Appendix 5B. Figures

Figure 5-1. Flow Diagram of Reactor Coolant System

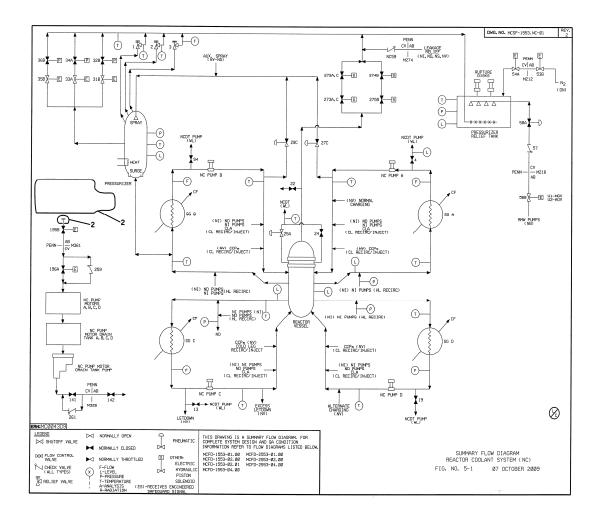


Figure 5-2. Deleted Per 1994 Update

Figure 5-3. Pump Head - Flow Characteristics

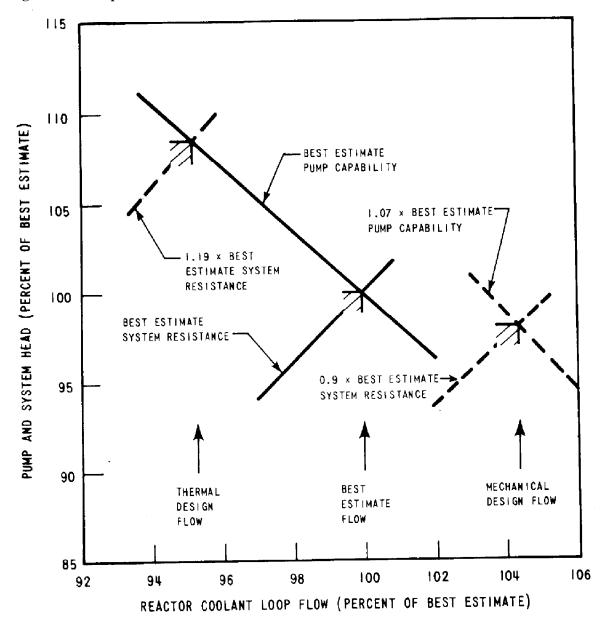


Figure 5-4. Deleted Per 1998 Update

Figure 5-5. Deleted Per 1998 Update

Figure 5-6. Deleted Per 1998 Update

Figure 5-7. Deleted Per 1998 Update

CROSSOVER LEG RESTRAL REACTOR COOLANT PUMP SUPPORT REACTOR COOLANT PUMP STEAM GENERATOR UPPER SUPPORT CROSSOVER VERTICAL RUN RESTRAINT CROSSOVER LEG RESTRAINT STEAM GENERATOR STEAM GENERATOR LOWER SUPPORT RCL GLOBAL COORDINATE SYSTEM $^{\rm Z}_{\rm G}$ Lumped Mass REACTOR PRESSURE VESSEL

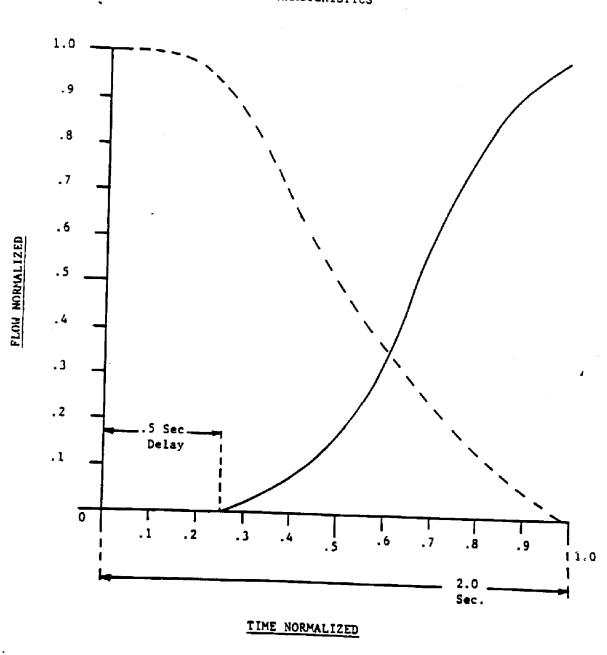
Figure 5-8. Reactor Coolant Loop/Supports System Dynamic - Westinghouse Structural Model

