3.7 PLANT SYSTEMS

3.7.1 FEEDWATER SYSTEM

Deleted

3.7.2 SECONDARY SERVICES CLOSED COOLING WATER SYSTEM

Deleted

3.7.3 CLOSED CYCLE COOLING WATER SYSTEM

NUCLEAR SERVICES CLOSED CYCLE COOLING SYSTEM

3.7.3.1 At least two independent nuclear services closed cycle cooling water pumps and heat exchangers and the associated flow path shall be OPERABLE with each pump capable of being powered from separate emergency busses.

APPLICABILITY: RECOVERY MODE.

ACTION:

With only one nuclear services closed cycle cooling water pump or only one nuclear services heat exchanger OPERABLE, restore the inoperable pump or heat exchanger to OPERABLE status within 72 hours.

3.8.2 ONSITE POWER DISTRIBUTION SYSTEMS

A.C. DISTRIBUTION

3.8.2.1 The following A.C. electrical busses shall be OPERABLE and energized with tie breakers open (unless closed in accordance with procedures approved pursuant to Specification 6.8.2) between redundant busses:

4160 volt Emergency Bus # 2-1E and 2-3E

4160 volt Emergency Bus # 2-2E and 2-4E

4160 volt Busses # 2-3 and 2-4

480 volt Emergency Bus # 2-11E, 2-12E and 2-31E

480 volt Emergency Bus # 2-21E, 2-22E and 2-41E

480 volt Busses # 2-32, 2-42, 2-35, 2-36, 2-45, and 2-46

120 volt A.C. Vital Bus # 2-1V

120 volt A.C. Vital Bus # 2-2V

120 volt A.C. Vital Bus # 2-3V

120 volt A.C. Vital Bus # 2-4V

APPLICABILITY: RECOVERY MODE.

ACTION:

With less than the above complement of A.C. busses OPERABLE, restore the inoperable bus to OPERABLE status within 8 hours.

3/4.4 REACTOR COOLANT SYSTEM

BASES

3/4.4.1 REACTOR COOLANT LOOPS

Several alternative methods are available for removal of reactor decay heat. These methods include use of the Mini Decay Heat Removal System, and the "Loss to Ambient" cooling mode. Either of these cooling methods provides adequate cooling of the reactor and each method is available for decay heat removal. Procedures have been prepared and approved for use of these cooling methods.

3/4.4.3 SAFETY VALVES

The pressurizer code safety valves operate to prevent the RCS from being pressurized above its Safety Limit of 2750 psig. Each safety valve is designed to relieve 348,072 lbs per hour of saturated steam at the valve's setpoint.

3/4.4.9 PRESSURE/TEMPERATURE LIMIT

The RCS pressure and temperature will be controlled in accordance with approved procedures to prevent a nonductile failure of the RCS while at the same time permitting the RCS pressure to be maintained at a sufficiently high value to permit operation of the reactor coolant pumps.

Reactor coolant chemistry surveillance requirements are included in the Recovery Operations Plan. These requirements provide assurance that localized corrosion or pitting in crevice areas, which could tend to promote stress corrosion cracking in heat affected zones of welds in stainless steel piping or components, will not occur. This assurance is provided by maintaining the reactor coolant dissolved oxygen concentration and pH to within the specified limits. The oxygen concentration must be limited since the chloride concentration is relatively high and cannot be reduced due to the unavailability of the purification demineralizers. Hydrazine is used to control the oxygen concentration in the presence of metallic impurities in the reactor coolant.

3/4.7 PLANT SYSTEMS

BASES

3/4.7.1 FEEDWATER SYSTEM

Deleted

3/4.7.2 SECONDARY SERVICES CLOSED COOLING WATER SYSTEM

Deleted

3/4.7.3 CLOSED CYCLE COOLING WATER SYSTEM

3/4.7.3.1 NUCLEAR SERVICES CLOSED CYCLE COOLING SYSTEM

OPERABILITY of the nuclear services closed cycle cooling system is required during operation of the MDHRS since this system provides the heat sink for the MDHRS.

3/4.7.3.2 DECAY HEAT CLOSED COOLING WATER SYSTEM

The decay heat closed cooling water system is required to be maintained in an OPERABLE status since it is provided to remove heat from the DHR system which is being maintained OPERABLE in a backup status for possible core cooling.

3/4.7.3.3 MINI DECAY HEAT REMOVAL SYSTEM (MDHRS)

OPERABILITY of the MDHRS is required since it is an alternative method for removing decay heat from the reactor. The MDHRS is provided with two pumps and two heat exchangers; one pump and one heat exchanger have adequate capacity for removing the present level of decay heat from the core.

3/4.7.4 NUCLEAR SERVICE RIVER WATER SYSTEM

The nuclear service river water system uses river water to cool the nuclear services closed cycle cooling system, the secondary services closed cooling water system, and decay heat closed cooling water system; therefore, it must be OPERABLE too. This system rejects its heat to the river as the ultimate heat sink.