

2.0 LIMITING CONDITIONS FOR OPERATION  
2.4 Containment Cooling (Continued)

component cooling heat exchangers and shutdown heat exchangers. A full capacity diesel-generator is connected to each of the two engineered safeguards 4.16-kV buses. Three engineered safeguards 480-Volt double-ended load centers are provided; of the six transformers, three are connected to each of the two 4.16-kV buses. Two load centers are operated as two-bus-section units; the third is provided with a center bus manually transferable to either associated end section. The center bus section supplies HPSI Pump SI-2C, CS Pump SI-3C and Charging Pump CH-1C any of which can thus be supplied from either 4.16-kV bus if required. Three component cooling heat exchangers have sufficient capacity to remove  $402 \times 10^6$  BTU/hr following a loss-of-coolant accident.<sup>(1)</sup> The containment sprays initially take coolant from the safety injection and refueling water (SIRW) tank. Before this supply of water is exhausted (at least 24 minutes)<sup>(2)</sup> the spray system is transferred to the recirculation mode and the pumps take suction from the containment sump. One shutdown cooling heat exchanger is sufficient to satisfy the spray system requirements during the long-term containment cooling period.<sup>(3)</sup> In addition, in the unlikely event of the component cooling water supply being lost, raw water can be utilized for direct cooling of the shutdown heat exchangers and containment cooling coils.<sup>(4)</sup> certain engineered safeguard components.<sup>(4)</sup>

The containment spray system is redundant with the containment air recirculation, cooling and iodine removal system for the containment cooling function.<sup>(5)</sup> The spray system is sized such that two of the three spray pumps would limit the containment pressure to below the design value following a DBA without taking credit for the air coolers or the cooling capacity of the safety injection system.<sup>(6)</sup> Similarly, two cooling and filtering units or one cooling and filtering unit and both cooling units have the capability of limiting the containment pressure under the same conditions as two spray pumps.<sup>(7)</sup>

The redundant cooling equipment provided to limit the containment pressure following a DBA is divided between the independent power supply systems. The raw water and component cooling water pumps are similarly distributed on the 4.16-kV and 480 Volt buses to serve the above cooling groups. Each cooling group has a design capacity equal to that required to restrict the containment pressure to below the design value. In the event of a DBA, loss of normal power sources and failure of one diesel-generator to operate, better than one full group would be connected to the available diesel-generator, thus providing more than ample reserve. Any one unit removed from a given bus does not restrict the groups which can be connected to one diesel-generator from fulfilling their design function. The removal of two units from buses which can be connected to one diesel-generator could limit the capability of the associated cooling groups; therefore, to ensure availability of the power supply to the redundant equipment in the event of loss of normal power sources, the diesel-generator serving this redundant equipment is in standby condition. During

MINIMUM FREQUENCIES FOR EQUIPMENT TESTS

	<u>Test</u>	<u>Frequency</u>	<u>FSAR Section Reference</u>	
1.	Control Element Assemblies	Drop times of all full-length CEA's	Each refueling operation	7.5.3
2.	Control Element Assemblies	Partial movement of all CEA's (Minimum of 6 in)	Every two weeks	7
3.	Pressurizer Safety Valves	Set Point	Once each refueling outage	7
4.	Main Steam Safety Valves	Set Point	Each refueling outage	4
5.	Refueling System Interlocks	Functioning	Prior to refueling outage	9.5.6
6.	<del>Raw Water System Valve Actuation</del>	<del>Functioning</del>	<del>Each refueling outage</del>	<del>9.8</del>
7.	DELETED			
8.	Reactor Coolant System Leakage	Evaluate	Daily*	4
9.	Diesel Fuel Supply	Fuel Inventory	Daily	8.4
10a.	Charcoal and HEPA Filters for Control Room	1. <u>In-Place Testing**</u> Charcoal adsorbers and HEPA filter banks shall be leak tested and show $\geq 99.95\%$ Freon (R-11 or R-112) and cold DOP particulates removal, respectively.	Each refueling shutdown not to exceed 18 months or after every 720 hours of system operation or after each complete or partial replacement of the charcoal adsorber/HEPA filter banks, or after any major structural maintenance on the system housing and following significant painting, fire or chemical releases in a ventilation zone communicating with the system.	9.10

\* Whenever the system is at or above operating temperature and pressure.

