

# UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION IV 1600 EAST LAMAR BOULEVARD ARLINGTON, TEXAS 76011-4511

July 6, 2021

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 05000361/2021-002 AND 05000362/2021-002

Dear Mr. Bauder:

This letter refers to the U.S. Nuclear Regulatory Commission (NRC) inspection conducted on May 10-13, 2021, at the San Onofre Nuclear Generating Station (SONGS), Units 2 and 3. The NRC inspectors discussed the results of this inspection with you and members of your staff during a telephonic final exit meeting conducted on June 9, 2021. 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 license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of site activities, performance of independent radiation measurements, and interviews with personnel. Specifically, the inspectors reviewed decommissioning planning activities for SONGS Units 2 and 3, effectiveness of the corrective action program, and the implementation of the safety review and design change program. 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, its 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).

D. Bauder 2

ADAMS is accessible from the NRC's Website at <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a>. 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 Ms. Stephanie Anderson at 817-200-1213, or the undersigned at 817-200-1249.

Sincerely,

Gregory G. Warnick, Chief Reactor Inspection Branch Division of Nuclear Materials Safety

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

Enclosure: Inspection Report 05000361/2021-002; 05000362/2021-002

cc w/encl: Distribution via LISTSERV

SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION - NRC INSPECTION REPORT 05000361/2021-002; 05000362/2021-002 - DATED JULY 6, 2021

#### **DISTRIBUTION**:

SMorris, ORA BTharakan, DNMS JMonninger, ORA BMaier, ORA MMuessle, DNMS DCylkowski, ORA VDricks, ORA LHowell, DNMS GWarnick, DNMS BWatson, NMSS RLantz, DRS ASnyder, NMSS GMiller, DRS LWilkins, Congressional Affairs TVegel, DRP AMoreno, RIV Congressional Affairs MHay, DRP RSkokowski, RIV/ETA

SAnderson, DNMS AMcCraw, RIV/OEDO REvans, DNMS R4DNMS RxIB

# ADAMS ACCESSION NUMBER: ML21181A393

X SUNSI Review By: SGA	ADAMS: ■ Yes □ N		☐ Sensitive ■ Non-Sensitive		☐ Non-Publicly Available ■ Publicly Available		Keyword NRC-002
OFFICE	DNMS/RxIB	DNM:	S/MLDB	C:RxIB			
NAME	SGAnderson	RJEv	ans	GGWarnick			
SIGNATURE	/RA/*	/RA	4/*	GGW			
DATE	06/30/2021	06/30	/2021	07/01/202	21		

OFFICIAL RECORD COPY

# U.S. NUCLEAR REGULATORY COMMISSION REGION IV

Docket Nos. 05000361; 05000362

License Nos. NPF-10; NPF-15

Report Nos. 05000361/2021-002; 05000362/2021-002

Licensee: Southern California Edison Company

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

Location: 5000 South Pacific Coast Highway

San Clemente, California

Inspection Dates: May 10-13, 2021

Inspectors: Stephanie G. Anderson

Senior Health Physicist Reactor Inspection Branch

Division of Nuclear Materials Safety

Robert J. Evans, PhD, CHP, PE

Senior Health Physicist

Materials Licensing and Decommissioning Branch

Division of Nuclear Materials Safety

Approved By: Gregory G. Warnick, Chief

Reactor Inspection Branch

Division of Nuclear Materials Safety

#### **EXECUTIVE SUMMARY**

San Onofre Nuclear Generating Station, Units 2 and 3 NRC Inspection Report 05000361/2021-002; 05000362/2021-002

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 these activities in accordance with site procedures, license requirements, and applicable NRC regulations.

Within the scope of the inspection, no violations were identified.

