



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

November 17, 2022

Mr. Doug Bauder, Vice President  
and Chief Nuclear Officer  
Southern California Edison Company  
San Onofre Nuclear Generating Station  
P.O. Box 128  
San Clemente, CA 92674-0128

SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION – NRC INSPECTION  
REPORT 05000361/2022-005 AND 05000362/2022-005

Dear Mr. Bauder:

This letter refers to the U.S. Nuclear Regulatory Commission (NRC) inspection conducted on October 17-20, 2022, at the San Onofre Nuclear Generating Station (SONGS), Units 2 and 3. The inspectors discussed the results of the inspection with you and members of your staff during the final exit meeting on October 20, 2022. The inspection results are documented in the enclosure to this letter.

This inspection examined activities conducted under your license as they relate to public health and safety, the common defense and security, and to confirm compliance with the Commission's rules and regulations, and with the conditions of your licenses. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, performance of independent radiation measurements, and interviews with personnel. Specifically, the inspectors reviewed decommissioning activities for SONGS Units 2 and 3, remedial and final status surveys, radioactive waste treatment, and effluent and environmental monitoring. Within the scope of the inspection, no violations were identified, and no response to this letter is required.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter, the enclosure, and your response if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC's Website at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy or proprietary information so that it can be made available to the Public without redaction.

If you have any questions regarding this inspection report, please contact Dr. Robert Evans at 817-200-1234, or the undersigned at 817-200-1249.

Sincerely,



Signed by Warnick, Gregory  
on 11/17/22

Gregory G. Warnick, Chief  
Decommissioning, ISFSI, and Operating  
Reactor Branch  
Division of Radiological Safety and Security

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

Enclosure:  
Inspection Report 050-00361/2022-005;  
050-00362/2022-005  
w/Attachment: Supplemental Inspection Information

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 REPORT 05000361/2022-005; 05000362/2022-005 – NOVEMBER 17, 2022

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**U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV**

Docket Nos. 05000361; 05000362

License Nos. NPF-10; NPF-15

Report Nos. 05000361/2022-005; 05000362/2022-005

Licensee: Southern California Edison Company

Facility: San Onofre Nuclear Generating Station, Units 2 and 3

Location: 5000 South Pacific Coast Highway  
San Clemente, California

Dates: October 17-20, 2022

Inspectors: Robert J. Evans, PhD, CHP, PE, Senior Health Physicist  
Decommissioning, ISFSI, and Operating Reactor Branch  
Division of Radiological Safety and Security  
Region IV

Martha Poston, Health Physicist  
Uranium Recovery and Materials Decommissioning Branch  
Division of Decommissioning, Uranium Recovery, and Waste Program  
Office of Nuclear Material Safety and Safeguards

Accompanied By: Gregory G. Warnick, Chief  
Decommissioning, ISFSI, and Operating Reactor Branch  
Division of Radiological Safety and Security  
Region IV

Approved By: Gregory G. Warnick, Chief  
Decommissioning, ISFSI, and Operating Reactor Branch  
Division of Radiological Safety and Security  
Region IV

Attachment: Supplemental Inspection Information

Enclosure

## EXECUTIVE SUMMARY

San Onofre Nuclear Generating Station, Units 2 and 3  
NRC Inspection Report 05000361/2022-005; 05000362/2022-005

This U.S. Nuclear Regulatory Commission (NRC) inspection was a routine, announced inspection of decommissioning activities being conducted at the San Onofre Nuclear Generating Station, Units 2 and 3. In summary, the licensee was conducting decommissioning activities in accordance with site procedures, license requirements, and applicable NRC regulations.

