UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 14, 2015

David Gibson, Executive Officer
San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108-2700

REFERENCE NUMBER: 257702: bneill

SUBJECT: NUCLEAR REGULATORY COMMISSION PERSPECTIVE REGARDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR THE SAN ONOFRE NUCLEAR GENERATING STATION

Dear Mr. Gibson:

Thank you for your letter dated October 2, 2015, regarding the National Pollutant Discharge Elimination System (NPDES) permit for the San Onofre Nuclear Generating Station (SONGS) and the Nuclear Regulatory Commission's (NRC's) role in regulating the discharge of radioactive materials into the waters of the United States. You have requested that NRC personnel participate in the San Diego Regional Water Quality Control Board's December 16, 2015, meeting, including that NRC staff prepare a brief presentation.

As you note in your letter, the NRC is responsible for regulating the civilian use of certain types of radioactive material as set forth in the Atomic Energy Act; namely, source material, byproduct material, and special nuclear material. NRC regulated materials include those radioactive materials associated with the fuel cycle of a light-water-cooled nuclear powered electrical generating station, such as SONGS. The SONGS NPDES permit, which is required by the Clean Water Act, does not regulate the discharge of NRC regulated radioactive materials.

The NRC regulations that govern the discharge and monitoring of radiological effluents from light-water-cooled nuclear power reactors are contained in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20, "Standards for Protection Against Radiation," and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities." These NRC's regulations establish the basis for the NRC's radiological environmental monitoring program (REMP) that is performed by the licensee at each nuclear power reactor facility (see NRC's Regulatory Guide 4.1, "Radiological Environmental Monitoring for Nuclear Power Plants"). Specifically, air (gaseous) effluent releases and liquid effluent releases from all light-water power reactor sites are monitored in accordance with a plant's Offsite Dose Calculation Manual (ODCM). The acceptable release limits stated in the ODCM are based on NRC regulations.

The frequency of performing monitoring and sampling activities for both gaseous and liquid effluents is contained in either the ODCM or the plant specific Technical Specifications and is based on the risk and likelihood of radiological effluents being released to the environment, but typically takes place on a daily, weekly, or monthly basis with additional sampling occurring during activities that may increase the risk of releasing radiological effluents (i.e., maintenance).

During operation, the NRC monitors and inspects the plant's REMP through the review of annually submitted radiological effluent discharge reports, as well as routine inspections of the plant to review the effluent sampling information and verify the effectiveness of the REMP. The licensee uses the results of the REMP to calculate the dose to the public. These dose calculations are included in the annual radiological effluent discharge report submitted to the NRC and are available for public review. Dose limits to members of the public are set forth in 10 CFR Part 20 and Part 50, Appendix I, and are monitored and enforced by the NRC. In addition, any significant deviation from the REMP or effluent release above allowable limits is reported to the NRC via the Licensee Event Report system, which ensures that corrective actions are taken and appropriate follow-up is conducted by either the NRC or licensee staff.

As of June 2013, SONGS officially ceased power production operations and entered into decommissioning[1]. Once a plant enters decommissioning, the REMP that was in place during operation continues in effect even after the plant is shut down. The REMP and associated ODCM will be modified to appropriately monitor the types of releases that may occur during decommissioning and to monitor results at appropriate intervals of time, but all acceptable release limits will still be based on the NRC's 10 CFR Part 20 and 50 regulations.

During decommissioning, the amount of radiological effluents generated and released decreases significantly compared to the amount being generated and released during plant operation, especially in regard to the effluents released into bodies of water. This is primarily due to the fact that the amount of cooling water needed during decommissioning is far less than that used during plant operation, thereby significantly decreasing the opportunity to generate or release liquid effluents.

Notwithstanding modifications to the ODCM to reflect decommissioning activities, the licensee will continue use the results of the REMP to calculate the dose to the public and will still be required to prepare annual radiological effluent discharge reports, as well as to report any deviations from the REMP via a Licensee Event Report. These reports will continue to be submitted to the NRC and will be available for public review. In addition, the NRC inspection program continues during decommissioning, including routine inspections of the procedures and results of the REMP to ensure that all applicable NRC requirements are being met.

As the NRC has no role in the renewal process for the SONGS NPDES permit and the non-radiological effluents regulated by that permit, taking into account the decrease in plant radiological effluents during decommissioning, and given the above description of the SONGS REMP and the NRC's continuing ability to monitor and inspect the release of radiological effluents to the environment, the NRC has determined that it will not participate in the upcoming meeting of the San Diego Regional Water Quality Control Board.

[1] The NRC defines the term "decommission" as meaning to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license; or (2) release of the property under restricted conditions and terminations of the license (10 CFR 50.2).

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

If you have additional questions or concerns please contact Ms. Marlayna Vaaler, SONGS Project Manager, at 301-415-3178, or via email at Marlayna.Vaaler@nrc.gov, to facilitate further discussions.

Sincerely,

/RA/

Bruce Watson, CHP, Chief
Reactor Decommissioning Branch
Division of Decommissioning, Uranium Recovery
and Waste Programs
Office of Nuclear Material Safety
and Safeguards

Docket Nos. 50-361 and 50-362
License Nos. NPF-10 and NPF-15