UNITED STATES NUCLEAR REGULATORY COMMISSION SOUTHERN CALIFORNIA EDISON COMPANY SAN DIEGO GAS AND ELECTRIC COMPANY DOCKET NO. 50-206

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT NO. 1

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an exemption to Southern California Edison Company, et al., (the licensee), for operation of San Unofre Nuclear Generating Station, Unit No. 1, located in San Diego County, California.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action: By letter dated July 30, 1987, the licensee requested approval of an exemption from the technical requirements of Section III.G.3 of Appendix R to 10 CFR 50 to the extent that it requires that a fixed fire suppression system be installed in an area for which an alternate shutdown capability has been provided. Specifically, the pipe tunnel (Fire Area 1-AB-11 34) is not protected by a fixed fire suppression system.

The licensee justifies the exemption on the basis of the low combustible loading, limited access, existing fire protection and the capability to safely shut down the plant with undamaged systems that are physically and electrically independent of the fire area.

The technical requirements of Section III.G.3 are not met in this area because of the lack or a fixed fire suppression system.

The principal concern with the existing fire protection in the pipe tunnel is that a fire of significant magnitude could occur which would damage redundant safe shutdown systems. However, the in-situ fire loading is low. If all of

the combustibles were totally consumed by fire, the equivalent fire severity is about nine minutes as determined from the ASTM E-119 time-temperature curve.

The combustible inventory consists of cables in trays. A fire involving this material would be characterized, initially, by slow burning, low heat generation and the production of moderate quantities of smoke. The smoke would be detected by the existing fire detection system which would transmit an alarm automatically to the control room. The fire department would be dispatched to the scene and would put out the fire using manual fire fighting equipment.

If severe damage to safe shutdown systems occurred prior to the arrival of the fire department, a capability exists to safely shut down the plant which the licensee has affirmed is physically and electrically independent of the fire area. On this basis the lack of a fixed fire suppression system is not considered safety significant.

The Need for the Proposed Action: The proposed exemption is required to allow the pipe tunnel not to have a fixed fire suppression system.

Environmental Impacts of the Proposed Action: Because the staff concludes that the licensee's alternate fire protection configuration provides an equivalent level of safety to that achieved by compliance with Appendix R. (prevention of severe fires that could damage rendundant safe shutdown systems), the proposed action would not involve a significant change in the probability or consequences of any accident previously evaluated, nor does it involve a new or different kind of accident. Consequently, any radiological releases resulting from an accident would not be significantly greater than previously determined. The proposed amendment does not otherwise affect

routine radiological plant effluents. Therefore, the Commission concludes that there are no significant radiological environmental impacts associated with the proposed amendment. The Commission also concludes that the proposed action will not result in a significant increase in individual or cumulative occupational radiation exposure.

With regard to nonradiological impacts, the proposed amendment does not affect nonradiological plant effluents and has no other environmental impact.

Therefore, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed amendment.

Alternatives to the Proposed Action: Because the Commission has concluded that there are no significant environmental impacts associated with the proposed action, there is no need to examine alternatives to the proposed action.

Alternative Use of Resources: This action does not involve the use of resources not previously considered in connection with the Final Environmental Statement related to operation of San Onofre Nuclear Generating Station, Unit No. 1, dated October 1973.

Agencies and Persons Consulted: The NRC staff has reviewed the licensee's request that supports the proposed amendment. The NRC staff did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT: The Commission has determined not to prepare an environmental impact statement for the proposed amendment.

Based upon the foregoing environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the application for amendment dated July 30, 1987 which is available for public inspection at the Commission's Public Document Room, 2120 L Street NW., Washington, DC 20555, and at the General Library, University of California, P.O. Box 1955/, Irvine, California 92713.

Dated at Rockville, Maryland, this 5th day of July 1989.

FOR THE NUCLEAR REGULATORY COMMISSION

George V. Knighton, Director Project Directorate V

Division of Reactor Projects - III,

IV, V and Special Projects

Office of Nuclear Reactor Regulation