\*\* Tests shall be performed in accordance with applicable section(s) of ANSI N510-1980.

3.0 SURVEILLANCE REQUIREMENTS

3.6 Safety Injection and Containment Cooling Systems Tests (Continued)

(- Containment Recirculating Air Cooling and Filtering System

- a. Emergency mode damper, automatic valve, fan, <sup>and</sup> fusible link automatic damper, ~~and raw water backup valve~~ operation will be checked for operability during each refueling outage.
- b. Each fan and remotely operated damper required to function during accident conditions will be exercised at intervals not to exceed three months.
- c. Each air filtering circuit will be operated at least 10 hours every month.
- d. A visual examination of the HEPA and charcoal filters will be made during each refueling outage to insure that leak paths do not exist.
- e. Measurement of pressure drop across the combined HEPA and charcoal adsorber banks shall be performed at least once per plant operating cycle to verify a pressure drop of less than 6 inches of water at system design flow.
- f. Fans shall be shown to operate within +/-10% design flow during each refueling outage.

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## ATTACHMENT B

## DISCUSSION, JUSTIFICATION AND NO SIGNIFICANT HAZARDS CONSIDERATIONS

### DISCUSSION AND JUSTIFICATION

The Omaha Public Power District (OPPD) proposes to revise the Fort Calhoun Station Unit No. 1 Technical Specifications (TS) to delete the surveillance requirements contained in TS 3.6(3)a. for the raw water backup valves (8 total) to the containment cooling coils, to delete the surveillance requirements contained in TS 3.2, Table 3-5, item 6 for the raw water valves (58 total), and to revise the basis of TS 2.4 to reflect these changes.

The raw water backup valves can provide direct cooling to selected Engineered Safety Feature (ESF) components in the event of a loss of Component Cooling Water (CCW). This capability provides an alternate heat sink when a complete loss of CCW occurs during normal operation or a design basis accident.

#### Specification 3.6(3) and Basis to Specification 2.4

In 1990, during the process of closing several open items created by the design basis reconstitution project, an engineering analysis determined that using raw water for direct cooling of the containment air cooling coils should not be used after an accident which creates elevated temperature conditions inside containment. The high containment air temperatures, in conjunction with the low back pressure in the containment cooling coils when in the raw water direct cooling mode, introduces the possibility of vaporization (flashing) inside the coils, which could potentially damage them. Therefore, the use of raw water direct cooling for the containment air coolers has been discontinued in short-term post accident situations. The issue of not being able to utilize raw water direct cooling to the containment air cooling coils was reported to the NRC in LER-90-25, dated October 29, 1990 and LER-90-25 Revision 1, dated December 17, 1990.

Raw water direct cooling of the containment air coolers is possible, if the containment atmospheric temperature is less than 150°F. Therefore, if raw water direct cooling of the containment air coolers were placed in service after a Loss of Coolant Accident (LOCA) or Main Steam Line Break (MSLB) accident, it would only be for long-term containment atmospheric cooling. These conditions are essentially equivalent to that associated with normal plant operation. Raw water direct cooling of the containment air coolers is not a required post-accident function to maintain containment pressure below 60 psig. Since these valves are not required to perform a post-accident function, it is proposed that the surveillance be deleted.

With deletion of the surveillance it is also proposed that the basis to TS 2.4 be revised to delete the discussion concerning post-accident use of raw water backup to the containment air coolers.

Specification 3.2, Table 3-5

It is proposed to delete the surveillance requirement contained in TS 3.2, Table 3-5, Item 6. This surveillance requires that raw water system valve actuation be functionally tested each refueling outage. The basis for this requirement is to ensure that the valves in the raw water system are able to perform their design safety function. Fifty eight (58) valves were previously tested to fulfill this surveillance requirement. Of the 58 valves, 32 are RW backup valves and the other 26 perform other system functions.

