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Director, Office of Nuclear Reactor Regulation
Attention: Mr. H. R. Denton
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Gentlemen:

Subject: Docket No. 50-206
Amendment No. 114
San Onofre Nuclear Generating Station
Unit 1

Amendment No. 114, submitted by letter dated September 9, 1983, consists of Proposed Change Nos. 123 and 124 to the Technical Specifications incorporated into Provisional Operating License No. DPR-13. Subsequent to this submittal, discussions with NRC reviewers resulted in the need to modify Proposed Change No. 124 and provide additional information. The modified portions of the Proposed Change are provided in the enclosure. These changes include a requirement to leak rate test the personnel air lock at 49.4 psig at 6 month intervals during operation and incorporate the associated acceptance criteria. Also, in accordance with the enclosed Proposed Change, the airlock volume between the doors will be tested within 72 hours following each opening, except when the air lock is being used for multiple entries, then at least once per 72 hours. This test shall be conducted at a test pressure of approximately 10 psig. The acceptance criteria for this lower pressure test is also provided in the enclosure.

An additional modification resulting from the NRC staff's completion of Generic Item B-24, Containment Purging/Venting During Normal Operations, is also included in the enclosure. This modification entails conducting leakage integrity tests to detect potential seal deterioration on active and passive containment ventilation isolation valves. The revised section includes requirements to conduct seal tests on active containment ventilation isolation valves every three months, and a six month testing frequency for passive containment ventilation isolation valves. This testing frequency is in conformance with Generic Item B-24 requirements.

In addition to the above modifications, information regarding the recirculation system testing was requested by the NRC reviewers. Specifically, you have inquired if we have an evaluation demonstrating that the installed isolation valve seal water system fluid inventory on the recirculation system is sufficient to assure the sealing function for at least 30 days at a pressure of 1.10 Pa in accordance with Appendix J requirements. The recirculation system is designed to supply long-term core cooling following a design basis LOCA. In fulfilling this function, the recirculation system will remain in continuous operation indefinitely to prevent core damage. When in operation, the recirculation system is pressurized with water to a pressure equal to or greater than the containment pressure under accident conditions. Although this water provides a sealing function for the pumps and

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valves which prevents a possible release of containment atmosphere through the line, the primary function of the water is to provide core cooling. However, the reliability of the sealing function on the pumps and valves is verified by a hydrostatic leak test which is performed on portions of the Safety Injection System used for recirculation at a pressure equal to or greater than the operating pressure under accident conditions. The unit Technical Specifications establish acceptance criteria for the effective leakage measured during this test. This acceptance criteria is based on the projected dose consequences resulting from a design basis LOCA such that the contribution of the portion of the recirculation system outside containment will not result in the total dose exceeding 10 CFR 100 limits. Furthermore, there are surveillance requirements for components of this system used during normal operation to assure leakage is maintained at an insignificant level.

As previously stated, the recirculation system provides long term core cooling following a LOCA and will remain in continuous operation indefinitely. Operation of the recirculation system will be terminated when plant parameters indicate that recirculation is no longer necessary. At that time, the inside containment valves on the safety injection lines will be closed to provide isolation, and the recirculation system will remain water solid at a lower pressure. Since the system is designed to withstand a hydrostatic test pressure of 1.10 Pa, excessive leakage at a lower pressure is not anticipated. Therefore, when in operation the sealing function for the pumps and valves of the recirculation system will remain intact, and furthermore, if operation of the recirculation system is terminated, excessive leakage would not occur due to the significantly reduced system pressure. Accordingly, based on the information discussed above, the sealing function provided by the recirculation system fluid inventory will remain intact for at least 30 days following a design basis LOCA.

If you have any further questions or desire additional information, please call me.

Very truly yours,

M. Q. Medford

cc: J. O. Ward, Chief, Radiological Health Branch,
State Department of Health Services