JAN 27 1984

50-206

The Honorable Alan Cranston
United States Senate
Washington, D. C. 20510

Dear Senator Cranston:

This letter is in response to a request from your office for information on inadvertent releases of radioactively contaminated material from the San Onofre Nuclear Generating Station (SONGS) over the past few years. This request was made in light of a September 1982 incident in which some contaminated sewage was inadvertently taken to a sewage treatment plant in Carson, California for disposal. This situation was discussed by telephone on December 16, 1983 between Mr. Hal Gross of your staff and personnel of the NRC Region V office.

Since 1980, several instances involving inappropriate release of materials contaminated with low levels of radioactivity have occurred at the SONGS site. The specific instances are described in the enclosure to this letter. Because of the low levels of radioactivity involved, none of these releases represented a threat to the public health and safety.

The inappropriate release of low-level contaminated materials from SONGS was a problem that existed over a number of years. During the 1980-1982 time frame NRC took a number of actions against the licensee, Southern California Edison Company, to assure fundamental improvement in the radiation protection program at the facility. These actions included Notices of Violation, enforcement conferences between senior NRC and licensee management, and a $150,000 civil penalty imposed against the company. Results of our subsequent inspections have shown that Southern California Edison has a much improved radiation protection program. The improvements included the implementation of more effective controls over contaminated materials.

Although, as noted in the enclosure, we are still seeing consequences of the previous deficient controls, we believe that the licensee has now taken appropriate steps to rectify an unsatisfactory situation.

I trust the information contained herein is responsive to your request. Should you have any additional questions, we would be pleased to discuss them with you.

Sincerely,

(Signed) T. A. Rehm

T. A. Rehm, Assistant for Operations
Office of the Executive Director
for Operations

Enclosure:
As stated

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ENCLOSURE

Summary of Recent Inadvertent Releases of Materials
Contaminated With Radioactivity From
San Onofre Nuclear Generating Station (SONGS)

December, 1980: An NRC inspector noted what appeared to be inadequate surveys of concrete, blacktop, and sand being removed from the SONGS Unit 1 restricted area. The licensee took immediate action to stop all further disposal of this excavated material. Appropriate surveys were performed which confirmed the presence of low-level radioactive material. Some of the contaminated material had been dumped in an area referred to as the Mesa. The Mesa is leased property just east of US-5 in Camp Pendleton. SCE removed the contaminated material to a licensed burial facility.

February 1981: The licensee notified Region V that a shipment of purportedly clean ion-exchange resin was discovered to have been contaminated with trace quantities of radioactive material on arrival at Southwest Nuclear Corporation's facility in Pleasanton, California. The specific activity of these resins (9.6 E-6 uCi/g) if compared to NRC release limits for water containing the same mix of isotopes indicates that no unacceptable risk to members of the public was created. Specifically, the concentration of radioactive material in the resin was about 60% of the NRC unconditional release limit for water as stated in 10 CFR 20, Appendix B, Table II, Column 2. The licensee should have discovered that the resin had been contaminated with low levels of radioactive material and should not have allowed an unconditional release. The material was properly reclassified and disposed of as low-level radioactive waste.

April, 1981: Region V received information that potentially contaminated tools and equipment were being stolen from SONGS. A joint NRC/FBI investigation was conducted in April and May 1981. As a result of this effort, a small quantity of hand tools were recovered, none of which were contaminated. Although the NRC investigation did not specifically identify any contaminated tools or equipment, weaknesses were identified in the licensee's program to control such items.

May 1981: SCE notified Region V of the discovery of low levels of radioactive contamination on the beach just west on the Unit 1 tsunami wall. The licensee initiated an extensive program to sample and analyze the extent of contamination. The average activity of the sand was 2.0 E-5 uCi/g. Review of this occurrence concluded that the activity had been deposited on the beach prior to 1975 as a result of contamination of the yard drain system. The direct radiation level from this activity was measured at about twice natural background. Approximately 300 cubic yards of sand were removed by SCE and disposed of as low-level radioactive waste.

October, 1981: Licensee surveys located several contaminated items including a battery, metal filters, and a pipe fitting at the Fabrication Shop (FAB)/Generation Retrofit Improvement Project (GRIP) located on the Mesa. The items were recovered and treated as radioactive waste. The surveys did not identify other contaminated material which may have been present and which was later found and recovered (see June 25, 1983 entry).

September, 1982: The contents of an obsolete septic tank located within the Unit 1 restricted area were pumped out and disposed of at the Joint Water Pollution Control Plant in Carson, California. On September 21, 1982, the licensee, in the process of implementing more stringent survey procedures as a result of previous NRC inspection findings, located trace contamination near the septic tank. Samples taken of residual material inside the septic tank revealed the presence of low-level radioactive contamination. The licensee notified the NRC, State of California, Los Angeles County and the waste hauler. Review of this instance found the tank had probably been contaminated several years ago from either a sample sink drain or a turbine building drain path. While NRC regulations permit disposal of contaminated sewage, the licensee should have sampled the tank contents prior to their release to assure that the material was within permissible quantities. As a result of this instance, the licensee made arrangements to sample all future sewage sludge for radioactivity prior to disposal.

February, 1983: The licensee discovered in June, 1983 that a February 24, 1983 shipment of 8,000 gallons of sludge had been diverted by the contract waste hauler and dumped at the Bonsall Landfill rather than the authorized dumping station. The licensee reviewed this matter, terminated their contract with the waste hauler, and concluded that the trace radioactivity present was less than the unconditional release limits for water expressed in 10 CFR 20, Appendix B, Table 2, and no report to NRC was required. The licensee has now established a formal agreement with a reputable and experienced contractor to assure that all sewage sludge will be disposed of at the designated location. Our recent inspections have shown the licensee's controls to be adequate.

June 25, 1983: A worker assigned to the Mesa FAB Shop informed the NRC that licensee surveys had identified radioactive material (contaminated tools and equipment) in his work area. This statement and subsequent discussion between the worker, NRC, and the licensee led to a major licensee survey effort to identify and recover contaminated items which may have left the restricted area. An onsite inspection was conducted in late September 1983. As discussed in that inspection report, approximately sixty items (tools and equipment) contaminated with low-level radioactivity have been located at various SCE and Bechtel Power Company facilities outside the SONGS restricted area. The licensee's evaluation and survey effort to completely recover all materials should be completed by April 1984. The licensee's evaluation concludes that the vast majority of contaminated material recovered probably left the Unit 1 restricted area several years ago. The NRC's review of this matter concluded that the recent implementation of more stringent controls by the licensee would minimize improper release of low-level contaminated materials.