June 29, 2001

Document Control Desk
U.S. Nuclear Regulatory Commission
Mail Stop P1-137
Washington, DC 20555

Manual:

Manual No.:

Issue Date: June 29, 2001

Please replace the following two pages of Chapter 9.0. The word DRAFT was inadvertently left on the copies.

Also, due to a printing error, the following two Figures 5.2-40-2 and 5.2-44-2 were missing from your packet. Please place these pages in the correct location of your manual. Sorry for any inconvenience this may have caused.

AFTER UPDATING YOUR MANUAL, PLEASE SIGN AND RETURN THIS RECEIPT ACKNOWLEDGMENT WITHIN 30 DAYS TO: POINT BEACH NUCLEAR PLANT, DISTRIBUTION CENTER, 6590 NUCLEAR ROAD, TWO RIVERS, WI 54241.

Submit PBF-0095 for any controlled manual changes or cancellations. If you have any questions, please call the Distribution Center at Extension 7598 or 7625.

********Special Distribution Notes********

Distribution Center - PBNP
S. M. Boldt/M. A. Muckey

_____

Date_____

A053
1/1

9.0 AUXILIARY AND EMERGENCY SYSTEMS

The auxiliary and emergency systems are supporting systems required to insure the safe operation or servicing of the reactor coolant system (described in Section 4). Various components in some of these systems are shared by Unit 1 and Unit 2. Appendix A.6 discusses this sharing and lists the shared components.

In some cases, the dependable operation of several systems is required to protect the reactor coolant system by controlling system conditions within specified operating limits. Certain systems are required to operate under emergency conditions.

This section considers systems in which component malfunctions, inadvertent interruptions of system operation, or a partial system failure must be designed for, to prevent a hazardous or unsafe condition.

The systems considered under this category are:

Chemical and Volume Control System: This system provides for boric acid injection, chemical additions for corrosion control, reactor coolant cleanup and degasification, reactor coolant makeup, reprocessing of water letdown from the reactor coolant system, and reactor coolant pump seal water injection.

Residual Heat Removal System: This system removes the residual heat from the core and reduces the temperature of the reactor coolant system during the second phase of plant cooldown.

Spent Fuel Cooling System: This system removes the heat generated by spent fuel elements stored in the spent fuel pool.

Component Cooling System: This system removes heat from the reactor coolant system, via the residual removal system during plant shutdown, cools the letdown flow to the chemical and volume control system during power operation and provides cooling to dissipate waste heat from various primary plant components and the boric acid and waste evaporators.

Sampling System: This system provides the equipment necessary to obtain liquid and gaseous samples from the reactor plant systems.

Facility Service Systems: These systems include fire protection and service water systems.

Fuel Handling System: This system provides for handling fuel assemblies, control rod assemblies, and material irradiation specimens.

9.0.1 GENERAL DESIGN CRITERIA

Criteria which are specific to one of the auxiliary or emergency systems are listed and discussed in the appropriate system design basis subsection. Criteria which apply primarily to other systems (and are discussed in other sections) are also listed and cross-referenced below because details of closely related systems and equipment are given in this section.

Reactivity Control Systems Malfunction

Criterion: The reactor protection systems shall be capable of protecting against any single malfunction of the reactivity control system, such as unplanned continuous withdrawal (not ejection or dropout) of a control rod, by limiting reactivity transients to avoid exceeding acceptable fuel damage limits. (GDC 31)

As described in Section 7 and justified in Section 14, the reactor protection systems are designed to limit reactivity transients to DNBR no less than the design basis limit due to any single malfunction in the deboration controls.

Engineered Safety Features Performance Capability

Criterion: Engineered Safety Features, such as the emergency core cooling system and the containment heat removal system, shall provide sufficient performance capability to accommodate the failure of any single active component without resulting in undue risk to the health and safety of the public. (GDC 41)

