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10 CFR 50.90

February 23, 2015

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

Subject: **Docket Nos. 50-361 and 50-362**
Response to a Request for Additional Information and Supplement 2 to Amendment Applications 266 and 251
Permanently Defueled Technical Specifications
San Onofre Nuclear Generating Station, Units 2 and 3

References: 1) Letter from T. J. Palmisano (SCE) to the U. S. Nuclear Regulatory Commission (NRC) dated March 21, 2014; Subject: Docket Nos. 50-361 and 50-362, Amendment Applications 266 and 251, Permanently Defueled Technical Specifications, San Onofre Nuclear Generating Station, Units 2 and 3 (ADAMS Accession No. ML14085A141)

2) Letter from T. J. Palmisano (SCE) to the NRC dated October 1, 2014; Subject: Docket Nos. 50-361 and 50-362, Supplement 1 to Amendment Applications 266 and 251, Permanently Defueled Technical Specifications, San Onofre Nuclear Generating Station, Units 2 and 3 (ADAMS Accession No. ML14280A264)

3) E-mail from T. Wengert (NRC) to A. Sterdis (SCE) dated December 11, 2014; Subject: SONGS – RAI RE: Permanently Defueled Technical Specifications License Amendment Request (TAC Nos. MF3774 and MF3775) (ADAMS Accession No. ML15033A052)

4) E-mail from T. Wengert (NRC) to A. Sterdis (SCE) dated January 23, 2015; Subject: SONGS – RAI RE: Permanently Defueled Technical Specifications License Amendment Request (TAC Nos. MF3774 and MF3775) (ADAMS Accession No. ML15042A394)

Dear Sir or Madam:

By letter dated March 21, 2014 (Reference 1), as supplemented by letter dated October 1, 2014 (Reference 2), Southern California Edison (SCE) submitted a License Amendment Request (LAR), consisting of Amendment Application Nos. 266 and 251, to Facility Operating License Numbers NPF-10 and NPF-15 for San Onofre Nuclear Generating Station (SONGS) Units 2 and 3, respectively. The LAR proposed to revise the Operating License and the associated Technical Specifications (TS) to reflect the permanent cessation of reactor operation for SONGS Units 2 and 3.

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NRR

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By e-mails dated December 11, 2014 (Reference 3) and January 23, 2015 (Reference 4), the NRC provided Requests for Additional Information (RAIs) regarding Reference 1. Enclosures 1 and 2 to this letter provide responses to the RAIs. As part of the RAI response provided in Enclosure 1, SCE has agreed to relocate the requirement of Technical Specification 5.7.1.7, "Hazardous Cargo Monitoring Report," to a licensee-controlled document, rather than deleting the same requirement. This change does not result in any changes to the proposed Technical Specifications pages of Reference 1. The responses in Enclosure 2 result in changes to the proposed Technical Specifications of Reference 1. The revised proposed Technical Specification pages are provided as a Supplement to Reference 1 and are included as attachments to Enclosure 2 to this letter.

The changes to the proposed Technical Specifications do not affect the conclusions of the No Significant Hazards Consideration or the Environmental Consideration provided in Reference 1.

There is one new regulatory commitment in the Enclosures to this letter. See Enclosure 3 for a description of the commitment.

If you have any questions or require any additional information, please contact Ms. Andrea Sterdis at (949) 368-9985.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 2/23/2015
(Date)

Sincerely,

FOR TJ

Enclosure 1: Response to NRC Request for Additional Information SBPB-01
Enclosure 2: Response to NRC Request for Additional Information STSB-01, -02, and -03
Enclosure 3: List of Regulatory Commitments

cc: M. L. Dapas, Regional Administrator, NRC Region IV
T. J. Wengert, NRC Licensing Project Manager, SONGS Units 2 & 3
R. L. Kellar, NRC Region IV, Branch Chief, Repository Spent Fuel Safety
S. Y. Hsu, California Department of Public Health, Radiologic Health Branch

ENCLOSURE 1

RESPONSE TO RAI SBPB-01

PROPOSED PERMANENTLY DEFUELED TECHNICAL SPECIFICATIONS

SAN ONOFRE UNITS 2 AND 3

RAI-SBPB-01:

Technical Specification 5.7.1.7 requires that the shipment of hazardous materials on nearby Interstate 5 and a railroad track be monitored and the results submitted to the NRC every three years. The regulatory basis for this requirement is from Title 10 of the Code of Federal Regulations (10 CFR) 100.10, "Factors to Be Considered when Evaluating Sites." This regulation required, in part, that the Commission consider factors such as the nature and inventory of radioactive materials contained in the facility, the safety features engineered into the facility, and the use characteristics of the site environs in determining the acceptability of the site.