Figure 5-9. Deleted Per 1998 Update

Figure 5-10. Power Operated Relief Valve Flow Characteristics

MCGUIRE NUCLEAR STATION

POWER OPERATED RELIEF VALVE FLOW CHARACTERISTICS



Valve Opening

Valve Closing ______

Figure 5-11. Deleted Per 1997 Update

Figure 5-12. Deleted Per 1997 Update

Figure 5-13. Deleted Per 1997 Update

Figure 5-14. Deleted per 1997 Update

Figure 5-15. Deleted Per 2014 Update

Figure 5-16. Deleted Per 2014 Update

Figure 5-17. KID Lower bound Fracture Toughness A533V (Reference WCAP 7623) Grade B Class

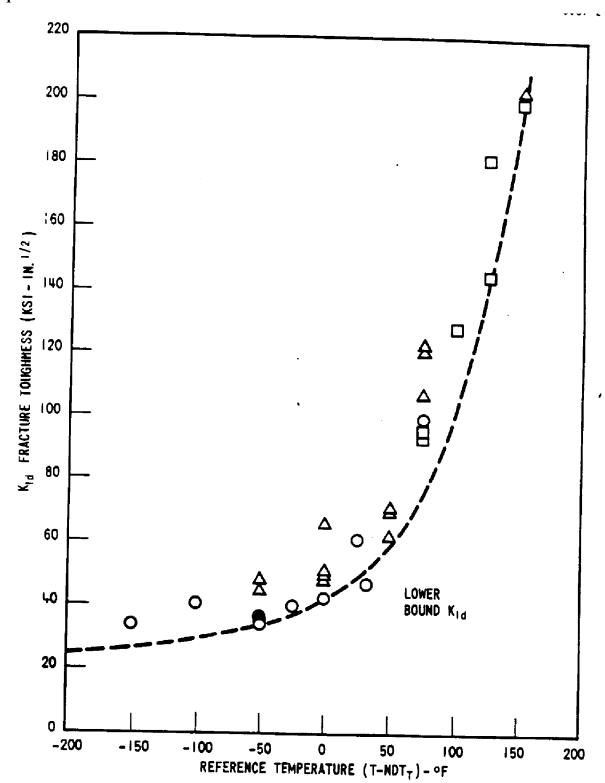
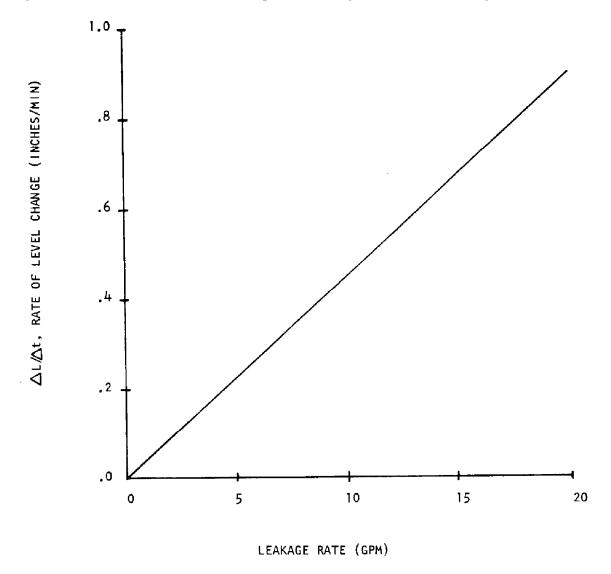