### Decommissioning Performance and Status Review at Permanently Shutdown Reactors

- The licensee was implementing decommissioning activities in accordance with the instructions provided in the Post Shutdown Decommissioning Activities Report. The inspectors also determined that the licensee was adequately controlling decommissioning activities and radiological work areas at the facility. (Section 1.2)

### Inspection of Remedial and Final Surveys at Permanently Shutdown Reactors

- The licensee and its decommissioning contractor were conducting remedial action support surveys at the intake structures in accordance with procedural requirements. (Section 2.2)

### Radioactive Waste Treatment, and Effluent and Environmental Monitoring

- The licensee and its decommissioning contractor maintained effluent monitoring and control systems as required, to support the condition of the facility since permanently ceasing operations. The effluent flow paths and monitoring systems reviewed aligned with descriptions provided in the Offsite Dose Calculation Manual (ODCM) except for thermoluminescent dosimeter (TLD) placement for measurement of direct radiation. Based on information provided in the ODCM, it was not clear as to which TLDs were considered inner ring and which were considered special interest. The licensee agreed to clarify the information provided in the ODCM. (Section 3.2)

## Report Details

### Summary of Plant Status

On June 12, 2013, the Southern California Edison Company (SCE), the licensee, formally notified the NRC that it had permanently ceased power operations at the San Onofre Nuclear Generating Station (SONGS), Units 2 and 3, effective June 7, 2013 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML131640201). By letters dated June 28, 2013 (ML13183A391), and July 22, 2013 (ML13204A304), the licensee informed the NRC that the reactor fuel had been permanently removed from the Units 3 and 2 reactor vessels as of October 5, 2012, and July 18, 2013, respectively. The NRC subsequently issued the permanently defueled technical specifications on July 17, 2015 (ML15139A390), along with revised facility operating licenses to reflect the permanent cessation of operations at SONGS, Units 2 and 3.

As required by Title 10 the *Code of Federal Regulations* (10 CFR) 50.82(a)(4), the licensee submitted its Post-Shutdown Decommissioning Activities Report (PSDAR) to the NRC on September 23, 2014 (ML14269A033). The PSDAR outlines the planned decommissioning activities. The current version of the PSDAR is dated May 7, 2020 (ML20136A339). The chosen decommissioning alternative was DECON. DECON is the removal or decontamination of equipment, structures, or portions of the facility and site that contain radioactive contaminants to levels that permit termination of the license.

On December 20, 2016, the licensee announced the selection of AECOM and Energy Solutions as the decommissioning general contractor. The joint venture between the two companies was called SONGS Decommissioning Solutions (SDS). The SDS organization manages most decommissioning activities as described in the PSDAR.

By letter dated August 7, 2020 (ML20227A044), the licensee certified that all spent fuel was removed from both Units 2 and 3. Accordingly, SONGS entered their Independent Spent Fuel Storage Installation (ISFSI) Only Technical Specifications, Emergency Plan, and Security Plan on August 10, 2020. After removal of all spent fuel from the two units, SDS started conducting additional decommissioning work within the two containment buildings and spent fuel pool rooms.

During the inspection week, the ongoing activities included segmentation of the reactor vessel internals inside the two containments. The contractor was also preparing the containments for future large component removals. In addition, the contractor was conducting hot spot removal and remediation of the radwaste building, preparing for removal of the spent fuel pool fuel racks, and actively demolishing the Unit 2 turbine building. Finally, the contractor was preparing the Units 2 and 3 intake structures for future release and backfilling.

## **1 Decommissioning Performance and Status Review at Permanently Shutdown Reactors (Inspection Procedure 71801)**

### **1.1 Inspection Scope**

The objectives of this portion of the inspection effort were to evaluate the status of decommissioning and to verify whether the licensee was conducting decommissioning and maintenance activities in accordance with regulatory and license requirements.

## 1.2 Observations and Findings

Section II.A of the PSDAR provides a description of the decommissioning periods. The site is currently in Period 4. Period 4 begins with the completion of fuel transfer operations and extends through the end of the decommissioning and decontamination work. At the time of the inspection, the licensee and its decommissioning general contractor SDS were conducting decommissioning activities in accordance with the PSDAR. The inspectors discussed the current schedule with decommissioning management staff and conducted site tours to observe work in progress.

