

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

JAN 1 3 1981

DOCKET NO:

70-2882

APPLICANT: Southern California Edison Company San Diego Gas and Electric Company

FACILITY:

San Onofre Nuclear Generating Station

SUBJECT:

REVIEW OF PORTION OF APPLICATION SUBMITTED WITH LETTER DATED

JANUARY 5, 1981, CONCERNED WITH ADDITION OF SOURCES TO POSS-

ESSION LIMIT

Background

The above named applicants are now licensed under Special Nuclear Material License No. SNM-1844 to possess 35 grams of U-235, at any enrichment, contained in fission counters. The January 5, 1981, application amends their application for a storage license for the fuel for Units 2 and 3 and requests authorization for receipt, possession and use of two Boronometer neutron sources. The Boronometer is a device to measure B-10 concentration in the reactor coolant. The license amendment application concerning the neutron sources is being acted upon separately since the sources are needed for installation before the anticipated issuance of the license for the new fuel storage.

Health, Nuclear Safety and Environmental Considerations

The two AmBe sources for the Boronometers are doubly encapsulated and will be installed in the Boronometers after receipt. The sources will be stored in their shipping containers until their installation in the Boronometers. The Boronometers provide additional protection of the sources and some isolation from personnel contact. To ensure continued containment of the byproduct material, the amendment authorizing the receipt and use of the sources should require the normal 6-month leak checks. The sources will be under the jurisdiction of the Radiation Protection Group. The licensees' application dated October 27, 1980, provided information on the qualifications of members of the Radiation Protection Group which demonstrates their ability to handle the sources safely. Further, the external neutron radiation level at one foot from the Boronometer is 2.5 mrem/hr with water in the vessel and 7.5 mrem/hr with the vessel dry.

There are no nuclear criticality safety or environmental problems associated with the use of the sources. The Radiation Protection Group should be able to keep the doses associated with use of the sources to a very low level.

Conclusion

Based on the facts summarized above and subject to the standard condition on leak testing, the staff believes that the proposed additional nuclear material may be received and used without undue risk to health and safety. It has been determined by the staff that the application fulfills the requirements of 10 CFR 70.23 (a). Further, the issuance of this license amendment is not a major federal action significantly affecting the quality of the human environment and thus, pursuant to 10 CFR 51.5 (d) (4), no environmental impact statement, negative declaration, or environmental appraisal need be prepared. Approval of the section of the application concerning the two neutron sources for the Boronometers is therefore recommended.

Robert L. Stevenson

Robert L. Stevenson Uranium Process Licensing Section Uranium Fuel Licensing Branch

Approved by: W T Crow

W. T. Crow, Section Leader

The proposed amendment was descensed with I Miller, one of the sete instructions (resident) and Grey Yuhas of RIT on January 13,1981. Peff.