Figure 5-18. Nominal Containment Sump Level Change Rate Versus Leakage Rate



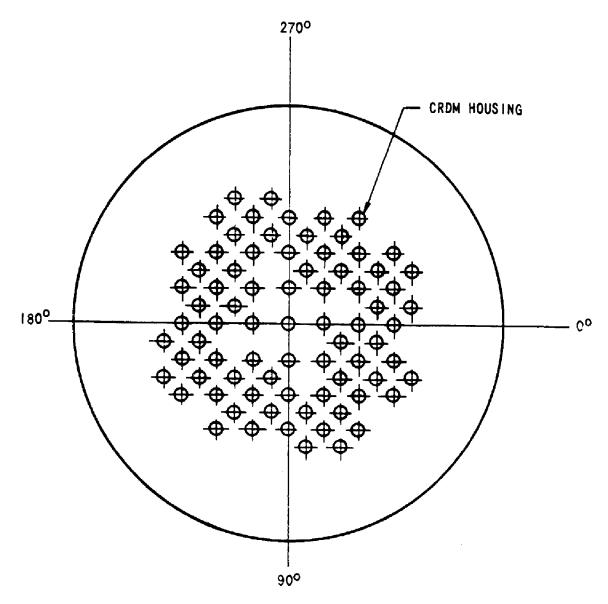
620 NOTE **814.8** 610 600 THOT TEMPERATURE ("F) 590 **BB51** 580 570 TOLD NOTE SEA.2" 560 557.A° 550 540 530 100 80 20 PERCENT POWER

Figure 5-19. Relationship Between Reactor Coolant System Temperature and Power

Refer to Sections 4.4.3.4 and 5.3.3 for applicability.

Note 1 - T_{hot} = 614.6°F, and T_{cold} = 555.6°F.

Figure 5-20. Reactor Vessel Head View Showing Top-Mounted Control Drive Mechanism Housing Locations



NEUTRON SHIELD PAD

WELD

WELD

VESSEL
INTERMEDIATE
SHELL

VESSEL LOWER
SHELL

50-1/2"

1-3/16"

cv

Figure 5-21. Surveillance Capsule for Unit 1- Elevation View

0.030 STAINLESS SHEATH

CORE

-CHARPY SPECIMEN

- SPACER

- WELD

NOZZLE WELD 18" 19" WELD -CORE VESSEL INTERMEDIATE SHELL -|44" WELD -5" ~ 52"− మే. -^capsule VESSEL LOWER SHELL -NEUTRON SHIELD PAD 0.030 STAINLESS SHEATH WELD CORE 1-3/16" SPACER CHARPY SPECIMEN

Figure 5-22. Surveillance Capsule for Unit 2- Elevation View

- WELD

CORE BARREL YESSEL -NEUTRON SHIELD PAD CAPSULE -86-1/2" 81-5/8" 90° 270°-56° 58-1/20 56⁰ VERTICAL WELD SEAMS INT. SHELL 170° & 350° LOWER SHELL 90° & 270° 1800

Figure 5-23. Surveillance Capsule Plan View (Representative for Unit 1, Unit 2 Similar)

Figure 5-24. Reactor Coolant Controlled Leakage Pumps

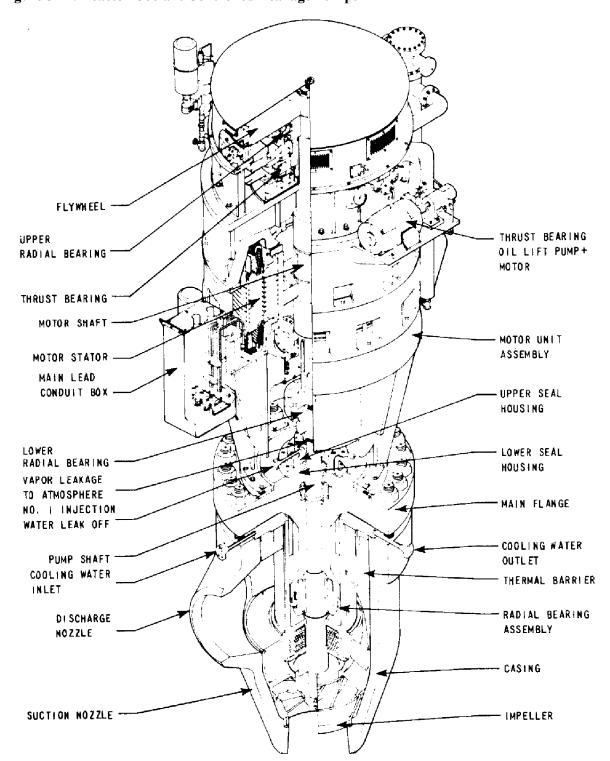
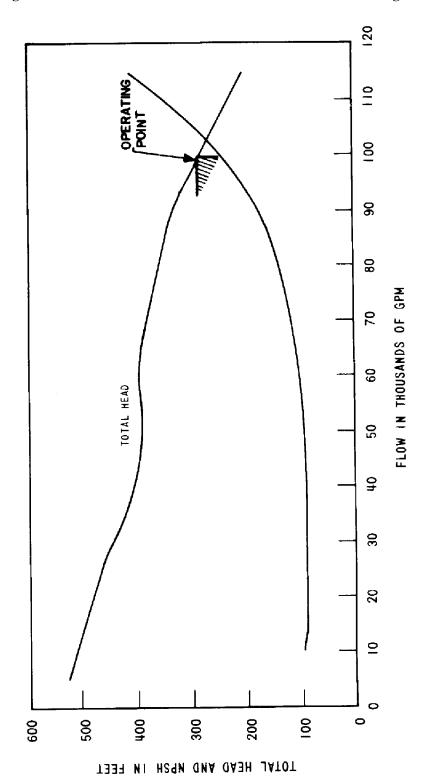


