

November 10, 1999

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Subject: **Docket Nos. 50-361 and 50-362**
Pressurizer Heater Power Supply
Proposed Technical Specification Change NPF-10/15-510
San Onofre Nuclear Generating Station
Units 2 and 3

Gentlemen:

Enclosed are Amendment Application Numbers 192 and 177 to Facility Operating Licenses NPF-10 and NPF-15 for San Onofre Nuclear Generating Station Units 2 and 3 (SONGS 2 & 3), respectively. The amendment applications consist of Proposed Change Number (PCN) 510. PCN-510 revises Limiting Condition For Operation 3.4.9.b of Technical Specification (TS) 3.4.9, "Pressurizer," to delete the phrase stating that two groups of pressurizer heaters be "capable of being powered from an emergency power supply." This phrase was inappropriately retained in the SONGS 2 & 3 TS from the standard TS for Combustion Engineering plants.

The phrase regarding the capability of being powered from an emergency power supply is inappropriate because at SONGS 2 & 3, the relevant pressurizer heaters are always powered from class 1E buses. These words were intended for plants where the power supply can be switched between class 1E and non-class 1E sources. PCN-510 removes this inappropriate and unintended requirement.

Supporting documentation is contained in the enclosure, including, for information, a corresponding change to the TS 3.4.9 Bases.

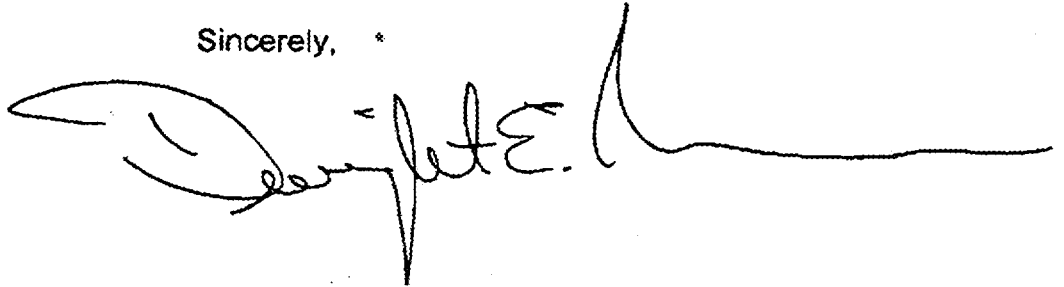
Southern California Edison (SCE) requests this amendment be issued on an exigent basis effective as of its date of issuance. Issuance of this change on an exigent basis will permit SCE to perform on-line maintenance of the SONGS 2 & 3 diesel generators scheduled to begin November 29, 1999. Explanation of the exigency appears in the enclosure.

Document Control Desk

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If you would like additional information regarding this amendment application, please let me know.

Sincerely, *

A handwritten signature in black ink, appearing to read "E. W. Merschoff", with a long horizontal line extending to the right.

Enclosure

cc: E. W. Merschoff, Regional Administrator, NRC Region IV
J. A. Sloan, NRC Senior Resident Inspector, San Onofre Units 2 and 3
L. Raghavan, NRC Project Manager, San Onofre Units 2 and 3
S. Y. Hsu, Department of Health Services, Radiologic Health Branch

ENCLOSURE

**DESCRIPTION AND NO SIGNIFICANT HAZARDS CONSIDERATIONS
OF PROPOSED CHANGE NUMBER**

**NPF-10/15-510
(PCN-510)**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN, CALIFORNIA)
EDISON COMPANY, ET AL. for a class 103)
License to Acquire, Possess, and Use)
a Utilization Facility as Part of)
Unit No. 2 of the San Onofre Nuclear)
Generating Station)

Docket No. 50-361
Amendment Application
No. 192

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10CFR50.90, hereby submit
Amendment Application No. 192. This amendment application consists of Proposed Change No. PCN-
510 to Facility Operating License NPF-10. PCN-510 is a request to revise Limiting Condition For
Operation 3.4.9.b to delete wording that pressurizer heaters be capable of being powered from an
emergency power supply.

Subscribed on this 10 day of November, 1999.

Respectfully Submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By: 

Dwight E. Nunn
Vice President

State of California
County of San Diego

On 11-10-99 before me, Deleise N. Collins, Notary Public

personally appeared Dwight E. Nunn, personally known to me (or
proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within
instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his
signature on the instrument the person, or the entity upon behalf of which the person acted, executed the
instrument.

WITNESS my hand and official seal.