#### <u>Decommissioning Performance and Status Review at Permanently Shutdown Reactors</u>

Decommissioning activities were being conducted in accordance with the general
guidance provided in the Post-Shutdown Decommissioning Activities Report.
Radiological postings were consistent with regulatory requirements. The licensee's
contractor conducted unconditional release surveys of the Unit 2 Turbine Building in
accordance with Post-Shutdown Decommissioning Activities Report and procedural
requirements. The licensee and its contractor implemented the quality equipment list in
compliance with quality assurance program and Defueled Safety Analysis Report
requirements. (Section 1.2)

#### Problem Identification and Resolution at Permanently Shutdown Reactors

The licensee and its contractor established and implemented comprehensive corrective
action programs to identify, resolve, and prevent conditions adverse to quality. The
licensee and its contractor also implemented quality assurance audit programs in
accordance with regulatory and procedural requirements. The licensee and its
contractor also established and implemented employee concern programs. (Section 2.2)

#### Safety Reviews, Design Changes, and Modifications at Permanently Shutdown Reactors

• The inspectors did not identify any regulatory issues associated with the training or selected samples for the safety reviews, design change, or modifications, and found that they were being performed in accordance with the applicable regulatory and procedural requirements. (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 by letter that it had permanently ceased power operations at the San Onofre Nuclear Generating Station (SONGS), Units 2 and 3, effective June 7, 2013. The licensee's letter is available in the Agencywide Documents Access and Management System (ADAMS) under (ADAMS Accession No. ML131640201). By letters dated June 28, 2013 (ADAMS Accession No. ML13183A391), and July 22, 2013 (ADAMS Accession No. ML13204A304), the licensee informed the NRC that the reactor fuel had been permanently removed from SONGS, Units 3 and 2, reactor vessels as of October 5, 2012, and July 18, 2013, respectively.

Upon docketing of these certifications, and pursuant to Title 10 of the *Code of Federal Regulations* (CFR) 50.82(a)(2), the SONGS, Units 2 and 3, facility operating licenses no longer authorized operation of the reactors or emplacement or retention of fuel into the reactor vessels. In response to the licensee's amendment request, the NRC issued the permanently defueled technical specifications on July 17, 2015 (ADAMS Accession No. ML15139A390), along with revised facility operating licenses to reflect the permanent cessation of operations at SONGS, Units 2 and 3.

The licensee submitted its Post-Shutdown Decommissioning Activities Report (PSDAR) on September 23, 2014 (ADAMS Accession No. ML14269A033), which is required to be submitted within 2 years following permanent cessation of operations under 10 CFR 50.82(a)(4). The PSDAR outlines the decommissioning activities for SONGS, Units 2 and 3. By letter dated August 20, 2015 (ADAMS Accession No. ML15204A383), the NRC informed the licensee that the PSDAR contained the information required by 10 CFR 50.82(a)(4)(i). The current version of the PSDAR is dated May 7, 2020 (ADAMS Accession No. ML20136A339).

The licensee submitted a license amendment request dated December 15, 2016 (ADAMS Accession No. ML16355A015), to revise the Permanently Defueled Emergency Plan into an Independent Spent Fuel Storage Installation (ISFSI) Only Emergency Plan (IOEP), and to revise the emergency action level (EAL) scheme into ISFSI-Only EALs for SONGS, Units 1, 2, and 3 ISFSI. The proposed changes reflect the new status of the facility, as well as the reduced scope of potential radiological accidents since all of the spent fuel has been moved to dry cask storage within the onsite ISFSI.

The NRC issued amendments to the SONGS operating licenses to allow transition to an IOEP and EAL scheme on November 30, 2017 (ADAMS Accession No. ML17310B482). The NRC inspectors determined that the SONGS IOEP and associated changes provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at the SONGS facility. The changes were reviewed, and appropriate conforming changes were properly addressed in the applicable revision and sections of the SONGS Updated Final Safety Analysis Report.

License Amendment 169 (Unit 1), 237 (Unit 2), and 230 (Unit 3) were submitted on December 15, 2016 (ADAMS Accession No. ML16355A014) and approved by the NRC by letter dated January 9, 2018 (ADAMS Accession No. ML17345A657). These license amendments changed the operating licenses and technical specifications to reflect the removal of all spent nuclear fuel from the SONGS, Units 2 and 3 Spent Fuel Pools (SFPs) and its transfer to dry cask storage within an onsite ISFSI. These changes fully reflect the permanently

shutdown status of the decommissioning facility, as well as the reduced scope of structures, systems, and components necessary to ensure plant safety since all spent fuel has been moved to the SONGS ISFSI.