Section 2.2.2.2 of the SONGS Updated Final Safety Analysis Report (UFSAR) described that the closest SONGS Units 2 and 3 safety-related structures to these transportation routes are the fuel handling buildings. This UFSAR Section also describes that the hazards considered on these transportation routes included toxic gases, asphixiants, explosives, and flammable materials.

The Section 3.2.14.2 of the Enclosure to the license amendment request states that the Hazardous Cargo Traffic Report required by TS 5.7.1.7 pertains only to an event postulated to occur in MODES 1 through 6. The NRC staff understands this statement is applicable to toxic gas and asphixiant effects on control room operators. However, the basis for the consideration of operating mode with respect to other cargo is not clear because the hazards considered include explosives, the fuel buildings are the nearest safety related structures to the transportation routes, and these structures contain a substantial inventory of spent fuel. Please clarify the basis for deletion of TS 5.7.1.7 by addressing the considerations described above that are required by 10 CFR 100.10.

SCE Response:

Upon further review, SCE agrees with the NRC that the scope of the hazards to be monitored by the Hazardous Cargo Monitoring Report is greater than toxic gas and asphyxiant gases and their effects on control room operators. As a result, there is a continuing need to monitor hazardous chemicals that are shipped in proximity to the San Onofre Nuclear Generating Station (i.e., on Interstate 5 and the railroad track).

SCE notes, however, that reporting requirements similar to the Hazardous Cargo Monitoring Report have largely been deleted from Standard Technical Specifications. For example, the reports listed in Section 5.6 of NUREG-1432, Revision 4, "Standard Technical Specifications, Combustion Engineering Plants," consist of reports that are either 1) specifically called out in Chapter 3.0 (Limiting Conditions for Operation) of the Standard Technical Specifications, such as the Post-Accident Monitoring Report or the Steam Generator Tube Inspection Report, or 2) are specifically required by regulation, such as the Annual Radiological Environmental Operating Report.

The philosophy behind removal of other reports from Chapter 5.0 of the Standard Technical Specifications is that the reports did not meet the threshold of 10 CFR 50.36(c) and would be re-located, as necessary, to licensee-controlled documents, such as a Technical Requirements Manual (TRM). SCE had previously proposed deletion of TS 5.7.1.7 as part of an Improved Technical Specifications Conversion (see ADAMS Accession No. ML11251A108) and additionally proposed a commitment (see ADAMS

Accession No. ML11251A112) to re-locate the requirement to licensee-controlled documents. This specific request had undergone NRC review through the RAI phase with no questions concerning the re-location when the permanent cessation of operations at San Onofre Units 2 and 3 was announced, and the request was subsequently withdrawn.

In similar fashion, SCE hereby revises its request to delete TS 5.7.1.7, "Hazardous Cargo Monitoring Report." Rather than deletion of the requirement, SCE proposes to delete the requirement from Technical Specifications and re-locate the requirement to licensee-controlled documents, and provides the following commitment:

> Prior to implementation of Permanently Defueled Technical Specifications, SCE will ensure licensee-controlled documents are in place to require the continuing performance of the Hazardous Cargo Traffic Report. The report will include hazardous cargo traffic on Interstate 5 and the adjacent railway line and be submitted to the NRC regional administrator every three years.

Because the revised request still results in removal of the requirement from the Technical Specifications, there is no change to the proposed pages provided as part of SCE's original submittal. No revision to the proposed pages is necessary or provided as part of this submittal.

ENCLOSURE 2

RESPONSE TO NRC REQUEST FOR ADDITIONAL INFORMATION STSB-01, -02, AND -03

PROPOSED PERMANENTLY DEFUELED TECHNICAL SPECIFICATIONS

SAN ONOFRE UNITS 2 AND 3

RAI-STSB-01:

The proposed change in the BACKGROUND section of TS 1.3, "Completion Times," replaces the wording "operation of the unit," with "storage of ***irradiated*** fuel" (emphasis added). The APPLICABILITY for the renumbered Limiting Condition for Operation (LCO) 3.1.3, "Spent Fuel Assembly Storage," states, "Whenever ***any*** fuel assembly is stored in the fuel storage pool" (emphasis added).

Please resolve this apparent discrepancy in wording and ensure that the Permanently Defueled Technical Specifications (PDTS) are consistent with your proposed resolution to the RAI.

