



James T. Reilly
Vice President

July 11, 2008

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555-0001

Subject: **Docket No. 50-206**
Supplemental Information For Partial Site Release
San Onofre Nuclear Generating Station, Unit 1

Dear Sir or Madam:

By letter dated December 19, 2007, Southern California Edison (SCE) submitted Amendment Application No. 222 to Facility License DPR-13 requesting a partial site release for unrestricted use of the offshore portion of the Unit 1 power reactor facility. SCE's application stated that ultimately the structures above the seafloor would be removed and the buried structures would be safely abandoned in place, fulfilling the conditions stated in an amended easement lease issued by the State Lands Commission.

Officials at the Camp Pendleton Marine Corps Base have expressed interest in the possibility of using one of the offshore conduits for the discharge of treated sewage effluent in the future. Because this alternative use was not considered in Amendment Application No. 222, SCE requests that the supplementary information in the enclosed evaluation regarding this alternative be added to SCE's application. The evaluation demonstrates that this alternative use of an offshore conduit also satisfies the requirements of 10 CFR § 20.1402.

If you have any questions or require additional information, please contact Mr. D. F. Pilmer at (949) 368-6136.

I declare under penalty of perjury that the foregoing is true and correct. Executed on 7/11/08.

A handwritten signature in black ink, appearing to read "James T. Reilly".

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Enclosure

cc: E. E. Collins, Regional Administrator, NRC Region IV
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J. C. Shepherd, NRC Project Manager, San Onofre Unit 1
G. G. Warnick, NRC Senior Resident Inspector, San Onofre Units 2 & 3
S. Y. Hsu, California Dept of Public Health, Radiologic Health Branch

**Evaluation of Radiological Effects of Implementing an Alternative
Use of Offshore Conduits for Treated Sewage Effluent
San Onofre Unit 1**

Officials at Camp Pendleton Marine Corps Base (MCB) have expressed interest in the possibility of using the offshore conduits for the discharge of treated sewage effluent in the future. They have advised SCE of their intent to formally study the feasibility of this option. They intend to complete their study by the end of 2008.

Note that the current amended easement lease from the California State Lands Commission (SLC) covers the physical work and final configuration of the offshore components. The easement lease does not provide for the reuse of the offshore conduits as contemplated by Marine Corps Officials. Accordingly, the exercise of this option, which deviates from the agreement with the State, would require separate negotiation, review and approval by the SLC.

The purpose of this evaluation is to assess the potential alternative use of the offshore conduits in comparison with the assessments developed and submitted for Amendment Application No. 222. Amendment Application No. 222 was submitted on December 19, 2007 and is based on the conduit configuration as it exists today before access by swimmers and divers to the interior is blocked. Amendment Application No. 222 demonstrates that a commercial lobster diver entering the offshore conduits would receive a fraction of one millirem per year. Work to convert one of the conduits for use as a sewage treatment effluent pathway, if ultimately selected by the Marine Corps and approved by the SLC, could conceivably result in greater occupancy times during construction, and therefore higher annual dose, than SCE projected in the Amendment Application.

Although the likelihood of this future industrial use of the offshore conduits is uncertain, SCE has evaluated the potential dose consequence of performing work inside the conduits to accommodate future use.

A conservative model is used for this evaluation in which divers are assumed to enter the conduit to perform the construction work necessary to convert the conduit for use as a sewage effluent pathway. A maximum stay time is postulated as the scope of the work is not yet defined. Underwater stay times must be controlled to minimize the potential for decompression sickness. The stay time is depth-dependent. At a depth of 40 feet (the average depth in the conduits) the safety limit is 262 minutes per 8 hour work day.

In order to evaluate the maximum dose to a diver working to convert either one of the conduits to modify it for use as a sewage effluent pathway, a dose rate of 0.002 millirem per hour is used as the limiting condition. This dose rate is the arithmetic average of the values in Table 6-10 in Amendment Application No. 222, "Calculated Dose Rates in Discharge Conduit".

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If a diver were to work in the discharge tunnel for the safety-limited 262 minutes per day, 5 days per week, for 50 weeks in one year, in an average dose rate of 0.002 millirem per hour, the resulting dose would be less than 2.4 millirem per year. This value is less than ten percent of the limit specified in 10 CFR § 20.1402.

As described in Amendment Application No. 222, if the subject work inside the conduit to allow use by the MCB takes place, the allowable effluent for the operating units (San Onofre Units 2 and 3) will be adjusted to ensure continued compliance with the requirements of 40 CFR § 190.

SCE concludes that the dose resulting from any work to reconfigure either conduit for use as a sewage treatment effluent pathway satisfies the criteria specified in 10 CFR § 20.1402, "Radiological criteria for unrestricted use".