The changes also made conforming revisions to the SONGS, Unit 1 technical specifications and combined them with the SONGS, Units 2 and 3 technical specifications. This license amendment became effective as of the date the licensee submitted a written notification to the NRC that all spent nuclear fuel assemblies had been transferred out of the SONGS SFPs and placed in storage within the onsite ISFSI. In a letter to the NRC dated August 7, 2020 (ADAMS Accession No. ML20227A044), the licensee has certified that all spent fuel has been removed from the SFPs of Units 2 and 3. Accordingly, SONGS entered their ISFSI-Only Technical Specifications, Emergency Plan, and Security Plan on August 10, 2020.

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

The California Environmental Quality Act is the state equivalent of the Federal National Environmental Policy Act. For SONGS, the California State Lands Commission (CSLC) performed the California Environmental Quality Act review, which was triggered by the need to establish the final disposition for the offshore conduits that are under a CSLC lease. On February 11, 2019, the Final Environmental Impact Report was released by the CSLC. The CSLC held a public meeting on March 21, 2019, to consider the Final Environmental Impact Report and a lease application to decommission the offshore infrastructure associated with SONGS, Units 2 and 3. On October 17, 2019, the California Coastal Commission approved, with conditions, the Coastal Development Permit to begin decontamination and dismantlement of the above grade structures at SONGS, which authorized active decommissioning activities at the site. Now that all spent fuel has been removed from the SFPs to the ISFSI, SDS has begun active decommissioning of the site. During the inspection week, SDS was actively demolishing various non-radiological warehouses and other structures in various locations around the site.

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

#### 1.1 Inspection Scope

The inspectors reviewed documents, interviewed plant personnel, and conducted site tours to assess the licensee's performance in the following areas:

- Status of decommissioning and verify whether the licensee is conducting decommissioning and maintenance activities in accordance with regulatory and license requirements;
- Licensee awareness of work activities to assess their control and conduct of decommissioning;
- Status of the licensee's decommissioning staffing, personnel qualifications, and training requirements, including that of the contracted workforce, to ensure that license requirements are met, as applicable to the current decommissioning status;

- Whether the licensee is identifying problems related to decommissioning and maintenance activities at an appropriate threshold and entering them into the corrective action program;
- Performed plant tours to assess field conditions and decommissioning activities; and
- Observed and assessed the status of facility housekeeping.

#### 1.2 Observations and Findings

#### a. Observation of Decommissioning Activities

The PSDAR provides a high-level description of the planned decommissioning activities. At the time of the inspection, the licensee and its decommissioning general contractor were conducting decommissioning activities in accordance with the PSDAR. The inspectors discussed the current schedule with management staff and conducted site tours to observe work in progress. Critical path activities included preparation of the interior and exterior of the containment structures for future decommissioning followed by preparation and implementation of the reactor vessel internals segmentation work.

The inspectors toured the Unit 2 and Unit 3 containments and observed work in progress. The contractor was observed to be disassembling and torch-cutting the safety injection tanks. The containment purge duct was being removed in areas where it interfered with work in progress. Core drilling was observed in preparation for opening an access pathway in a concrete wall. The contractor was also preparing the two containments for deck removal and wall modifications for ease of access for future removal of large components from the containments.

During the tour of the Unit 2 containment, an industrial safety boundary was found to be down. This observation was eventually reported to the responsible individuals, and a condition report was issued to document the event and to formulate corrective actions to prevent recurrence.

Housekeeping was found to be adequate in both containments, but the inspectors noted that the Unit 3 containment appeared to be more organized than the Unit 2 containment. The high-radiation areas were being managed in accordance with technical specification requirements. Radiological controls were consistent with regulatory requirements in the restricted areas.

The inspectors toured the two spent fuel pool rooms, to determine the status of the rooms. The fuel bundle racks were empty, since all spent nuclear fuel had been removed from the rooms by August 2020. Housekeeping was adequate in the rooms, and the radiologically contaminated areas were properly posted.