SCE Response:

SCE reviewed all three LCOs being maintained (LCOs 3.1.1, 3.1.2, and 3.1.3) in the Permanently Defueled Technical Specifications (PDTS) and confirmed the Applicability for each of the three LCOs is not limited to irradiated fuel assemblies, but is for any fuel assembly. Therefore, the proposed TS 1.3 Background Section will be modified to state "storage of fuel assemblies" in lieu of the current wording of "storage of irradiated fuel." The revised markups and clean typed pages are provided in Attachments A, B, and C to this Enclosure.

RAI-STSB-02:

In renumbered TS 3.1.3, "Spent Fuel Assembly Storage," proposed renumbered Surveillance Requirement (SR) 3.1.3.1 states the following:

> Verify by administrative means the initial enrichment, burnup, and cooling time of the fuel assembly in accordance with LCO 3.1.3 or Design Features 4.3.1.1, or LCS 4.0.100. Rev 2, dated 09/27/07.

For clarity, the NRC staff requests the licensee to define the abbreviation for Licensee Controlled Specification (LCS) in this section, since it is used for the first time in this LCO of the PDTS.

SCE Response:

SCE will define the term LCS in proposed SR 3.1.3.1. In addition, SCE noted that Unit 3 SR 3.7.18.1 (proposed SR 3.1.3.1) inadvertently referenced LCS 4.3.100, not LCS 4.0.100. This typographical error will also be corrected. The revised markups and clean typed pages are provided in Attachments A, B, and C to this Enclosure.

RAI-STSB-03:

In renumbered TS 3.1.3, "Spent Fuel Assembly Storage," the Frequency for the renumbered SR 3.1.3.1 states the following:

> Prior to moving a fuel assembly to any spent fuel pool storage location.

With the docketing of the certification for permanent removal of fuel from the reactor vessel to the spent fuel storage location, there should not be any movement of a fuel assembly into the spent fuel pool. Please explain how the specified Frequency applies to SR 3.1.3.1.

SCE Response:

Proposed LCO 3.1.3 ensures that any fuel assemblies stored in the spent fuel storage pool are within the criticality safety analysis assumptions. That is, as stated in the LCO section of the Bases, the LCO requirements ensure that k_{eff} of the spent fuel storage pool will remain < 1.00 under normal, non-accident conditions assuming the pool is flooded with unborated water and $\leq$ 0.95 under normal, non-accident conditions assuming the pool is flooded with borated water with a maximum soluble boron concentration of 970 parts per million (ppm). The k_{eff} of the spent fuel pool will always remain $\leq$ 0.95 under accident conditions assuming the pool to be flooded with borated water with a minimum soluble boron concentration of 1700 ppm. The purpose of TS SR 3.7.18.1 (proposed TS SR 3.1.3.1) is to ensure this requirement will be met at all times. Therefore, before moving any fuel assembly to a new location within the pool, the SR requires verification that the LCO will be met with the fuel assembly at the new location.

There is no expectation of movement of irradiated fuel into the spent fuel storage pool. The Surveillance Frequency applies to any movement of any fuel assembly within the pool. The Surveillance would be applicable to the initial placement of spent fuel assemblies into the pool or movement of a fuel assembly from one location to another. If fuel assemblies are never moved within the pool in the future, then there is no need to re-confirm the LCO is being met. The LCO requirements were verified before each fuel assembly was moved to its current location. Furthermore, the current Frequency for the SR is not being changed by the proposed amendment. The proposed Surveillance Frequency was previously approved by the NRC as being acceptable.

Therefore, it is SCE's position that the current and proposed Frequency for this SR is appropriate and ensures the LCO requirements are being met.

ATTACHMENT A

Replacement Pages
Proposed Permanently Defueled Technical Specifications, Markup
San Onofre Nuclear Generating Station (SONGS), Unit 2

1.0 USE AND APPLICATION

1.3 Completion Times

PURPOSE

The purpose of this section is to establish the Completion Time convention and to provide guidance for its use.

storage of fuel assemblies

BACKGROUND

Limiting Condition for Operation (LCOs) specify minimum requirements for ensuring safe ~~operation of the unit~~. The ACTIONS associated with an LCO state Conditions that typically describe the ways in which the requirements of the LCO can fail to be met. Specified with each stated Condition are Required Action(s) and Completion Time(s).