Figure 5-25. Estimated Performance Curve - Controlled Leakage Main Coolant Pump



HOTOR SUPPORT STAND MOTOR SHAFT PUMP MAIN FLANGE HOTOM SEAL HOUSING -SPOOL PIECE -SEAL LEAKOFF PUMP SHAFT

Figure 5-26. Reactor Coolant Pump Spool Piece and Motor Support Stand

Figure 5-27. BWI Steam Generator

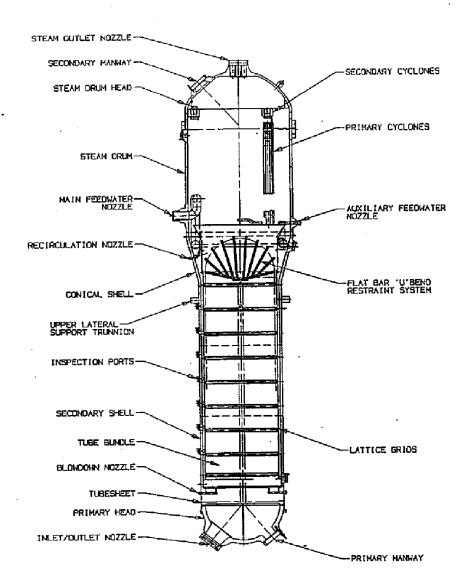


Figure 5-28. Flow Diagram of Residual Heat Removal System (ND)