The inspectors conducted independent radiological surveys during plant tours using a Thermo Radeye G survey meter (NRC No. 086964 with calibration due date of December 22, 2021). The inspectors confirmed that the licensee had properly posted the areas based on radiological survey measurements. No high radiation area was identified that was not already posted and controlled. No radiation areas were identified outside of the restricted and posted areas.

The inspectors observed the status of work outside of the power block. Various shop and office buildings around the power block have been demolished, were being demolished, or will be demolished in the near future. The diesel generator buildings were scheduled for demolition in the near term. Oil was being drained from the main transformers. The Containment Building tendons were being de-tensioned and removed. Building rubble was being radiologically surveyed and sorted for unconditional release.

#### b. Review of Unconditional Release Program

The decommissioning activities in progress during the inspection included surveys for future demolition and removal of the Unit 2 Turbine Building rubble. As noted in the PSDAR, material that has radiological contamination below the applicable radiological limits may be released for unrestricted disposition including scrapping, recycling, or general disposal.

Prior to building demolition, the contractor must demonstrate that the building structures, systems, and components can be released for unrestricted use. These unconditional release surveys are controlled, in part, by procedure SDS-LT1-PCD-1003, "Unconditional Release of Structures, Systems, and Miscellaneous Material and Equipment," Revision 2. Consistent with NRC guidance, the unconditional release criteria are the minimum detectable count rates of the instrumentation plus background. The unconditional release surveys are supposed to demonstrate that the measured radioactivity levels were indistinguishable from background levels.

To ensure that the Turbine Buildings have been surveyed prior to dismantlement or demolition, the contractor developed a series of survey instructions and maintained a spreadsheet of the various areas and associated survey instructions. The inspectors reviewed this matrix during the inspection.

The design of each survey was based on various factors including history of radioactive material being present in the area of concern, previous or current use of the area, process knowledge, results of preliminary surveys, and engineering judgement. The radiological scan coverage, number of direct measurements, and number of smear surveys for removable contamination varied based on the above factors.

The inspectors reviewed one recently completed survey within the Unit 2 Turbine Building. This survey was conducted on structural steel. The pre-survey analysis determined that this survey would be classified as a Class 3 survey based on the factors described above. A Class 3 survey included radiological scans of approximately 10-percent of the surface area, direct measurements at the location of the highest scan indications, and a minimum of 10 smear samples. Quality control samples were collected at 5-percent of the surveyed locations. After the structural steel survey had been completed, the results indicated that there was no plant added radioactivity that was distinguishable from background. Thus, the survey concluded that the structural steel could be unconditionally released.

The inspectors observed the licensee conducting an unconditional release survey of the Unit 2 Turbine Building. The survey included the measurement of potential radioactive contamination inside and outside of system piping. The inspectors concluded that the contractor's staff was conducting the survey in accordance with procedural

requirements. The inspectors noted that the surveyors appeared to have problems with surveying small-bore piping, since the detector in use could not fit into the interior of the piping. This observation was reported to the contractor. The contractor issued a condition report to reconsider how they conducted surveys of small-bore piping.

In summary, the licensee's contractor had developed and implemented a program for unconditional release of structures, systems, and components, and the contractor implemented and maintained a program to ensure that these structures, systems, and components have been radiologically surveyed prior to unconditional release.

## c. <u>Classification of Structures, Systems, and Components</u>

The inspectors reviewed the licensee's current quality classification of structures, systems, and components for compliance with the requirements provided in the Defueled Safety Analysis Report (DSAR), Decommissioning Quality Assurance Plan (DQAP), and SONGS Decommissioning Solutions Quality Assurance Program (SDS QAP). Section 1.0 of the DSAR states that the SONGS Quality Equipment List (Q-List) is updated to identify those plant structures, systems, and components that are required for decommissioning. The inspectors reviewed the current Q-List (Controlled Document 90034, Revision 5) during the inspection and interviewed site staff about the designations provided in the Q-List.