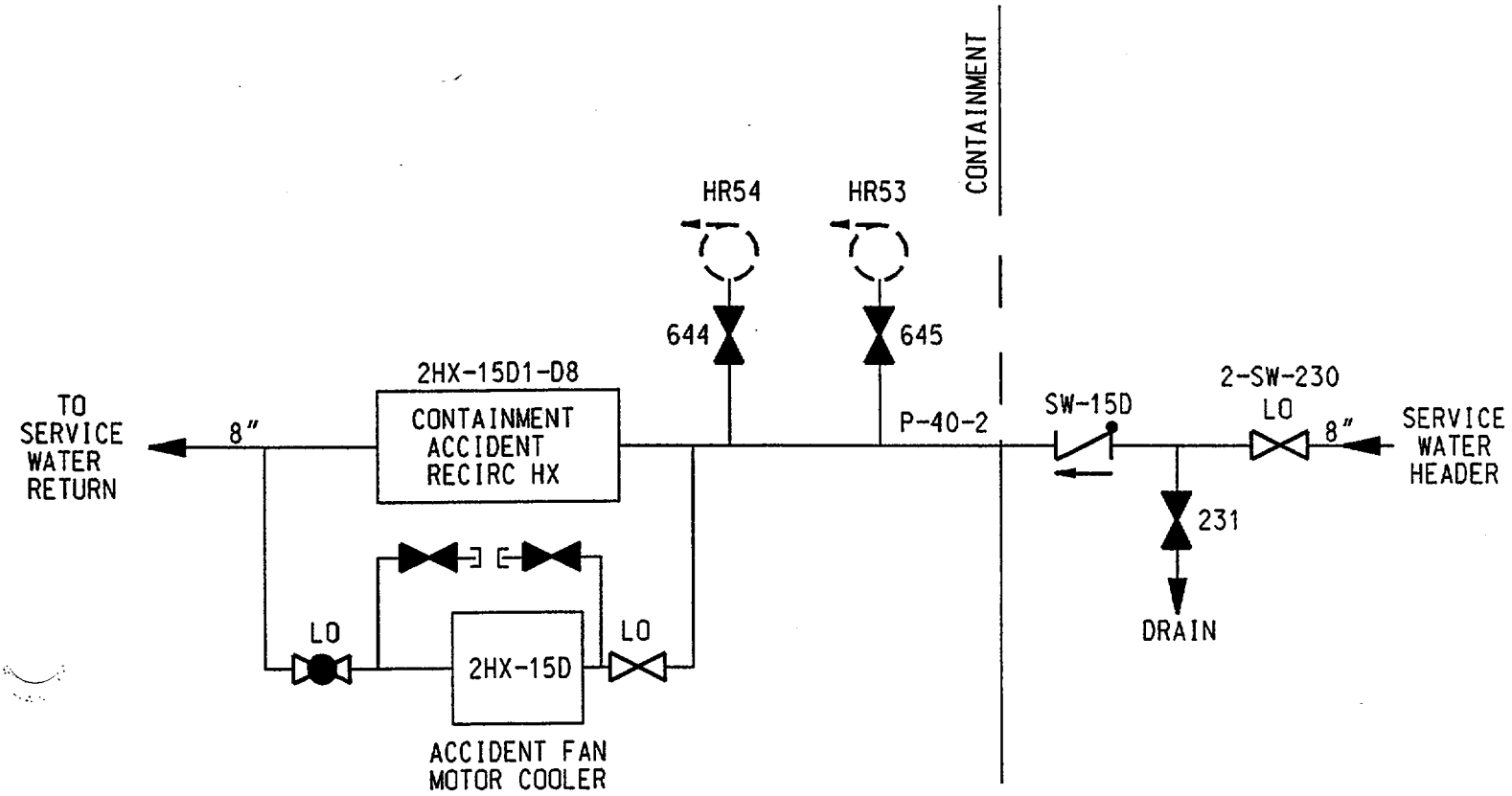
Each of the auxiliary cooling systems which serves an emergency function provides sufficient capability in the emergency mode to accommodate any single failure of an active component and still function in a manner to avoid undue risk to the health and safety of the plant personnel and the public.

Containment Heat Removal Systems

Criterion: Where an active heat removal system is needed under accident conditions to prevent exceeding containment design pressure, this system shall perform its required function, assuming failure of any single active component. (GDC 52)

Each of the auxiliary cooling systems, which serves an emergency function to prevent exceeding containment design pressure, provides sufficient capability in the emergency mode to accommodate any single failure of an active component and still perform its required function.

SERVICE WATER SUPPLY TO CONTAINMENT FAN COOLER UNITS (UNIT 2)



PENETRATION	CONTAINMENT ISOLATION VALVES INSIDE	CONTAINMENT ISOLATION VALVES OUTSIDE	BRANCH/SYSTEM	LINE SIZE	FLUID	TEMP HOT > 200 COLD < 200	CLASS
40-2	CLOSED SYS	SW-230	VENTILATION COOLER WATER IN/SERVICE WATER	8"	W	COLD	4