Twelve (12) of the 32 RW backup valves have been added to the ISI program. These valves include RW backup to the control room air conditioners, RW backup to the shutdown cooling heat exchangers, and RW backup to the Low Pressure Safety Injection (LPSI) pump seal and bearing coolers. Eight (8) RW backup valves are for the containment coolers which are not required to perform a post-accident function, as previously discussed. It has been determined that the remaining 12 RW backup valves perform no accident mitigation function.

Among the other 26 RW valves tested, 12 are currently tested quarterly as part of the ISI program. The other 14 valves are RW header isolation valves that do not have to change position to mitigate the consequences of an accident.

Therefore, the valves which are required to change position during an accident are included within the scope of the Inservice Testing Program to satisfy TS 3.3(1)a. Testing of these valves under TS 3.2, Table 3-5, Item 6 is redundant to TS 3.3(1)a.

## BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION:

The proposed changes do not involve significant hazards considerations because operation of Fort Calhoun Station Unit No. 1 in accordance with these changes would not:

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated.

The deletion of surveillance requirements contained in Technical Specifications (TS) 3.2, Table 3-5, Item 6 and 3.6(3)a does not involve a significant increase in the probability or consequences of an accident previously evaluated.

TS 3.6(3)a requires the Raw Water (RW) backup valves to the containment air coolers to be tested each refueling outage. In 1990, during the process of reviewing several open items created by the design basis reconstitution project, an engineering analysis determined that RW direct cooling of the containment air cooling coils should not be used after an accident that has created elevated temperature conditions inside containment. The high containment air temperatures, in conjunction with the low back pressure in the containment cooling coils when in the RW direct cooling mode, introduces the possibility of vaporization inside the coils. Therefore, the use of RW direct cooling for the containment air coolers has been discontinued in post-Loss of Coolant Accident (LOCA) or post-Main Steam Line Break (MSLB) situations. The issue of not being able to utilize RW direct cooling to the containment air cooling coils was reported to the NRC in LER-90-25, dated October 29, 1990 and LER-90-25 Revision 1, dated December 17, 1990.

Raw water direct cooling of the containment air coolers is possible if the containment atmospheric temperatures are less than 150°F. If RW direct cooling of the containment air coolers was utilized after a LOCA or MSLB accident, it could only be used for long-term containment atmospheric cooling. These conditions are essentially equivalent to that associated with conditions in containment during normal plant operation. RW direct cooling of the containment air coolers is not a required post-accident function to maintain containment pressure below 60 psig. Since these valves are not required to perform a post-accident function, deletion of the requirements to test these valves does not involve a significant increase in the probability or consequences of an accident previously evaluated.

TS 3.2, Table 3-5, Item 6 requires that valves in the RW system be tested every refueling outage. The valves tested by this surveillance that could perform a safety function are already tested in accordance with TS 3.3(1). Therefore testing of these valves under TS 3.2, Table 3-5, Item 6 is redundant to TS 3.3(1)a.

- (2) Create the possibility of a new or different kind of accident from any previously analyzed.

There will be no physical alterations to the plant configuration, changes to setpoint values, or changes to the implementation of setpoints or limits as a result of this proposed change. Valves that are required to be repositioned during an accident to mitigate the consequences will still be tested on a refueling frequency. The proposed change only deletes unnecessary or redundant testing requirements from the TS. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously analyzed.

- (3) Involve a significant reduction in a margin of safety.

The proposed changes delete unnecessary or redundant surveillance requirements within the TS. The deletion of TS 3.2, Table 3-5 Item 6, only deletes testing requirements that are already required to be conducted by TS 3.3(1)a. The deletion of the requirement to test the RW backup valves to the containment air coolers contained in TS 3.6(3) only deletes an unnecessary surveillance. RW direct cooling of the containment air coolers is not required to maintain containment pressure below the design limit of 60 psig. Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

Therefore based on the above considerations, it is OPPD's position that this proposed amendment does not involve significant hazards considerations as defined by 10 CFR 50.92 and the proposed changes will not result in a condition which significantly alters the impact of the Station on the environment. Thus, the proposed changes meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and pursuant to 10 CFR 51.22(b) no environmental assessment need be prepared.