At the time of the inspection, the remaining quality-related structures, systems, and components were the Independent Spent Fuel Storage Installation and greater-than-class-C canisters. All other plant components no longer met the criteria for quality classification. However, the licensee and its decommissioning general contractor maintained listings of structures, systems, and components that were classified as either important to the defueled condition or not important to safety.

According to the DSAR, Section 3.2.3, the criteria necessary to determine if a structure, system, or component was designated as important to the defueled condition included those necessary to comply with the requirements for effluent monitoring in accordance with the Offsite Dose Calculation Manual, and those necessary to comply with the requirements of the fire protection program in accordance with 10 CFR 50.48(f).

The inspectors reviewed the Q-List and confirmed that selected fire protection system, fire water suppression system, and process and effluent radiological monitoring and sampling systems were classified as important to the defueled condition. All other structures, systems, and components were designated as not important to safety. These designations were consistent with the instructions provided in the DSAR. However, as noted in both the DSAR and Q-List, these remaining components will comply with California Building Code requirements, including seismic design requirements.

#### 1.3 <u>Conclusion</u>

Decommissioning activities were being conducted in accordance with the general guidance provided in the PSDAR. Radiological postings were consistent with regulatory requirements. The licensee's contractor conducted unconditional release surveys of the Unit 2 Turbine Building in accordance with PSDAR and procedural requirements. The licensee and its contractor implemented the quality equipment list (Q-list) in compliance with quality assurance program and DSAR requirements.

#### 2 Problem Identification and Resolution at Permanently Shutdown Reactors (40801)

#### 2.1 <u>Inspection Scope</u>

The inspectors reviewed documents and interviewed plant personnel to assess the licensee's performance in the following areas:

- Audits and assessments are conducted in accordance with the requirements of the NRC-approved Quality Assurance (QA) program and 10 CFR Part 50, Appendix B with appropriate managerial oversight;
- Licensee effectiveness at reasonably preventing problems and promptly detecting and correcting issues of concerns, conditions adverse to quality, and nonconformances;
- Issues or problems were identified and corrected in accordance with NRC approved QA program and 10 CFR Part 50, Appendix B, Criterion XVI;
- Licensee has established, implemented, and performs management reviews of the safety conscious work environment; and
- Licensee is identifying and placing potential 10 CFR Part 21, "Reporting of Defects and Non-Compliance Issues," into the CAP and appropriately evaluating them.

#### 2.2 Observations and Findings

10 CFR Part 50, Appendix B, provides the requirements for QA programs. The licensee established and implemented the DQAP, Revision 9, to comply with Appendix B requirements. In addition, the licensee's decommissioning general contractor established and implemented the SDS QAP, Revision 5, to comply with Appendix B requirements.

The inspectors reviewed the licensee's and its contractor's corrective action and quality auditing programs to ensure that the programs complied with regulatory and procedural requirements. In addition, the inspectors reviewed the licensee's implementation of its safety conscious work environment.

#### a. Corrective Action Programs

Corrective action programs are required by 10 CFR Part 50, Appendix B, Criterion VXI and Sections 16 of the DQAP and SDS QAP. In accordance with the two QA plans, significant conditions adverse to quality shall require a cause determination, corrective actions will be implemented to prevent recurrence, and the conditions and associated corrective actions taken will be documented and reported to appropriate levels of management. Details of the licensee's corrective action program were provided in procedure ADM-5, "Corrective Action Program," Revision 3. Details of the contractor's program were provided in procedure SDS-RA1-PGM-0005, "Corrective Action Program," Revision 5.

The inspectors reviewed the two corrective action programs and interviewed staff responsible for implementing the programs. The inspectors verified that the licensee and its decommissioning general contractor established and implemented corrective action programs. Both the licensee and its contractor had assigned staff to manage the programs. Management review committees were also established to provide oversight of the program and to review selected events that resulted in corrective action reports. Adverse conditions were being identified and entered into the two corrective action programs. The inspectors also confirmed that the licensee and its contractor were trending the adverse conditions and associated corrective actions.