DESCRIPTION

The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the time of discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the ~~unit~~ is in a ~~MODE or~~ specified condition stated in the Applicability of the LCO. Required Actions must be completed prior to the expiration of the specified Completion Time. An ACTIONS Condition remains in effect and the Required Actions apply until the Condition no longer exists or the ~~unit~~ is not within the LCO Applicability.

facility

facility

~~If situations are discovered that require entry into more than one Condition at a time within a single LCO (multiple Conditions), the Required Actions for each Condition must be performed within the associated Completion Time. When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the time of discovery of the situation that required entry into the Condition.~~

~~Once a Condition has been entered, subsequent trains, subsystems, components, or variables expressed in the Condition, discovered to be inoperable or not within limits, will not result in separate entry into the Condition, unless specifically stated. The Required Actions of the Condition continue to apply to each additional failure, with Completion Times based on initial entry into the Condition.~~

(continued)

3.1
~~3.7~~ PLANT SYSTEMS
3.1.3
~~3.7.18~~ Spent Fuel Assembly Storage
3.1.3

LCO ~~3.7.18~~ The combination of initial enrichment and burnup of each SONGS 2 and 3 spent fuel assembly stored in Region I shall be within the acceptable burnup domain of Figure ~~3.7.18-1~~ or Figure ~~3.7.18-2~~, or the fuel assembly shall be stored in accordance with Technical Specification 4.3.1.1.

3.1.3-1
3.1.3-2

The combination of initial enrichment and burnup of each SONGS 2 and 3 spent fuel assembly stored in Region II shall be within the acceptable burnup domain of Figure ~~3.7.18-3~~ or Figure ~~3.7.18-4~~, or the fuel assembly shall be stored in accordance with Technical Specification 4.3.1.1.

3.1.3-3
3.1.3-4

Each SONGS 1 uranium dioxide spent fuel assembly stored in Region II shall be stored in accordance with Technical Specification 4.3.1.1.

APPLICABILITY: Whenever any fuel assembly is stored in the fuel storage pool.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Requirements of the LCO not met.	A.1 ~~--------NOTE---------~~ ~~LCO 3.0.3 is not applicable.~~ ~~----------~~ Initiate action to bring the noncomplying fuel assembly into compliance.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR ~~3.7.18.1~~	Verify by administrative means the initial enrichment, burnup, and cooling time of the fuel assembly are in accordance with LCO ~~3.7.18~~, or Design Features 4.3.1.1, or ~~LCS~~ 4.0.100. Rev 2, dated 09/27/07.	Prior to moving a fuel assembly to any spent fuel pool storage location.

3.1.3.1
3.1.3

Licensee Controlled Specification (LCS)

ATTACHMENT B

Replacement Pages
Proposed Permanently Defueled Technical Specifications, Markup
San Onofre Nuclear Generating Station (SONGS), Unit 3

1.0 USE AND APPLICATION

1.3 Completion Times

PURPOSE

The purpose of this section is to establish the Completion Time convention and to provide guidance for its use.

storage of fuel assemblies

BACKGROUND

Limiting Condition for Operation (LCOs) specify minimum requirements for ensuring safe ~~operation of the unit.~~ The ACTIONS associated with an LCO state Conditions that typically describe the ways in which the requirements of the LCO can fail to be met. Specified with each stated Condition are Required Action(s) and Completion Time(s).

DESCRIPTION

The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the time of discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the ~~unit~~ is in a ~~MODE or~~ specified condition stated in the Applicability of the LCO. Required Actions must be completed prior to the expiration of the specified Completion Time. An ACTIONS Condition remains in effect and the Required Actions apply until the Condition no longer exists or the ~~unit~~ is not within the LCO Applicability.

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facility

~~If situations are discovered that require entry into more than one Condition at a time within a single LCO (multiple Conditions), the Required Actions for each Condition must be performed within the associated Completion Time. When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the time of discovery of the situation that required entry into the Condition.~~

~~Once a Condition has been entered, subsequent trains, subsystems, components, or variables expressed in the Condition, discovered to be inoperable or not within limits, will not result in separate entry into the Condition, unless specifically stated. The Required Actions of the Condition continue to apply to each additional failure, with Completion Times based on initial entry into the Condition.~~

(continued)

3.1.3

3.1

~~3.7~~ PLANT SYSTEMS

3.1.3

~~3.7.18~~ Spent Fuel Assembly Storage

3.1.3

LCO ~~3.7.18~~ The combination of initial enrichment and burnup of each SONGS 2 and 3 spent fuel assembly stored in Region I shall be within the acceptable burnup domain of Figure ~~3.7.18-1~~ or Figure ~~3.7.18-2~~, or the fuel assembly shall be stored in accordance with Technical Specification 4.3.1.1.

3.1.3-2

3.1.3-1

The combination of initial enrichment and burnup of each SONGS 2 and 3 spent fuel assembly stored in Region II shall be within the acceptable burnup domain of Figure ~~3.7.18-3~~ or Figure ~~3.7.18-4~~, or the fuel assembly shall be stored in accordance with Technical Specification 4.3.1.1.