The contractor was actively segmenting the reactor vessel internals in both containments. The core shrouds were being segmented, in part, to separate the greater-than-Class-C (GTCC) wastes from the remainder of the material. The GTCC wastes will be placed in storage liners and stored at the onsite Independent Spent Fuel Storage Installation (ISFSI). The remainder of the internals will be packaged and disposed as radioactive wastes. After segmentation of the shrouds, the contractor plans to segment the core support barrel D ring. The upper guide structure and core barrel were also being segmented.

The inspectors reviewed the associated reactor vessel internals segmentation work packages and interviewed selected workers. The workers appeared to understand the work being conducted and was conducting the work in accordance with the instructions provided in the respective work packages.

The inspectors toured the Unit 2 and Unit 3 containments and observed the work in progress and work recently completed. The work included cutting of the internal concrete floors and walls for future removal of large components and staging of contaminated equipment and radioactive trash for removal and disposal. The large components to be removed include the reactor coolant pump motors, reactor coolant pumps, and steam generators. Housekeeping was found to be adequate in both containments, and the radiological controls were consistent with regulatory requirements in the two restricted areas.

The inspectors reviewed the status of the two spent fuel pools. The Unit 2 pool had been drained to just above the top of the spent fuel racks. The decommissioning contractor plans to remove the eight racks from the Unit 2 pool in the next few weeks. The Unit 3 pool level had not been drained but was noted to be cloudy due to recent rack cleaning activities. The contractor plans to start removing the eight racks from the Unit 3 pool after the racks are removed from the Unit 2 pool. Following removal of all 16 racks, the remainder of the pool water from the two pools will be drained, processed, and released.

Outside of containment, the work in progress included continued demolition of the two turbine buildings. The contractor was separating the metal from the concrete debris for recycling. The concrete was being disposed as very low-level radioactive wastes. The work was being conducted with an emphasis on safety. At the time of the inspection, the contractor was upgrading the onsite rail tracks to include a scale for weighing of rail cars prior to transportation.

The inspectors conducted independent radiological surveys during plant tours using a Ludlum Model 2401-EC2 survey meter (serial number 181580, calibrated to cesium-137 with calibration due date of January 28, 2023). The inspectors confirmed that the licensee had properly posted the areas that were toured. No high radiation area was identified that was not already posted and controlled. No radiation areas were identified outside of the radiologically restricted and posted areas.

### 1.3 Conclusion

The licensee and its decommissioning contractor were implementing decommissioning activities in accordance with the instructions provided in the PSDAR. The inspectors also determined that the licensee was adequately controlling decommissioning activities and radiological work areas at the facility.

## **2 Inspection of Remedial and Final Surveys at Permanently Shut-down Reactors (Inspection Procedure 83801)**

### 2.1 Inspection Scope

The objectives of this portion of the inspection effort were to verify that the licensee's final and remedial survey program complied with license and regulatory requirements.

### 2.2 Observations and Findings

Regulation 10 CFR 50.82(a)(9) requires the licensee to submit a license termination plan to the NRC as part of the license termination application. The license termination plan includes the licensee's detailed plans for the final radiation survey. At the time of the inspection, the licensee had not submitted its license termination plan, thus, any proposed final status survey will be conducted at risk by the licensee until the license termination plan has been approved by the NRC.

As part of the decommissioning process, the licensee and its decommissioning contractor must remediate and isolate the Units 2 and 3 intake structures from the rest of the facility. In recent weeks, the contractor attempted to isolate the two intake structures from the ocean. Gates were installed in the two structures to isolate the structures from the ocean. The gates in the Unit 2 structure were ineffective, so the contractor chose to install a "grout bag" in the structure as an isolation device from the ocean.

Prior to installation of the grout bag, the decommissioning contractor collected 21 concrete core samples from an area exposed to the ocean. Divers were used to help collect the samples since the area of concern was exposed to ocean water. The core samples will be used to help justify future release of the area from the license. Following sampling, a 16-foot high, 16-foot wide, and 35-foot long grout bag was installed in the Unit 2 intake structure.

