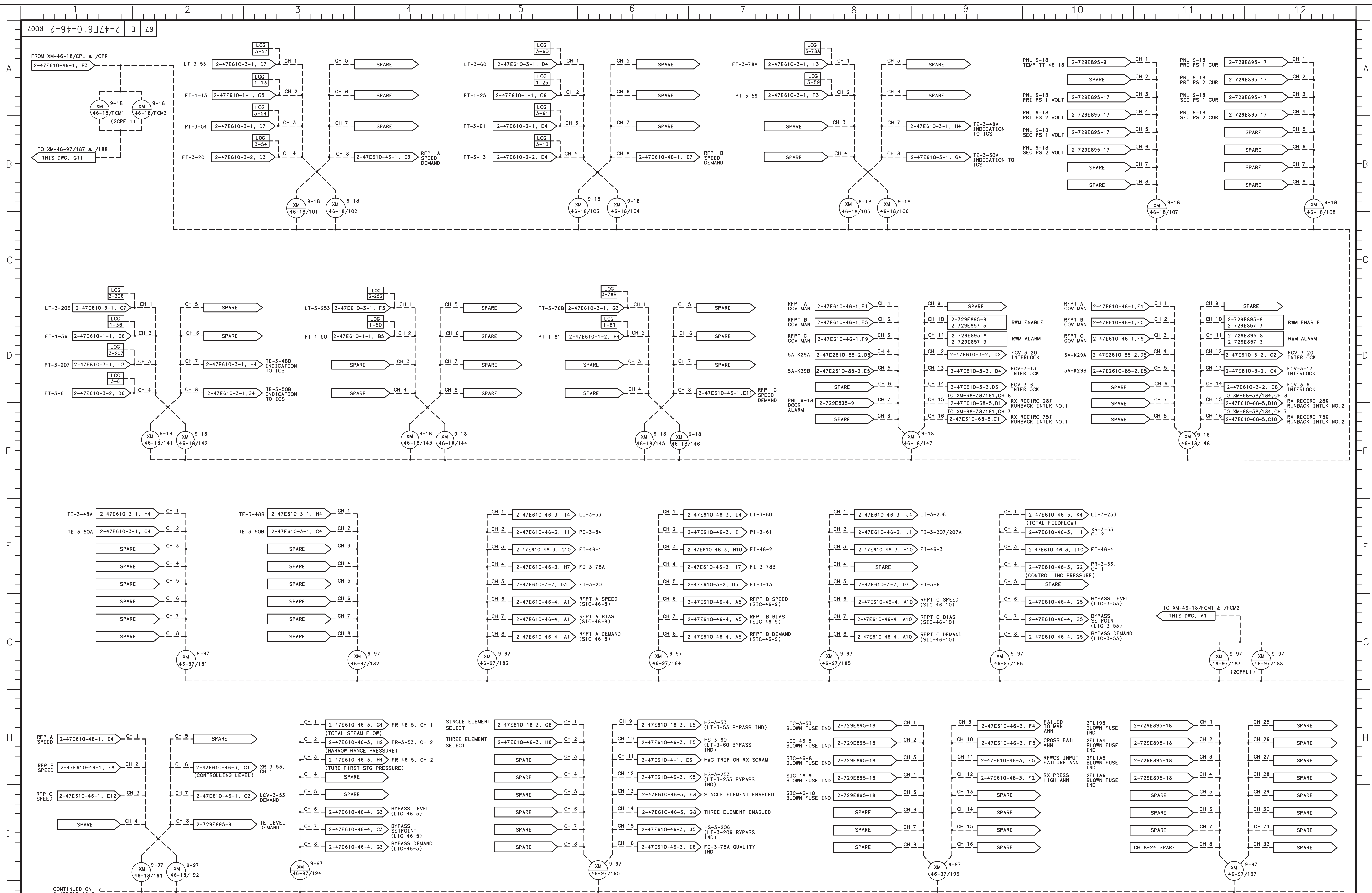


BFN-16

Figure 7.10-1

(Deleted by Amendment 15)