Signature Deleise N. Collins



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN, CALIFORNIA)
EDISON COMPANY, ET AL. for a class 103)
License to Acquire, Possess, and Use)
a Utilization Facility as Part of)
Unit No. 3 of the San Onofre Nuclear)
Generating Station)

Docket No. 50-362
Amendment Application
No. 177

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10CFR50.90, hereby submit
Amendment Application No. 177. This amendment application consists of Proposed Change No. PCN-
510 to Facility Operating License NPF-15. PCN-510 is a request to revise Limiting Condition For
Operation 3.4.9.b to delete wording that pressurizer heaters be capable of being powered from an
emergency power supply.

Subscribed on this 10 day of November, 1999.

Respectfully Submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By: 

Dwight E. Nunn
Vice President

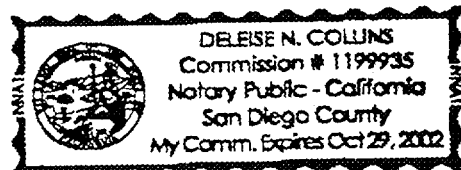
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personally appeared Dwight E. Nunn, personally known to me (or
proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within
instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his
signature on the instrument the person, or the entity upon behalf of which the person acted, executed the
instrument.

WITNESS my hand and official seal.

Signature Deleise N. Collins



**DESCRIPTION AND SAFETY ANALYSIS
OF PROPOSED CHANGE NPF-10/15-510
(PCN-510)**

PCN-510 is a request to revise Limiting Condition For Operation (LCO) 3.4.9.b of Technical Specification (TS) 3.4.9, " Pressurizer," for San Onofre Nuclear Generating Station Units 2 and 3 (SONGS 2 & 3), by deleting the phrase "and capable of being powered from an emergency power supply" with respect to the pressurizer heaters.

Existing Technical Specifications and Bases

Unit 2: See Attachment "A"

Unit 3: See Attachment "B"

Proposed TS and Bases, PCN 510 (redline and strikeout)

Unit 2: See Attachment "C"

Unit 3: See Attachment "D"

Proposed Technical Specifications and Bases, PCN 510

Unit 2: See Attachment "E"

Unit 3: See Attachment "F"

Description of Changes

SUMMARY:

PCN-510 is a request to revise LCO 3.4.9, which currently requires: "The pressurizer shall be OPERABLE with: ... b. Two groups of pressurizer heaters OPERABLE with the capacity of each group \geq 150 kW and capable of being powered from an emergency power supply." The phrase "and capable of being powered from an emergency power supply" was inappropriately retained from the Standard TS For Combustion Engineering Plants, NUREG-1432 (Reference 1), when SONGS 2 & 3 adopted the standard TS in 1996. PCN-510 requests deletion of this inappropriate phrase. Approval of PCN-510 will bring the SONGS 2 & 3 TS into conformance with Reference 1.

PCN-510 also includes for information a proposed corresponding change to the Bases for LCO 3.4.9.

Approval of PCN-510 on an exigent basis will enable Southern California Edison (SCE) to proceed with planned on-line maintenance of the emergency diesel generators.

1.0 BACKGROUND

As described in Section 5.4.10.2 of the Updated Final Safety Analysis Report for SONGS 2 & 3 (UFSAR) (Reference 3), the pressurizer for each Unit is designed to contain 30 immersion heaters, each heater having a nominal capacity of 50 kW at a nominal 480 vAC. The heaters are grouped into 8 banks. Two banks of heaters are connected to proportional controllers that adjust the heat input as required to compensate for steady-state losses and to maintain the desired reactor coolant pressure. The remaining 6 banks of backup heaters are connected to on-off controllers. These heaters, normally deenergized, are turned on automatically by either pressure or level error signals.

The proportional heater banks and 4 of the 6 backup heater banks are powered from non-safety-related buses. Power to each of the 2 remaining backup heater banks is from separate safety-related class 1E buses under all conditions. These buses are 2B04 and 2B06 for Unit 2, and 3B04 and 3B06 for Unit 3.

Since the pressurizer heater elements are non-safety grade, the two banks powered from class 1E buses are automatically isolated by safety injection actuation or emergency feedwater actuation signals. Power to the heaters is automatically disconnected to ensure that the safety grade power systems required for emergency core cooling and secondary cooling systems are not degraded. An operator override of the automatic disconnect is provided.