The licensee recently submitted the results of the 21 core samples to the NRC for review. To support the review, the contractor developed an estimated derived concentration guideline level. If accepted by the NRC, the contractor plans to use this acceptance criteria for the area where the grout bag was installed and the balance of the intake structure surface areas.

At the time of the inspection, the Unit 2 intake structure continued to be isolated by the grout bag. In the near term, the contractor plans to seal the residual leakage past the grout bag, clean the remainder of the intake structure, and conduct a remedial action support survey of the structure. The remedial action support survey is used, in part, to determine when a survey unit is ready for the final status survey. The remedial action support survey for the Unit 2 intake structure was tentatively planned for early 2023.

In the Unit 3 intake structure, remedial action support surveys were in progress during the inspection. The surveys included surface scans, fixed-point measurements, swipe samples, and core samples. Following successful completion of the remedial action support survey, the contractor plans to conduct a final status survey. The NRC and its contractor expect to be provided with an opportunity to conduct a confirmatory survey, to confirm the results of the licensee's final status survey. After successful completion of all surveys, the contractor plans to use a flowable fill to fill the void spaces in both intake structures. Approximately 18,000 cubic yards of fill will be needed to fill each structure.

The inspectors reviewed the contractor's work instructions, interviewed staff, and observed the work in progress. The contractor had established procedures for the activities, and the contractor had sufficient equipment to conduct the surveys. The inspectors reviewed some of these work instructions for recently completed surveys and surveys in progress. The instructions provided sufficient guidance for the performance of the work and documentation of the survey records. However, some of the work may be conducted at risk until the NRC approves the license termination plan, proposed acceptance criteria, or portions of the plan as needed to support the work in progress.

### 2.3 Conclusion

The licensee and its decommissioning contractor were conducting remedial action support surveys at the intake structures in accordance with procedural requirements.

## **3 Radioactive Waste Treatment, and Effluent and Environmental Monitoring (Inspection Procedure 84750)**

### 3.1 Inspection Scope

The objectives of this portion of the inspection were to: (1) ensure that radioactive effluent sampling and analysis requirements are satisfied so that discharges of radioactive materials are adequately quantified and evaluated; (2) ensure that the radiological environmental monitoring programs are effectively implemented; and (3) monitor the licensee's continued implementation of the voluntary groundwater protection initiative.

### 3.2 Observations and Findings

Section II of the PSDAR states that appropriate radiological and environmental programs will be maintained throughout the decommissioning process to ensure that radiological safety of the workforce and the public and environmental compliance is maintained. Further, Section IV.E states that the licensee will continue to comply with the Offsite Dose Calculation Manual (ODCM), radiological environmental monitoring program, and groundwater protection initiative program during decommissioning. The PSDAR also

states that each program will likely be modified somewhat to reflect changes in site configurations. The inspectors reviewed the licensee's implementation of its radwaste treatment and effluent/environmental monitoring programs including recent changes to the programs.

a. Radioactive Waste Treatment

The inspectors conducted a review of the licensee's liquid radwaste system. Per Section 11.1 of the Defueled Safety Analysis Report, the liquid radwaste processing system consists of a portable liquid radwaste processing skid, discharge pathways, radiation monitors, and associated instrumentation and controls. At the time of the inspection, the sources of liquid radioactive effluents included the liquids stored in radwaste system tanks and the turbine building sump. Future sources of liquid radwaste include the remainder of the spent fuel pool and reactor cavity water.

During site tours, the inspectors observed the contractor's construction of a mobile liquid radwaste processing and discharge system. The skids will be used, in part, for processing and release of the remaining spent fuel pool and reactor cavity water. Two cargo containers were being fitted with equipment to process and filter the liquid radwaste. The first container included a sock filter, process valves and instrumentation, pump skid, and radiation monitor. The second container will hold the filter and resin vessels. The second container will include shielding as needed to protect workers from external radiation exposures emanating from the filter and resin vessels that contain filtered radioactive material.