The inspectors reviewed trend reports and meeting minutes from the most recent committee meetings. The contractor's data indicated that the overall number of condition reports was increasing over time, due in part to the increase in decommissioning work activities. Most condition reports involved industrial safety events and programmatic issues. The contractor tracked the collective causes of the events and timeliness of report closures. The licensee also trended its corrective action program. Possible trends involved first aid/injuries and environmental issues or events, but the licensee's staff subsequently determined that the incidents did not appear to be representative of definitive trends.

The inspectors reviewed one root cause evaluation in detail. In November 2020, during an excavation project, contractor workers unknowingly encountered an energized power line. The contractor conducted an apparent cause evaluation, but the licensee elected to conduct an independent root cause evaluation of the incident. The licensee identified the root cause, direct cause, and causal factors as well as corrective actions to prevent recurrence. The inspectors concluded that the licensee's actions were proactive in response to an event that could have resulted in severe worker injury.

#### b. Quality Assurance Audit Programs

Quality assurance audits are required by 10 CFR Part 50, Appendix B, Criterion XVIII. The instructions for the audit programs are provided in Sections 18 of the licensee's DQAP and the contractor's SDS QAP. Details of the programs are provided in the licensee's procedure NOD-2, "Audit and Assessment Program," Revision 3, and the contractor's procedure SDS-QA1-PCD-0011, "Audit and Surveillance," Revision 6.

The inspectors reviewed the licensee's and contractor's implementation of their respective QA audit programs and discussed the programs with licensee and contractor staff. Overall, the inspectors concluded that the licensee and its contractor established

and implemented comprehensive programs and conducted audits at the frequencies specified in the respective QA plans.

At the time of the inspection, the licensee's required audits included document and records control; maintenance, modifications, and calibrations; ISFSI controls; corrective action program; and procurement and material control. The contractor was required to conduct audits for those program areas for which governance was assumed. These audits included independent review of the QA program, fire protection, environmental/chemistry/Offsite Dose Calculation Manual, waste management, radiation protection, radiological surveys, and external suppliers.

Procedures required both the licensee and its contractor to develop annual audit schedules. The inspectors reviewed the two audit schedules for 2021 and confirmed that the licensee and its contractor were conducting audits as required by implementing procedures.

Surveillances were performed and documented when it was determined to be advantageous to monitor or observe an item or activity to verify conformance. The contractor conducted and documented surveillances as needed to support QA program requirements. The inspectors reviewed selected audits and surveillances issued since the last inspection of this program area. The audits identified various weaknesses and offered recommendations as appropriate.

#### c. Safety Conscious Work Environment

During the inspection, the inspectors interviewed both Employee Concerns Program (ECP) managers for the licensee and contractor. During those interviews, the inspectors were able to discuss the current caseloads and discuss the process for employees bringing concerns to the ECP's at the site. Both the ECP managers were knowledgeable of the current concerns and trend associated with safety culture. Overall, the inspectors determined that both the ECP's were being managed effectively.

#### 2.3 <u>Conclusion</u>

The licensee and its contractor established and implemented comprehensive corrective action programs to identify, resolve, and prevent conditions adverse to quality. The licensee and its contractor also implemented QA audit programs in accordance with regulatory and procedural requirements. The licensee and its contractor established and implemented employee concern programs.

# 3 Safety Reviews, Design Changes, and Modifications at Permanently Shutdown Reactors (37801)

### 3.1 <u>Inspection Scope</u>

The inspectors reviewed documents and interviewed plant personnel to assess the licensee's performance in the following areas:

 Determination that licensee procedures and processes ensure they are adequately identifying changes to technical specifications (TS) resulting from proposed changes, tests, experiments, and modifications:

- Evaluate whether the licensee's safety review process committee is appropriately staffed and trained in accordance with its charter, as defined in the licensee's TSs, quality assurance plan, or other licensing documentation, as applicable;
- Verify supporting design basis documentation, such as calculations, design specifications, vendor manuals, Post-Shutdown Decommissioning Activities Report, and TSs are updated consistent with design changes;
- Verify that the licensee's training program provides effective periodic training for personnel preparing, reviewing, and approving safety evaluations. Verify that the training and qualification of the personnel conducting the 10 CFR 50.59 training is consistent with license requirements. Determine whether the licensee has established a process to assess training effectiveness; and
- Verify that the licensee is identifying problems related to safety reviews, design changes, and modifications at an appropriate threshold and entering them into its corrective action program.

