



SOUTHERN CALIFORNIA  
**EDISON**<sup>®</sup>

An EDISON INTERNATIONAL<sup>®</sup> Company

A. Edward Scherer  
Manager of  
Nuclear Regulatory Affairs

January 20, 2006

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

**Subject: San Onofre Nuclear Generating Station, Units 2 and 3  
Docket Nos. 50-361 and 50-362  
Proposed Change Number NPF-10/15-560  
Request to Revise Facility Operating License Condition 2.B.(6)  
Special Nuclear Materials**

**Reference: SCE to NRC letter dated July 15, 2005, Subject: San Onofre Nuclear  
Generating Station Units 2 and 3, Docket Nos. 50-361 and  
50-362, Proposed Change Number NPF-10/15-560, Request to Revise  
Facility Operating License Condition 2.B.(6) Special Nuclear  
Materials**

Dear Sir or Madam:

The referenced letter submitted Southern California Edison (SCE) Proposed Change Number (PCN)-560 to request amendments to Operating License Numbers NPF-10 and NPF-15 to revise the Facility Operating License Condition 2.B.(6) Special Nuclear Materials. The PCN-560 revision adds reference to byproduct and special nuclear materials produced during the decommissioning of San Onofre Unit 1.

Subsequently, U. S. Nuclear Regulatory Commission Requests for Additional Information (RAIs) were received. The enclosure to this letter provides the SCE responses.

Should you have any questions, or require additional information, please contact Mr. Jack Rainsberry at (949) 368-7420.

Sincerely,

P.O. Box 128  
San Clemente, CA 92672  
949-368-7501  
Fax 949-368-7575

A001

Enclosure:

**San Onofre Nuclear Generating Station, Units 2 and 3, Southern California Edison (SCE) Proposed Change (PCN)-560 Concerning Unit 1 Wastewater Discharged to Units 2/3 Response to Request for Additional Information (RAI) by the Reactor Operations Branch (IROB) in the Office of Nuclear Reactor Regulation**

**cc: B. S. Mallett, Regional Administrator, NRC Region IV  
N. Kalyanam, NRC Project Manager, San Onofre Units 2 and 3  
C. C. Osterholtz, NRC Senior Resident Inspector, San Onofre Units 2 and 3  
S. Y. Hsu, Department of Health Services, Radiological Health Branch**

**ENCLOSURE**

**SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3  
SOUTHERN CALIFORNIA EDISON (SCE) PROPOSED CHANGE (PCN)-560  
CONCERNING UNIT 1 WASTEWATER DISCHARGED TO UNITS 2/3**

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION (RAI)  
BY THE REACTOR OPERATIONS BRANCH (IROB)  
IN THE OFFICE OF NUCLEAR REACTOR REGULATION**

**SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3  
SOUTHERN CALIFORNIA EDISON (SCE) PROPOSED CHANGE (PCN)-560  
CONCERNING UNIT 1 WASTEWATER DISCHARGED TO UNITS 2/3**

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION (RAI)  
BY THE REACTOR OPERATIONS BRANCH (IROB)  
IN THE OFFICE OF NUCLEAR REACTOR REGULATION**

1. In Section 5.1, on page 4, middle of paragraph 4, of Enclosure 3 to the application, there is the statement that "The new design will have more above ground piping.....". What provisions has been or will be made for additional or unique radiation monitoring of this additional above ground piping. Having more above ground piping may present additional challenges to SCE's radiation monitoring program. Discuss (1) what provisions have been or will be made for leakage monitoring of the piping, and (2) if this additional above ground piping is in the Protected Area (PA) of Unit 1 and will then be outside of the Units 2 and 3 PAs, until it enters the Units 2 and 3 PAs. Also, discuss if this piping is accessible to plant personnel (i.e., those routinely assigned to work outside PAs) which do not routinely wear dosimetry. (RAI Category Code 2.g)

**Response:**

(1) It is SCE's intent to perform a leak check of the North Industrial Area Yard Drainage Sump Pump Discharge Piping prior to placing that piping into operation. The test will be performed at approximately 120 feet of head, which is higher than the pump discharge pressure calculated for any operating condition. The exposed sections of this discharge piping will normally operate slightly above atmospheric pressure. The piping is designed for 150 psig and the material, 316 stainless steel, was specifically chosen to resist corrosion associated with the sump contents and the marine environment. This piping will be included in the San Onofre Nuclear Generating Station (SONGS) Preservation Plan for periodic inspection.