When complete, the liquid radwaste system will consist of two process trains. The first train will be used to accept contaminated water, direct the water through filtration and resin elements, and discharge the processed water into two external holding tanks. The contractor plans to repurpose the former refueling water storage tanks in both Units 2 and 3 into holding tanks. The second train will be used to release the processed water from an external batch release tank to the Unit 2 outfall. A radiation monitor will be used to monitor the release. The contractor plans to repurpose the existing condensate storage tanks as the external batch release tanks. The two cargo containers are expected to be portable to allow movement between Units 2 and 3, to support releases from each unit as needed.

The inspectors observed the construction of some portions of the piping in the first cargo container and reviewed the associated construction documents. Work was being conducted in a safe manner, appropriate work controls were in place, and good housekeeping practices were observed.

b. Effluent and Environmental Monitoring

The inspectors reviewed the licensee's effluent and environmental monitoring programs including the ODCM, recent liquid radwaste release records, effluent and environmental monitoring reports, and the groundwater protection initiative. The inspectors also reviewed applicable procedures and interviewed staff responsible for implementing these procedures.

The requirements for the effluent and environmental monitoring programs are provided in site procedures. The inspectors reviewed selected site procedures as well as the

radioactive effluent release reports (ML22060A115 and ML22122A040) and the radiological environmental operating report (ML22136A084) for calendar year 2021. The inspectors reviewed selected data used in the development of the annual reports and compared the information provided in the reports against the requirements of the ODCM. The effluents released during 2021 did not exceed the limits established in the ODCM. In addition, the doses to members of the public were calculated in accordance with ODCM requirements, were less than 1 millirem, and did not exceed the dose to members of the public as specified under 10 CFR 20.1301 of 100 millirem. In addition, the licensee demonstrated compliance with the dose limits for members of the public as specified under 10 CFR 20.1302.

The inspectors reviewed two liquid effluent batch release packages, SONGS Release Permit #2L-001-0 (Tank 57) dated April 19, 2022, and SONGS Release Permit #SL-002-0 (Tank 58) dated May 11, 2022. Both releases were discharged via the Unit 2 outfall. The release packages confirmed the licensee adequately implemented the releases in accordance with the ODCM. The inspectors also reviewed an event notification that was reported to the NRC in late-September 2022. The incident involved the release of oil from the oil waste sump in excess of the licensee's National Pollutant Discharge Elimination System permit.

The sources of gaseous effluent include the containment vents, plant vent stack, and open hatches to containment. The licensee and its contractor monitored these release points in 2021 and reported the results in the annual radioactive effluent release report dated April 28, 2022. The primary sources of releases were from airborne particulates since fission and activation gases, and iodines, were no longer required to be sampled due to the removal of all fuel from the two containments and spent fuel pools.

The inspectors briefly reviewed the licensee's implementation of its groundwater protection initiative. The program included the sampling of 20 monitoring wells. The results of the program were provided in the 2021 annual radioactive effluent release report. The results indicate that one well contained hydrogen-3 (tritium) in detectable concentrations but well below the drinking water limit established by the U.S. Environmental Protection Agency.

c. Changes to ODCM Program

The inspectors reviewed recent changes to procedure SO123-ODDCM-B, "Offsite Dose Calculation Manual, Nuclear Organization, San Onofre Nuclear Generating Station (SONGS)," revision 17. Revision 17, issued April 28, 2022, changed the ODCM to add dose factor calculation and methodology definitions, update the total dose formulas, remove kelp and soil sampling requirements, remove thermoluminescent dosimeters (TLDs) used to monitor direct radiation at distances further than the outer ring (4 to 5 miles), and remove the turbine plant sump radiation monitor and the south yard facility monitored release pathway.

