Local Public Document Room location: Exeter Public Library, Founders Park, Exeter, NH 03833.

Attorney for licensee: Thomas Dignan, Esquire, Ropes & Gray, One International Place, Boston MA 02110– 2624.

NRC Project Director: Phillip F. McKee.

Omaha Public Power District, Docket No. 50–285, Fort Calhoun Station, Unit No. 1, Washington County, Nebraska

Date of amendment request: May 31, 1995.

Description of amendment request: The amendment would provide additional restrictions on the operation of the component cooling water (CCW) system heat exchangers to ensure that the CCW system temperature is maintained within its analyzed design basis.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

(1) The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

In preparation for, and in response to a service water system operational performance self assessment, the heat loads in the Component Cooling Water (CCW) system were reevaluated to determine the peak temperatures on the system and components cooled by the CCW system. It was determined that if all of the containment coolers were operating, the return temperature of the CCW system could exceed the 120°F stated in the Updated Safety Analysis Report (USAR) as the maximum temperature of the system.

During a Large Break Loss of Coolant Accident (LBLOCA) or a Main Steam Line Break Inside Containment (MSLB/IC), the containment air cooling units and containment air cooling and filtering units will automatically start to remove heat from the containment atmosphere. The heat sink for the containment air coolers is the CCW system. The heat removed from the containment atmosphere is transferred to the Raw Water (RW) system via the component cooling heat exchangers AC-1A, B, C, and D. The heat is then ultimately rejected to the Missouri River by the RW system.

Calculations indicate that the CCW return temperature (i.e., mixed exit temperature) from the component cooling heat exchangers could exceed 160°F after a LBLOCA or MSLB/IC with the present TS minimum requirements for the heat exchangers. Further evaluation indicated that the CCW system (and components cooled by CCW) could withstand temperatures above the 120°F temperature stated in the USAR, but a return temperature above 158°F would require additional evaluation of thermal-induced stresses on the CCW return side pipe supports. In order to maintain the peak CCW return temperature to less than or equal to 158°F, additional restrictions must be placed on the number of component cooling heat exchangers required to be operable.

The current minimum requirements for component cooling heat exchangers are contained in Technical Specification (TS) 2.3, "Emergency Core Cooling System," and require that three of the four heat exchangers be operable when the plant is in operating Modes 1 and 2. Analyses show that three in service heat exchangers will maintain the CCW temperatures in an analyzed range following a DBA. In order to ensure that three heat exchangers are available, in conjunction with an assumed single failure, four are required to be operable. The proposed change would place additional restrictions on the operation of the CCW heat exchangers by requiring four heat exchangers to be operable in Modes 1 and 2, and if only three are operable then provide 14 days to restore the system to four operable heat exchangers.

The proposed change does not involve a significant increase in the probability of an accident previously evaluated. The proposed change does not impact systems, structures, or components that are initiators of any analyzed accidents.

The proposed change does not involve a significant increase in the consequences of an accident previously evaluated. The proposed change ensures that the CCW system and safety-related components cooled by the CCW will perform their safety functions in response to previously evaluated accidents. The proposed change was evaluated utilizing the probabilistic risk analysis model of the FCS Individual Plant Examination. The IPE concluded that the routine testing and maintenance activities, for the RW and CCW systems (e.g., inoperability of components for testing and maintenance) are not significant contributors to severe accident risk.

Therefore, the proposed change would not increase the probability or consequences of an accident previously evaluated.

(2) The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change does not create an initiator for a new or different kind of accident from those previously evaluated. The proposed change places additional restrictions on the operation of equipment to ensure that the CCW system and safetyrelated components cooled by the CCW will perform their safety functions. The additional restrictions were evaluated in combination with existing allowances on RW and CCW pump inoperability, to confirm that the peak CCW return temperature would be in an analyzed range, and will not adversely impact the operability of the CCW system or safety-related components cooled by CCW. These restrictions are valid up to and including a river temperature of 90°F, which is the upper bound currently cited in the USAR.

Various single active failures were postulated to determine the most limiting failure in conjunction with the maximum heat load from the containment air coolers. It was determined that with the river temperature less than 70 °F, a single failure of a RW valve to open on a component cooling heat exchanger would not raise the CCW return temperature to an unanalyzed level, but with the river temperature greater than or equal to 70 °F, the CCW return temperature could be at an unanalyzed level. Therefore, it is proposed that when the river temperature is greater than or equal to 70 °F four heat exchangers have RW in service (i.e., RW valves open). Having RW in service eliminates the potential failure of a RW valve to auto-open as a credible single active failure.

The proposed change ensures that the CCW system and safety-related components cooled by the CCW will perform their safety functions. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

(3) The proposed change does not involve a significant reduction in a margin of safety.

The proposed change provides additional restrictions on the CCW system and ensures that the CCW system will perform its design safety function. These additional restrictions ensure that the CCW system will be capable of removing the maximum heat load from the containment cooling system following a DBA and thereby ensures that the containment pressure remains below its limit as assumed in the USAR. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room location: W. Dale Clark Library, 215 South 15th Street, Omaha, Nebraska 68102.

Attorney for licensee: James R. Curtiss, Winston & Strawn, 1400 L Street, N.W., Washington, DC 20005– 3502.

NRC Project Director: William H. Bateman.

Pennsylvania Power and Light Company, Docket No. 50–387, Susquehanna Steam Electric Station, Unit 1, Luzerne County, Pennsylvania

Date of amendment request: May 5, 1995.

Description of amendment request: This amendment would remove from the Susquehanna Steam Electric Station Unit 2 Technical Specifications, the listing of three residual heat removal (RHR) system valves in Table 3.6.3–1, "Primary Containment Isolation Valves" These valves are no longer needed to support the steam condensing mode of the RHR system and are being removed from the plant during the Unit 2 seventh