October 30, 2006

The Honorable Dianne Feinstein
United States Senate
Washington, D.C. 20510

Dear Senator Feinstein:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter dated August 21, 2006, expressing concern about the discovery of tritium at the San Onofre Nuclear Generating Station (SONGS) Unit 1. Based on currently available information, the tritium issues at SONGS Unit 1 do not pose a hazard to public health and safety. The NRC continues to evaluate the situation and is ensuring that the licensee is taking appropriate action.

The NRC has completed the on-site portion of an inspection of licensee activities related to these issues and has taken water samples for independent tritium analysis. The NRC's inspection objective is to determine the circumstances that led to the unplanned release of radioactivity and to ensure that Southern California Edison (SCE), the licensee, takes appropriate corrective actions. The NRC will provide to you copies of the inspection report, including the results of the samples, and any resulting enforcement actions. The NRC will also make this information available to the public through the NRC's Agencywide Documents Access and Management System (ADAMS), which is accessible on the NRC's website.

All commercial nuclear power plants discharge liquid effluents containing small amounts of tritium. Such discharges are regulated by the NRC and are permitted under the Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES), which in most cases is administered by authorized States. The NRC requires that licensees control, monitor, and report the types and total amount of liquid effluents released to ensure that potential impacts are detected and reviewed. Licensees accomplish this, in part, through their Radiological Environmental Monitoring Programs (REMPs). The REMPs require off-site sampling of various environmental pathways at specified intervals and include reporting levels for radioactive constituents such as tritium. Reports submitted in accordance with the REMPs cover planned and unplanned releases and are available to the public through ADAMS. NRC routinely reviews, through the NRC inspection program, the licensee's control, monitoring, and reporting of radiological discharges.

SONGS Unit 1 ceased operations in 1992 and is undergoing dismantlement and decommissioning. On August 7, 2006, during dismantlement activities, the licensee measured low levels of tritium in water samples. On August 14, 2006, the licensee voluntarily notified California State and local government agencies and the NRC regarding the tritium. The levels of tritium found in the water ranged from 50,000 to 330,000 picocuries per liter (pCi/L). These levels are substantially below the NRC effluent concentration limit of 1,000,000 pCi/L provided in Part 20 to Title 10 of the *Code of Federal Regulations* (10 CFR Part 20).

The tritium levels identified in the groundwater at SONGS Unit 1 are above the EPA drinking water standard of 20,000 pCi/L. However, the groundwater beneath the site where the tritium was located is not a source of potable drinking water; therefore, the immediate local drinking water supplies will not be impacted. In addition, the wells at Camp Pendleton and in the City of San Clemente are located several miles off site, and the groundwater flows in the direction from these wells towards SONGS. Therefore, it is very unlikely that tritium from SONGS will migrate to these wells.

The NRC responded to the discovery of tritium in the water samples at SONGS Unit 1 through NRC's Region IV office. NRC Region IV staff promptly initiated discussions with the licensee on the tritium issue and has been reviewing actions proposed or taken by the licensee to characterize the sources of the tritium and to mitigate the impacts of tritium contamination. The NRC will continue to follow the SONGS tritium issue. The staff has initiated periodic teleconferences with the licensee to discuss the licensee's followup activities. In addition, future NRC inspections at SONGS Unit 1 will continue to evaluate the licensee's radiological effluent and environmental monitoring programs and the licensee's corrective actions.

With regard to the ultimate remediation of the site, the criteria for decommissioning and decontamination are provided in 10 CFR Part 20, Subpart E. These regulations require that before a license can be terminated the site be cleaned to a level such that the maximum total dose a person can receive from all radioactive sources is less than 25 millirems per year. The licensee for SONGS Unit 1 has indicated it plans to decommission the entire SONGS site and seek license termination for all three units during the middle of the century. NRC will evaluate any residual contamination and confirm that the site meets the release criteria during decommissioning. Through implementation of the requirements in 10 CFR Part 20, NRC will ensure public health and safety will be protected before it terminates the three power reactor licenses and releases the site.

The Commission appreciates your interest in this matter and your comments. Please contact me if you have further concerns.

Sincerely,

/RA/

Dale E. Klein