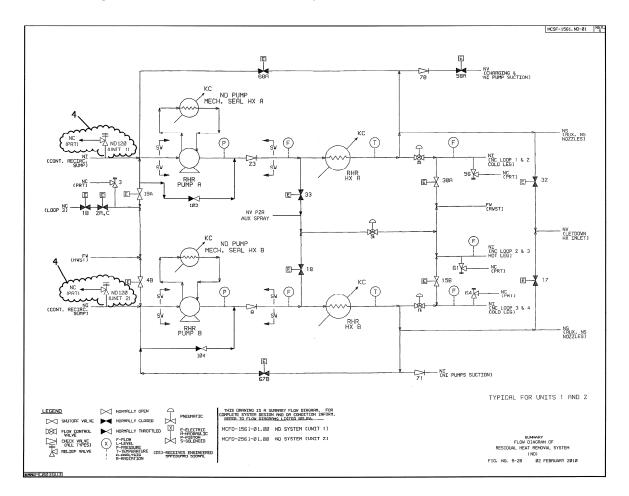


Figure 5-29. Pressurizer

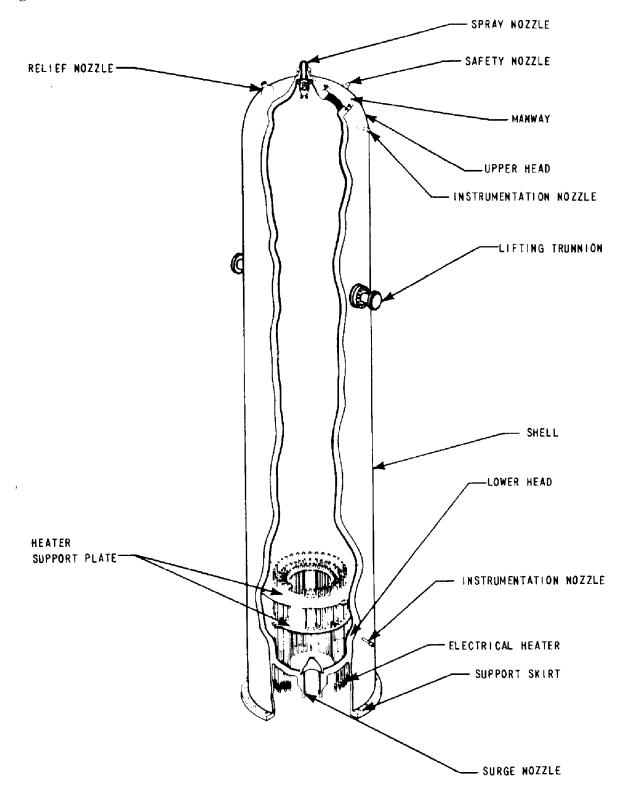


Figure 5-30. Typical Steam Generator Lower Lateral Support

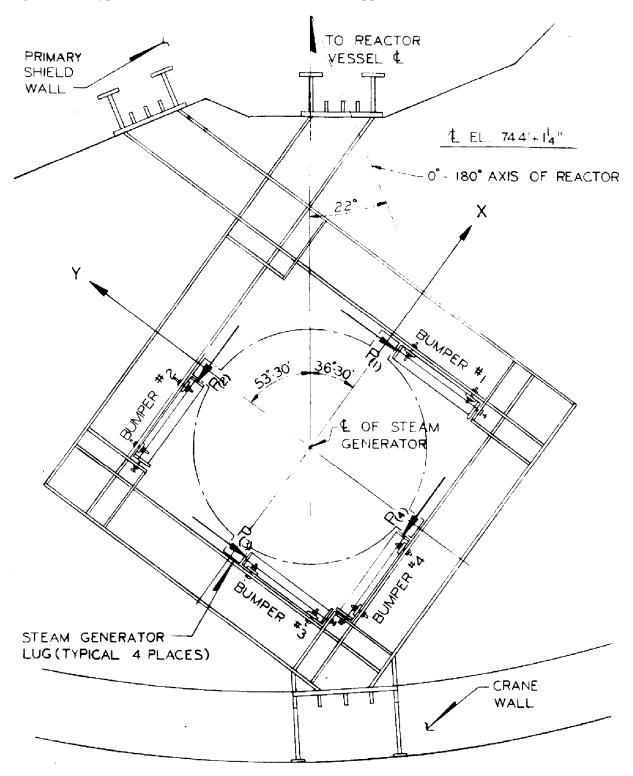
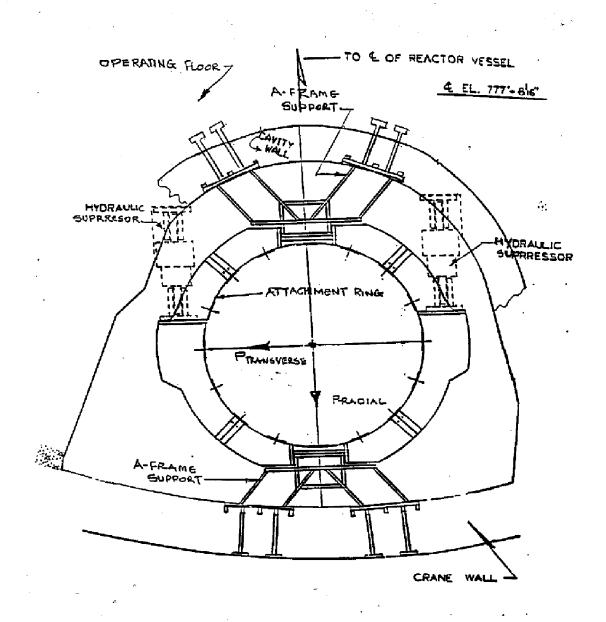


Figure 5-31. Typical Steam Generator Upper Support



PVERTICAL EL.743'+9'6 VERTICAL EL 740'+0" T UPPER CLEVIS 123" O.D. SEAMLESS PIPE COLUMN STEAM GENERATOR COLUMN LENGTH UPPER ASSUMED COLUMN LENGTH FOR THE REACTOR COOLANT PUMP CLEVIS ASSUMED FOR THE -LOWER CLEVIS LOWER CLEVIS EL.725'+0" PVERTICAL PVERTICAL TYPICAL COLUMN ASSEMBLY FOR TYPICAL COLUMN ASSEMBLY COOLANT REACTOR FOR THE STEAM GENERATOR

