ENCLOSURE

SAFETY EVALUATION REPORT SUPPLEMENT
CONTAINMENT SYSTEMS BRANCH
COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2
DOCKET NOS. 50-445/446

6.2 Containment Systems

6.2.3 Containment Isolation System

I. Containment Isolation Provisions for Containment Emergency Sump Recirculation Lines

The containment emergency sump recirculation lines are provided with a single, remote, manual gate valve outside the containment. The valve is enclosed in a valve isolation tank. The piping from the sump to the valve is enclosed in a concentric guard pipe. In Section 6.2.3 of the SER for Comanche Peak, dated July 1981, it is stated that the valve isolation tank and the concentric guard pipe are leaktight at containment design conditions. In FSAR Amendment 38, the applicant stated that "The guard pipe and valve isolation tank are not considered part of the barrier between containment and external environment and are not tested at containment design conditions. The reason for this is that these moderate energy lines are designed to meet the requirements of Branch Technical Position MEB 3-1 (SRP 3.6.2)". In light of this information, we find it acceptable to forego leak testing of the guard pipe and valve isolation tank at containment design condition.

II. Elimination of Type C Leakage Tests for Certain Containment Isolation Valves

By letters dated August 19 and December 16, 1983, and April 6, 1984, the applicant requested that a number of containment isolation valves be eliminated from the Type C leak testing program. The isolation valves involved and the associated justification are provided in Table 6.2.4.2 of FSAR Amendments 42, 46, and 51. We have reviewed this information and find it acceptable. The following is a discussion of these valves:

1. Safety Injection Valves 1-8802 A, 1-8802 B, and 1-8840 are normally closed and are required to open during post-accident conditions. The Safety Injection System is a closed system outside containment which operates at a pressure in excess of containment design pressure. In the event the valve fails to open, leakage of containment atmosphere is prevented by the pump pressure on the system side and a water seal on the containment side of the valve. The combination of the valve disc seal and the double stem seals preclude the possibility of significant stem leakage. In lieu of Type C testing, the applicant has committed to conduct quarterly stem leakage measurements. We find this is acceptable. The surveillance requirements and acceptance criteria should be included in the plant's Technical Specifications.

2. Containment Isolation Valves HV-4776, HV-4777, ICT-142, and ICT-145 on the spray systems are normally closed and are required to operate during post-accident conditions. The applicant indicated in Amendment 42 of the FSAR that there is a water filled loop seal on the containment side of the valves which would exist for a period greater than 30 days following onset of an accident. In lieu of Type C testing, the applicant has committed to conduct leakage testing with water. We find this to be in accordance with the provisions of Section III.C.3(b) of Appendix J to 10 CFR Part 50. The surveillance requirements and acceptance criteria should be included in the plant's Technical Specifications.

6.2.5 Containment Leakage Testing Program

Exemption from Section III.D.2(b)(ii) of Appendix J to 10CFR50

By letter dated August 23, 1984, the applicant requested an exemption from certain requirements of 10CFR50, Appendix J, Paragraph III.D.2(b)(ii), which states:

"Air locks opened during periods when containment integrity is not required by the plant's Technical Specifications shall be tested at the end of such period at not less than Pa."

Whenever the plant is in Mode 5 (cold shutdown), containment integrity is not required. Hence, if an air lock is opened during Mode 5 operations, paragraph III.D.2(b)(ii) requires that an overall air lock leakage test at not less than Pa be conducted prior to entry into Mode 4.

Even if the periodic 6-month test required by Paragraph III.D.2(b)(i) of Appendix J has been satisfied, to meet the requirement of Paragraph III.D.2(b)(ii), no access to the containment can be allowed while preparing to leave Mode 5 until an air lock that has been opened in Mode 5 is first tested. The test would effectively be required every time Mode 5 was entered. The containment would have to be cleared of personnel during performance of this test or they would be required to remain inside containment during the test and until the plant reached Mode 4. Often there are several minor operational and maintenance problems that require containment entry just prior to entering Mode 4; the special air lock test would have to wait until all problems requiring containment entry were first corrected. This is a very restrictive requirement and would slow the process of returning to operation.