## 3.2 Observations and Findings

The inspectors reviewed various 10 CFR 50.59 applicability determinations and screens, performed by SDS and SCE in support of changes (modifications) to the facility. The inspectors were evaluating whether any facility design changes, tests, experiments or modifications were being effectively conducted, managed, and controlled. The inspectors also verified that no decommissioning activities involved any changes to technical specifications or the PSDAR. As part of this evaluation the inspectors also ensured the licensee was implementing an effective training program for any personnel involved in 10 CFR 50.59 screening and evaluations.

The inspectors reviewed SCE procedure ENG-3, "10 CFR 50.59, 72.48, and 50.82 Program," Revision 0 and SDS procedure, SDS-RA1-PGM-002, "10 CFR 50.59 and 72.48 Program," Revision 3. The inspectors determined both SCE and SDS procedures used guidance from NEI 96-07, Revision 1, Guidelines for 10 CFR 50.59 Implementation, to perform reviews on systems, structures and components to determine whether any changes, tests, or experiments may be performed without obtaining prior NRC approval. The inspectors determined that the procedures provided instructions to assure proper implementation, review, and approval of design changes. The inspectors concluded that SCE and SDS reviewed the proposed activities under the 10 CFR 50.59 screening process in accordance with procedures and regulatory requirements and provided adequate explanation as to why an evaluation was not necessary.

#### 3.3 Conclusion

The inspectors did not identify any regulatory issues associated with the training or selected samples for the safety reviews, design change, or modifications, and found that they are being performed in accordance with the applicable regulatory and procedural requirements.

## 4 Exit Meeting Summary

On June 9, 2021, the NRC inspectors presented the final inspection results to Mr. 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 with the exception of all SDS procedures and documents reviewed during the inspection, which were marked as proprietary.

#### SUPPLEMENTAL INSPECTION INFORMATION

#### **KEY POINTS OF CONTACT**

# Licensee Personnel

- A. Bates, SCE, Regulatory Affairs and Oversight Manager
- S. Mannon, SDS, Regulatory Affairs Manager
- L. Rafner, SCE, Regulatory Affairs
- M. Morgan, SCE, Regulatory Affairs
- J. Sophie, SDS, Containment Systems Removal Project Manager
- R. Kalman, SDS, Operations Project Director
- B. Fraser, SDS, Senior Vice President
- M. Chavez, SDS, Quality Engineer
- B. Churchill, SCE, Lead Auditor
- A. Kowal, SCE, Lead Auditor
- C. Cates, SCE, ECP Manager
- T. Anderson, SDS, ECP Manager
- M. Cuarenta, SDS, CAPCO

#### **INSPECTION PROCEDURES USED**

IP 71801	Decommissioning Performance and Status Review at Permanently Shutdown
	Reactors
IP 40801	Problem Identification and Resolution at Permanently Shutdown Reactors
IP 37801	Safety Reviews, Design Changes, and Modifications at Permanently Shutdown
	Reactors

#### LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

#### Opened/Closed

None

#### Discussed

None

#### LIST OF ACRONYMS

ADAMS Agencywide Documents Access and Management System

CFR Code of Federal Regulations

CSLC California State Lands Commission

DQAP Decommissioning Quality Assurance Plan

DSAR Defueled Safety Analysis Report

EAL Emergency Action Level
ECP Employee Concern Program
IOEP ISFSI-Only Emergency Plan

ISFSI Independent Spent Fuel Storage Installation

NRC Nuclear Regulatory Commission

PSDAR Post-Shutdown Decommissioning Activities Report

QA Quality Assurance

SCE Southern California Edison Company SDS SONGS Decommissioning Solutions

SDS QAP SONGS Decommissioning Solutions Quality Assurance Program

SFP Spent Fuel Pool

SONGS San Onofre Nuclear Generating Station

TS Technical Specification