Figure 5-32. Typical Column Assembly for the Steam Generator and Reactor Coolant Pump

Figure 5-33. Typical Reactor Coolant Pump Lateral Support for Loops 1-2

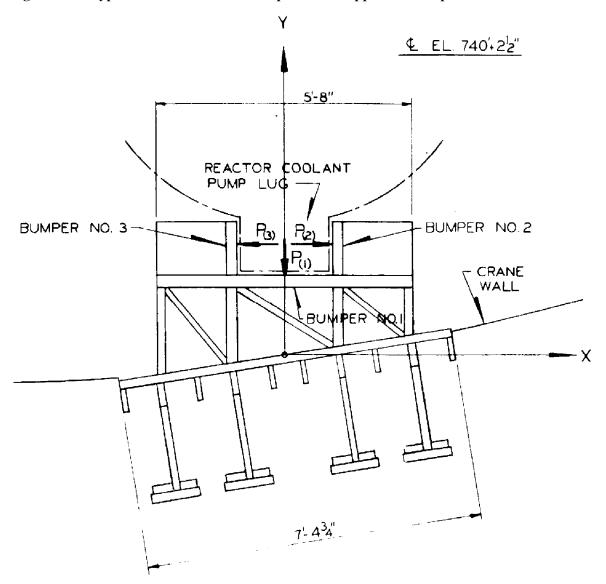


Figure 5-34. Typical Reactor Coolant Pump Lateral Support for Loops 3-4

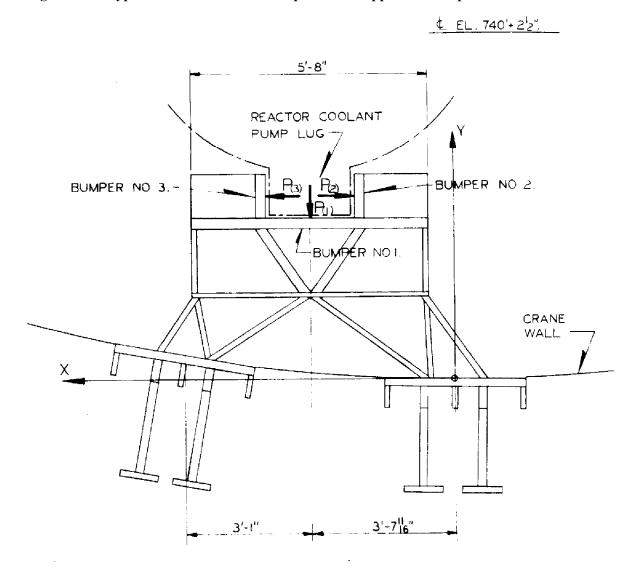


Figure 5-35. Pressurizer Support System Elevation

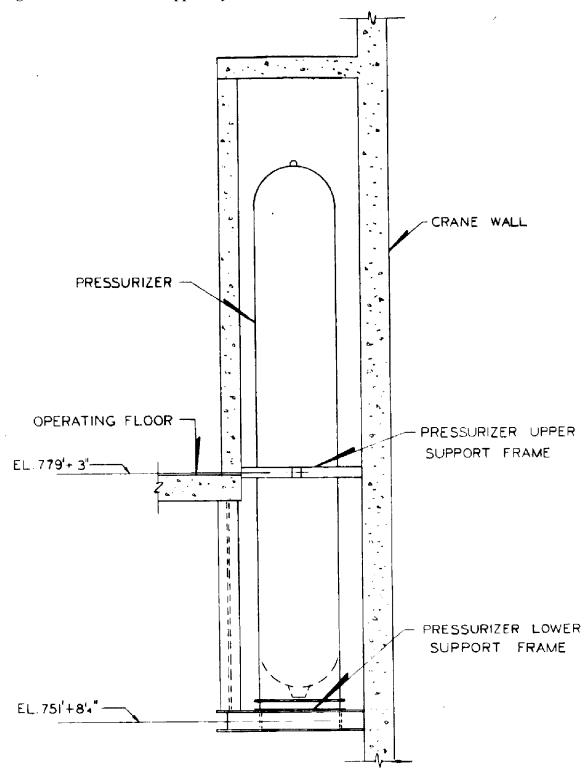