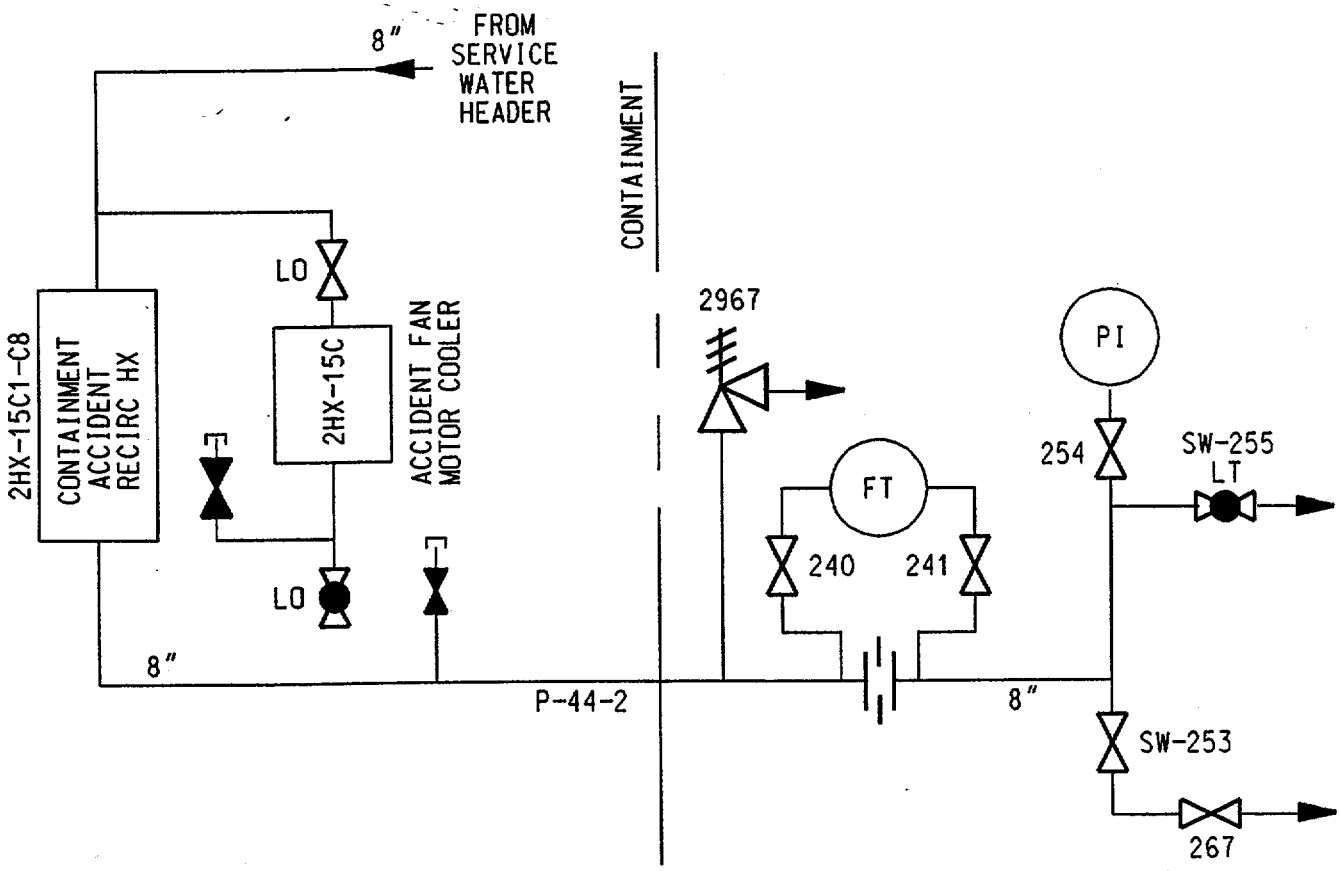
FOR FURTHER INFORMATION REFER TO FSAR CHAPTER 9 & FIG. 9.6-5

NOTE: THIS PENETRATION MEETS CLASS 4 CONTAINMENT ISOLATION CRITERIA. REQUIREMENTS ARE MET BY MANUAL VALVE (SW-230) LOCATED OUTSIDE CONTAINMENT. INSIDE CONTAINMENT THE SERVICE WATER SYSTEM IS A CLOSED SYSTEM.

FIG. 5.2-40-2
UNIT 2
JUNE 2001

CGS# FSARFIG5.2-40-2.DGN

SERVICE WATER RETURN LINE TO CONTAINMENT FAN COOLER UNITS (UNIT 2)



PENETRATION	CONTAINMENT ISOLATION VALVES INSIDE	CONTAINMENT ISOLATION VALVES OUTSIDE	BRANCH/SYSTEM	LINE SIZE	FLUID	TEMP HOT > 200 COLD < 200	CLASS
44-2	CLOSED SYS	SW-253 SW-255	VENTILATION COOLER WATER OUT/SERVICE WATER	8"	W	COLD	4

FOR FURTHER INFORMATION REFER TO FSAR CHAPTER 9 & FIG. 9.6-5

NOTE: THIS PENETRATION MEETS CLASS 4 CONTAINMENT ISOLATION CRITERIA WITH TWO MANUAL VALVES (SW-253, SW-255) LOCATED OUTSIDE CONTAINMENT. IT IS A CLOSED SYSTEM INSIDE CONTAINMENT.

FIG. 5.2-44-2
UNIT 2
JUNE 2001

CGS# FSARFIG5.2-44-2.DGN