3.1.3-4

3.1.3-3

Each SONGS 1 uranium dioxide spent fuel assembly stored in Region II shall be stored in accordance with Technical Specification 4.3.1.1.

APPLICABILITY: Whenever any fuel assembly is stored in the fuel storage pool.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Requirements of the LCO not met.	A.1 ~~--------NOTE---------~~ ~~LCO 3.0.3 is not applicable.~~ ~~----------~~ Initiate action to bring the noncomplying fuel assembly into compliance.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR ~~3.7.18.1~~	Verify by administrative means the initial enrichment, burnup, and cooling time of the fuel assembly are in accordance with LCO ~~3.7.18~~, or Design Features 4.3.1.1, or ~~LCS~~ ~~4.3~~.100. Rev 2, dated 09/27/07.	Prior to moving a fuel assembly to any spent fuel pool storage location.

3.1.3.1

3.1.3

0

Licensee Controlled Specification (LCS)

3.1.3-1

ATTACHMENT C

Replacement Pages
Proposed Permanently Defueled Technical Specifications, Clean
San Onofre Nuclear Generating Station (SONGS), Units 2 and 3

1.0 USE AND APPLICATION

1.3 Completion Times

PURPOSE	The purpose of this section is to establish the Completion Time convention and to provide guidance for its use.
BACKGROUND	Limiting Conditions for Operation (LCOs) specify minimum requirements for ensuring safe storage of fuel assemblies. The ACTIONS associated with an LCO state Conditions that typically describe the ways in which the requirements of the LCO can fail to be met. Specified with each stated Condition are Required Action(s) and Completion Time(s).
DESCRIPTION	The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the time of discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the facility is in a specified condition stated in the Applicability of the LCO. Required Actions must be completed prior to the expiration of the specified Completion Time. An ACTIONS Condition remains in effect and the Required Actions apply until the Condition no longer exists or the facility is not within the LCO Applicability.
EXAMPLE	The following example illustrates the use of Completion Times.

EXAMPLE 1.3-1

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Required Action and associated Completion Time not met.	B.1 Verify . . . AND B.2 Restore . . .	6 hours 36 hours

Condition B has two Required Actions. Each Required Action has its own separate Completion Time. Each Completion Time is referenced to the time that Condition B is entered.

The Required Actions of Condition B are to perform the verification within 6 hours AND perform the restoration within 36 hours. A total of 6 hours is allowed for performing the verification and a total of 36 hours (not 42 hours) is allowed performing the restoration from the time that Condition B was entered. If verification is performed within 3 hours, the

3.1 PLANT SYSTEMS

3.1.3 Spent Fuel Assembly Storage

LCO 3.1.3 The combination of initial enrichment and burnup of each SONGS 2 and 3 spent fuel assembly stored in Region 1 shall be within the acceptable burnup domain of Figure 3.1.3-1 or Figure 3.1.3-2 or in accordance with Technical Specification 4.3.1.1.

The combination of initial enrichment and burnup of each SONGS 2 and 3 spent fuel assembly stored in Region II shall be within the acceptable burnup domain of Figure 3.1.3-3 or Figure 3.1.3-4, or in accordance with Technical Specification 4.3.1.1.

Each SONGS 1 uranium dioxide spent fuel assembly stored in Region II shall be stored in accordance with Technical Specification 4.3.1.1.

APPLICABILITY: Whenever any fuel assembly is stored in of the fuel storage pool.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Requirements of the LCO not met.	A.1 Initiate action to bring the noncomplying fuel assembly into compliance.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.1.3.1	Verify by administrative means the initial enrichment, burnup, and cooling time of the fuel assembly are in accordance with LCO 3.1.3, or Design Features 4.3.1.1, or Licensee Controlled Specification (LCS) 4.0.100. Rev 2, dated 09/27/07.	Prior to moving a fuel assembly to any spent fuel pool storage location

ENCLOSURE 3

LIST OF REGULATORY COMMITMENTS

PERMANENTLY DEFUELED TECHNICAL SPECIFICATIONS

SAN ONOFRE UNITS 2 AND 3

LIST OF REGULATORY COMMITMENTS

No.	Commitment	Due Date/Event
1	SCE will ensure licensee-controlled documents are in place to require the continuing performance of the Hazardous Cargo Traffic Report. The report will include hazardous cargo traffic on Interstate 5 and the adjacent railway line and be submitted to the NRC regional administrator every three years.	Prior to implementation of Permanently Defueled Technical Specifications