Figure 5-36. Pressurizer Lower Lateral Support

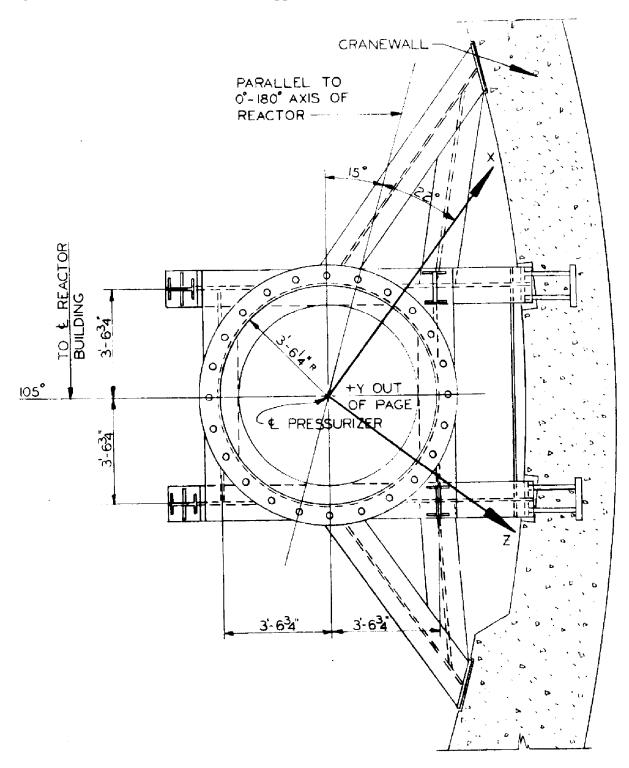


Figure 5-37. Pressurizer Upper Lateral Support

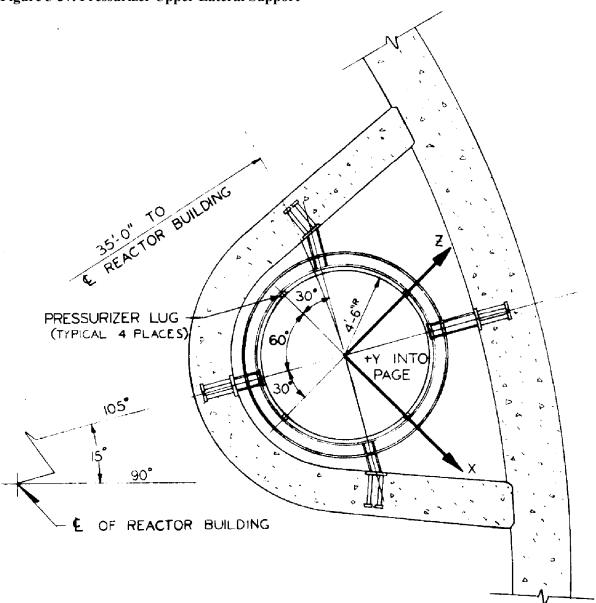


Figure 5-38. Typical Reactor Vessel Support

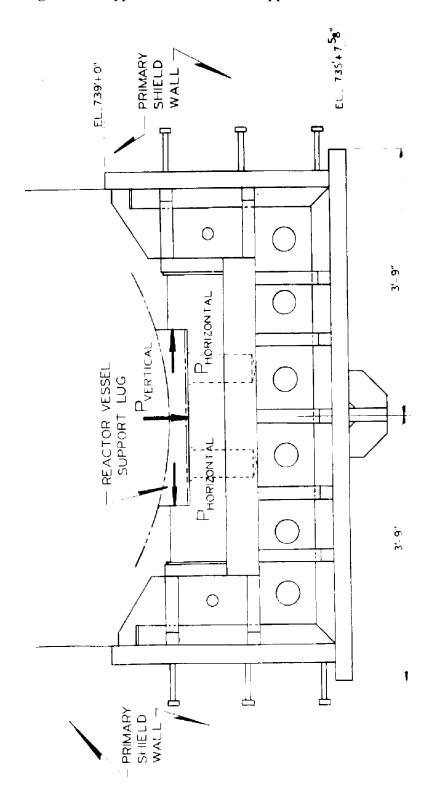


Figure 5-39. Deleted Per 1995 Update

Figure 5-40. Deleted Per 1995 Update

Figure 5-41. Deleted Per 1995 Update

Figure 5-42. Deleted Per 1995 Update

Figure 5-43. Deleted Per 1995 Update