(2) The piping begins in a Unit 1 Radiological Controlled Area, traverses the Unit 1 Industrial Area and then enters directly into the Units 2 and 3 Protected Area. These areas are contiguous to each other. Workers in the Unit 1 Industrial Area and in the Units 2 and 3 Protected Area are not required to wear dosimetry. Health Physics procedure SO123-VII-20.16 is used to comply with 10 CFR Part 20 for the Units 2 and 3 Protected Area and is applicable to the Unit 1 Industrial Area. The additional piping will be included in the routine ongoing monitoring program in the Protected Area with area monitoring Thermoluminescent Dosimeters (TLDs) and routine periodic radiological surveys. Any unanticipated radiation levels above defined administrative control levels will be resolved and/or corrected.

2. In terms of the proposed change to allow radioactive fluids to be sent to Units 2 and 3 and may be stored in the units for processing, discuss the effect of this additional radioactivity coming into Units 2 and 3 on Technical Specification 5.5.2.7, "Explosive Gas and Storage Tank Radioactivity Monitoring System," which limits the quantity of radioactivity in unprotected outdoor liquid storage tanks. Discuss also the effect on the indoor liquid storage tanks and Sections 11.2, "Liquid Waste Management Systems," and 15.7.3.3, "Postulated Radioactive Releases Due to Liquid Tank Releases," in the Updated Final Safety Analysis Report for SONGS Units 2 and 3. (RAI Category Code 4.b)

Response:

The only outdoor unprotected tank at Units 2/3 is the hold-up tank on each unit's full-flow condensate polishing demineralizer system. It is not part of the design to transfer the radioactive wastewater to any outdoor unprotected tank at either Unit 2 or Unit 3 and there is no intention to do so. In the unlikely event that radioactive wastewater is transferred to these outdoor tanks, a site procedure (SO123-III-5.1.23) already contains the requirements for total curie determination of the hold-up tank.

In PCN-560, wastewater that meets or is below the limits of 10 CFR 20 Appendix B table II, column 2, may be directly discharged to the Unit 2 or Unit 3 outfall without additional treatment through the Units 2/3 Radwaste Treatment System. If the radioactive concentration in the wastewater exceeds the Part 20 liquid effluent limits, treatment options include use of a vendor system on-site to achieve the desired levels prior to discharge or shipment to an off-site vendor for processing and disposal.

As an additional option, wastewater that exceeds the Part 20 liquid effluent limits could be processed through the existing miscellaneous liquid waste system (MLWS) described in Updated Final Safety Analysis Report (UFSAR) section 11.2. In the event that this option is selected, existing administrative controls will be used during transfer of Unit 1 wastewater to the Units 2/3 MLWS to minimize the potential for rapid depletion of the ion exchangers due to chemical contaminants that in turn could result in generation of additional spent resin that must be disposed of as solid radwaste. In the event the option is used, the contribution of the Unit 1 wastewater to the overall radioactive inventory in the radwaste treatment system provided in Units 2/3 MLWS design inputs (see UFSAR Table 11.2-21) will depend on the volume and specific activity of the Unit 1 wastewater that is processed. The overflow protection features described in Table 11.2-7 will not be affected by the proposed change.

The accident scenario postulated in section 15.7.3.3 "Postulated Radioactive Releases due to Tank Failures" will not be affected by the proposed change and remains bounding.