# AMENDMENT 29

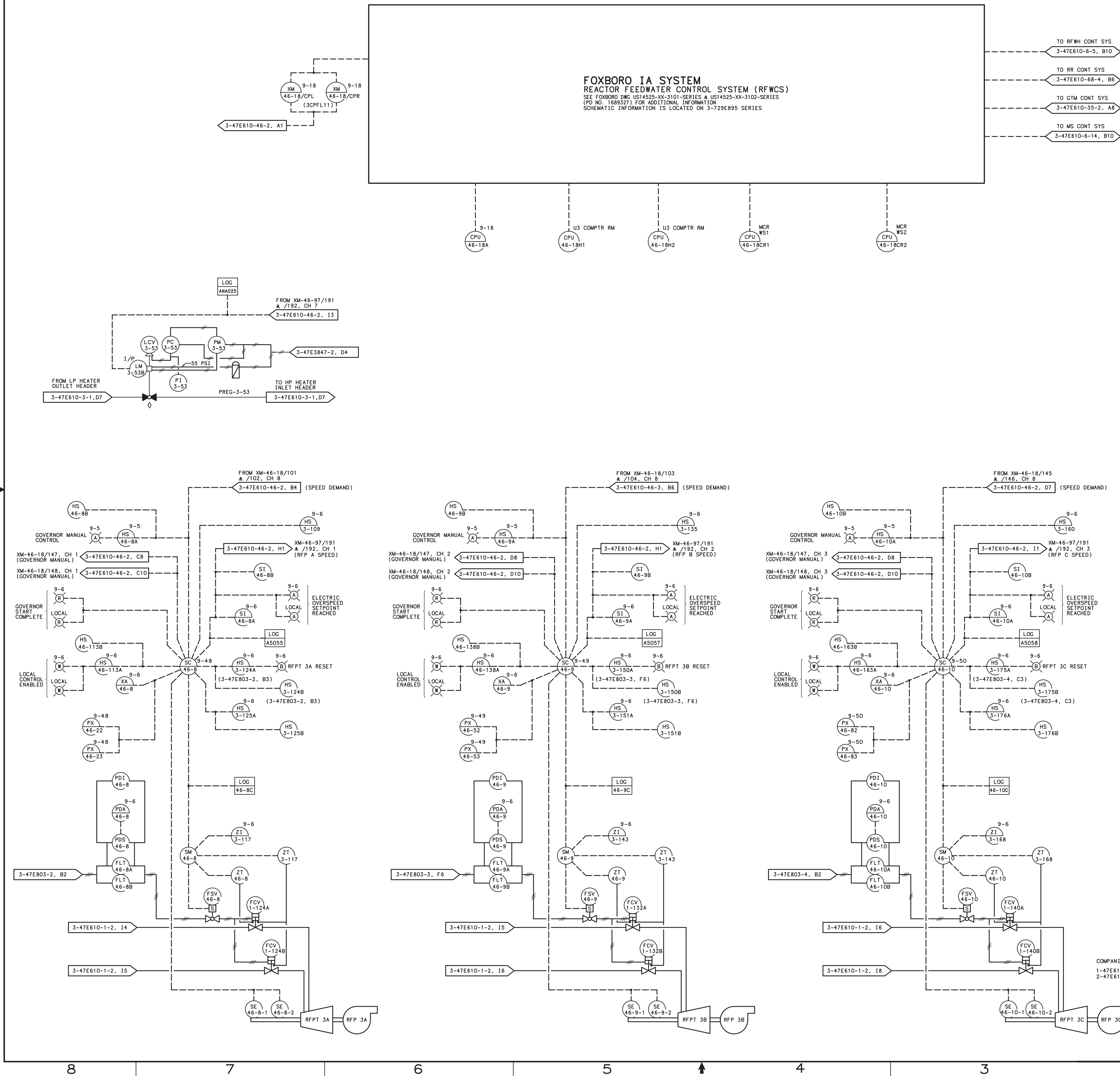
POWERHOUSE  
UNIT 2

BROWNS FERRY NUCLEAR PLANT  
FINAL SAFETY ANALYSIS REPORT

MECHANICAL  
CONTROL DIAGRAM  
FEEDWATER CONTROL SYSTEM  
FIGURE 7.10-3



67 M 3-47E610-4-6-1



- NOTES:
1. THE FEEDWATER CONTROL SYSTEM IS A COMMON 3-ELEMENT CONTROL SYSTEM USING FEEDWATER FLOW, STEAM FLOW AND REACTOR WATER LEVEL, AND A STARTUP BYPASS CONTROL VALVE (LCV-3-53). DURING STARTUP, LCV-3-53 MODULATES TO CONTROL THE REACTOR WATER LEVEL BY PERMITTING THE DISCHARGE OF THE CONDENSATE BOOSTER PUMPS TO ENTER THE FEEDWATER PIPING UPSTREAM OF THE FEEDWATER HEATERS, BYPASSING THE REACTOR FEEDWATER PUMPS.
  2. DELETED
  3. THE MAIN STEAM LEAKAGE EXCESSIVE ALARM (XA-46-7) IS DESIGNED TO ALERT THE OPERATOR IF THERE IS AN UNBALANCE BETWEEN TOTAL STEAM FLOW AND MAIN TURBINE FIRST-STAGE PRESSURE.
  4. ALL INSTRUMENTS HAVE UNIT PREFIX "3-" UNLESS OTHERWISE NOTED.
  5. UNITS ON DRAWING ARE FOR REFERENCE ONLY AND ARE ABBREVIATED TO MEET SPACE CONSTRAINTS. REFER TO MEL FOR COMPLETE UNITS.

REFERENCE DRAWINGS:

MEL ..... INSTRUMENT TABULATION-REACTOR FEEDWATER SYSTEM  
MEL ..... INSTRUMENT TABULATION-FEEDWATER CONTROL SYSTEM  
3-45N3680-2 ..... WIRING DIAGRAM-PANEL 9-52  
3-45N3672-4 ..... WIRING DIAGRAM-PANEL 9-36  
3-45N3672-5 ..... WIRING DIAGRAM-PANEL 9-36  
3-45N3672-6 ..... WIRING DIAGRAM-PANEL 9-36  