During the review of the ODCM, the inspectors noted that Table 5.1 indicated the licensee had one TLD per sector/per ring on the meteorological chart. The ODCM indicated there were 16 sectors and two rings, an inner ring at the site boundary and an outer ring described as being 4 to 5 miles out from the midpoint of the site. When compared to Figures 5-2 and 5-3 in the ODCM showing the location of the TLD used for measuring direct radiation levels to the public, it was clear that the licensee did not have

TLDs in all sectors for either the inner or outer ring due to the location of the site, as many of the TLDs would have to have been placed in the ocean. NUREG-1301 allows the licensee to take geographical constraints such as the ocean into account in the placement of TLD for this purpose, and this was considered an administrative change to clarify the actual placement of TLD for direct radiation measurement.

According to Figures 5-2 and 5-3, there were some limited TLDs that were in the inner ring but were on the lines between sectors, so it appeared that these “inner ring” dosimeters were shared between meteorological zones. After discussion with the licensee, it was determined that some of these inner ring dosimeters were special interest TLDs used to measure direct radiation in meteorological zones that were known to be occupied by members of the public for recreational purposes (fishing, camping, etc.). The licensee used an occupancy factor of 300 hours per year for these special interest TLDs. The licensee agreed that the identification of these direct radiation TLDs as inner ring, outer ring, or special interest needed to be clarified and implemented the action to update the ODCM to include this information in their corrective action program.

The inspectors reviewed recent deviations from the ODCM. The licensee submitted 14 ODCM deviations to the SDS condition reporting program since January 2022. These deviations were as follows:

- SDS-001153 Air Sampler 9 and 12 – long down time (approximately 8 hours)
- SDS-001267 Air Sample – weekly sample interval missed (long run time – 14 days)
- SDS-001317 Air Sampler 13 – loss of power (70 hours operational/168 hour expected)
- SDS-001362 Air Sampler 16 – loss of power (158 hours operational/168 hours expected)
- SDS-001419 Five missing TLDs – along beach path (attributed to vandalism)
- SDS-001439 Air Sampler 16 – power outage (> 4 hours) will report in 2022 annual report
- SDS-001480 Air Sampler 16 – power outage (> 4 hours) will report in 2022 annual report
- SDS-001492 Missing TLD – state beach, attributed to vandalism, TLDs replaced
- SDS-001298 Radwaste effluent monitor, release flow instruments and Unit 2 turbine plant sump radiation monitor out of service – greater than 30 days. All powered off for turbine building demolition. Unit 2 turbine plant sump will be removed for ODCM. Others will be put back into service at a later date.
- SDS-001435 Turbine plant sump flow meters (2) – defective removed from service, replaced with a different meter
- SDS-001434 Omega flowmeter – Turbine plant sump discharge line defective, returned to vendor, replaced with a different meter
- SDS-001381 Channel function test of Turbine plant sump flowmeter – not performed quarterly, changed interval to annual in ODCM
- SDS-001493 Turbine plant sump flowmeter – failed during Unit 3 turbine plant sump discharge, plan to replace
- SDS-001494 Radiation monitors (2) – changed condition to nonfunctional due to lockout tag-out for engineering change. These monitors will become part of the portable liquid radwaste system being constructed to deal with spent fuel pool water.

The inspectors reviewed these deviations and corrective action taken or planned. No issues or concerns with the actions taken or proposed were identified.

d. Changes to the Radiological Environmental Monitoring Program

Revision 17 of the ODCM issued April 28, 2022, made the following changes to the radiological environmental monitoring program:

- TLD control stations were removed from Table 5.1, Radiological Environment Monitoring Program, to align the TLD program used to measure direct radiation dose with the programs described in ANSI/HPS N13.37-2014 guidelines as endorsed by Regulatory Guide 4.13, Performance, Testing, and Procedural Specifications for Thermoluminescence Dosimetry: Environmental Applications, revision 2
- Table 5.1 was modified to remove quarterly composite ocean sampling for tritium and replaced it with monthly tritium analysis. The licensee was already performing monthly tritium analysis under the lease agreement and found that sampling to be more sensitive than the quarterly composite sampling for tritium. The licensee intends to continue the monthly sampling until it is no longer required under the lease agreement. In the event that happens, the licensee committed to reinstating the quarterly composite sampling for tritium.
- Air samplers #7 and #11 were removed from Table 5.1. Air sampler #7 was removed to support the demolition of the AWS building and air sampler #11 was removed to support the turnover of the MESA facility to the Marine Corp/Camp Pendleton.
- Soil sampling and kelp sampling were removed from Table 5.4, Radiological Environmental Monitoring Sample locations, as neither kelp sampling or soil sampling was required by Table 5.1, nor was it identified as a potential sampling media in NUREG-1301.

The NRC inspection staff determined that these changes were consistent with changes due to decommissioning.

3.3 Conclusion

The licensee and its decommissioning contractor maintained effluent monitoring and control systems as required, to support the condition of the facility since permanently ceasing operations. The effluent flow paths and monitoring systems reviewed aligned with descriptions provided in the Offsite Dose Calculation Manual (ODCM) except for thermoluminescent dosimeter (TLD) placement for measurement of direct radiation. Based on information provided in the ODCM, it was not clear as to which TLDs were considered inner ring and which were considered special interest. The licensee initiated action to clarify the information provided in the ODCM.

**4 Exit Meeting Summary**

On October 20, 2022, the inspectors presented the final inspection results to Doug Bauder, Chief Nuclear Officer and Vice President Decommissioning, and other members of the licensee's staff. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified except for certain SDS procedures and documents which were marked as proprietary.

## **SUPPLEMENTAL INSPECTION INFORMATION**

### **KEY POINTS OF CONTACT**

#### Licensee Personnel

A. Bates, SCE, Nuclear Regulatory Affairs Manager  
D. Bauder, SCE, Chief Nuclear Officer and Vice President Decommissioning  
V. Bilovsky, SCE, Decommissioning Project Director  
M. Carmargo, SCE, Strategic Planning and Stakeholder Engagement Manager  
J. Carey, SCE, Corrective Action Program Manager  
C. Cates SCE Prudency Manager  
R. Corbett, SDS, Radiation Protection Manager  
K. Gallion-Sholler, SCE, Emergency Preparedness Manager  
S. Garcia, SDG&E Representative  
G. Huff, SDS, Chemistry Engineer  
J. Janke, SCE, ISFSI Manager  
R. Kalman, SDS, Executive Sponsor  
J. Madigan, SCE, Nuclear Oversight and Safety Culture Manager  
S. Mannon, SDS, Program and Regulatory Assurance Manager  
M. Morgan, SCE, Nuclear Regulatory Affairs  
J. Peattie, SCE, Decommissioning Agent Contract Management Manager  
R. Quam, SCE, Security Manager  
L. Rafner, SCE, Regulatory Affairs  
C. Samples, SCE, Radiation Protection  
S. Sewell, SCE, Radiation Protection Manager  
J. Stephenson, SCE, ISFSI Engineering Manager

## INSPECTION PROCEDURES USED

IP 71801	Decommissioning Performance and Status Review at Permanently Shutdown Reactors
IP 83801	Inspection of Remedial and Final Surveys at Permanently Shutdown Reactors
IP 84750	Radioactive Waste Treatment, and Effluent and Environmental Monitoring

## LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

### Opened

None

### Discussed

None

### Closed

None

## LIST OF ACRONYMS

ADAMS	Agencywide Documents Access and Management System
CFR	<i>Code of Federal Regulations</i>
GTCC	greater-than-Class C
ISFSI	Independent Spent Fuel Storage Installation
NRC	Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
PSDAR	Post-Shutdown Decommissioning Activities Report
SDS	SONGS Decommissioning Solutions
SCE	Southern California Edison Company
SONGS	San Onofre Nuclear Generating Station
TLD	thermoluminescent dosimeter