3-47E3847-2 ..... SCHEMATIC-REACTOR FEED PUMP TURBINES  
3-47E610-1 ..... MECHANICAL FLOW DIAGRAM-CONTROL AIR SYSTEM  
3-47E610-2 ..... MECHANICAL FLOW DIAGRAM-REACTOR FEEDWATER  
3-47E610-3 ..... CONTROL DIAGRAM-REACTOR FEEDWATER SYSTEM  
3-47E610-4 ..... CONTROL DIAGRAM-CONDENSATE SYSTEM  
3-47E610-1A ..... CONTROL DIAGRAM-MATH STEAM SYSTEM  
3-47E610-1B ..... CONTROL DIAGRAM-MATH STEAM SYSTEM  
3-47E610-2, 3, 4 ..... MECHANICAL FLOW DIAGRAM-BOILER FEED PUMP  
3-45N3663-2, 3 ..... DRIVE TURBINE A, B, C

3-45N3663-2, 3 ..... WIRING DIAGRAM-PANEL 9-18  
3-45N3663-3 ..... WIRING DIAGRAM-PANEL 9-58A (BRMS)  
3-45N3663-4 ..... WIRING DIAGRAM-PANEL 9-58A (BRMS)  
3-45E3642-4 ..... WIRING DIAGRAM-PANEL 9-46, 9-49, 9-50  
3-45E3642-5 ..... WIRING DIAGRAM-PANEL 9-46, 9-49, 9-50  
3-45E3642-6 ..... KEY DIAGRAM-ANNUNCIATOR SYSTEM

GE DRAWINGS:

3-729E895-1, 2, 3, 4 ..... ELEMENTARY DIAGRAM-FEEDWATER CONTROL SYSTEM  
3-729E895-1 ..... 100-FEEDWATER CONTROL SYSTEM  
505E2538A ..... CONTROL DIAGRAM  
3-729E897-3 ..... ELEMENTARY DIAGRAM-ROD WORTH MINIMIZER SYSTEM

LEGEND:

MCU MOTOR CONTROL UNIT  
MSU TURBINE SPEED CONTROL UNIT (MOTOR GEAR UNIT)  
MSC MOTOR SPEED CHANGER  
LSS LOW SPEED STOP  
HSS HIGH SPEED STOP

## AMENDMENT 29

POWERHOUSE  
UNIT 3

BROWNS FERRY NUCLEAR PLANT  
FINAL SAFETY ANALYSIS REPORT

FEEDWATER CONTROL SYSTEM  
MECHANICAL CONTROL DIAGRAM

FIGURE 7.10-5