LCO 3.4.9.b requires that the two backup heater banks ("groups") powered from the 480 v class 1E buses be OPERABLE in MODEs 1, 2 and 3, with each group having a capacity of greater than or equal to 150 kW and capable of being powered from an emergency power supply. As stated in the TS Bases, the requirement to have two groups of heaters ensures that reactor coolant pressure can be maintained against heat losses to ambient. Safety analyses presented in the UFSAR do not take credit for pressurizer heater operation. Nevertheless, the need to maintain subcooling for the maintenance of natural circulation at hot standby conditions in the long term during loss of offsite power, as indicated in Section II.E.3.1, "Emergency Power Supply For Pressurizer Heaters," of NUREG-0737 (Reference 2), is the reason for their inclusion.

The requirement in Reference 2 is intended to keep the reactor coolant in a subcooled condition with natural circulation at hot, high pressure conditions for an undefined, but extended, time period after a loss of offsite power. While loss of offsite power is a coincident occurrence assumed in the accident analyses, maintaining hot, high pressure conditions over an extended time period is not evaluated in the accident analyses.

2.0 DISCUSSION

2.1 Standard Technical Specifications

Standard TS for Combustion Engineering plants are provided by NUREG-1432 (Reference 1). SONGS 2 & 3 adopted the standard TS in 1996 under Amendments 127 and 116 for Units 2 and 3, respectively.

The standard TS for pressurizer heaters include the phrase "...and capable of being powered from an emergency power supply" enclosed in square brackets, meaning that plant-specific information may be substituted. Also enclosed in square brackets is Surveillance Requirement (SR) 3.4.9.3: "[Verify required pressurizer heaters are capable of being powered from an emergency power supply.]" The Bases for this requirement are given in square brackets, and include the following: "[This SR is not applicable if the heaters are permanently powered by 1E power supplies.] In other words, the phrase only applies to those plants, SONGS 2 & 3 excluded, which have the design capability of switching heater power between class 1E and non-class 1E sources.

When Amendments 127 and 116 were issued for SONGS 2 & 3, SR 3.4.9.3 was (correctly) deleted. However, the bracketed phrase "[and capable of being powered from an emergency power supply]" was retained in LCO 3.4.9.b. The purpose of PCN-510 is to bring the SONGS 2 & 3 TS into agreement with NUREG-1432 by deleting this phrase.

This change to the TS will not result in a change to the design of the plant. These pressurizer heaters will continue to be powered from the 1E buses. Therefore, the requirements of NUREG-0737, item II.E.3.1, "Emergency Power Supply For Pressurizer Heaters," will continue to be satisfied.

2.2 Need For Exigent Review

From the time the standard TS were being developed for SONGS 2 & 3, SCE staff had understood the requirement for pressurizer heater power "capable of being powered from an emergency power supply" to mean "powered from a class 1E bus," on the reasonable grounds that: (1) the requirement in Reference 1 is intended to apply to plants other than SONGS 2 & 3 having pressurizer heater power supplies that may be switched between class 1E and non-class 1E sources; (2) the definition of OPERABLE specifically calls for "normal OR emergency power" [emphasis added]; and (3) the pre-1996 SONGS 2 & 3 TS specifically required power "from the 1E busses." Recent conversations with NRC staff have shown that these words can be interpreted to mean "from an OPERABLE diesel generator."

These conversations took place in November, 1999, in conjunction with planning for on-line maintenance of the diesel generators (DGs) scheduled to begin November 29, 1999. Prior to that time, SCE staff had been unaware of the alternate interpretation of the wording, and therefore could not have taken earlier corrective action to delete the phrase. Also, prior to the issuance of TS Amendments 141 (Unit 2) and 133 (Unit 3) on September 9, 1998, the allowed outage time for the DGs was 72 hours, the same as the pressurizer heaters, so that there has been no need for corrective action heretofore. The scheduled November, 1999 DG outages will be the first to utilize the extended 14 day allowed outage time since the issuance of Amendments 141 and 133.

Because planning for the DG outages is far advanced and the scheduled preventive maintenance is due, it is impractical to delay the scheduled maintenance while the NRC pursues the normal public notice process. Therefore, SCE is requesting NRC review and approval of PCN-510 on an exigent basis.

As explained above, SCE was unaware of the alternate interpretation of the phrase "capable of being powered from an emergency power supply," and is not creating an exigency to take advantage of the procedure available in 10 CFR 50.91(a)(6).

3.0 AMENDMENT PROPOSAL

Southern California Edison proposes to amend LCO 3.4.9.b from its present wording:

The pressurizer shall be OPERABLE with: ... b. Two groups of pressurizer heaters OPERABLE with the capacity of each group \geq 150 kW and capable of being powered from an emergency power supply.

The proposed revised wording is:

The pressurizer shall be OPERABLE with: ... b. Two groups of pressurizer heaters OPERABLE with the capacity of each group \geq 150 kW.

The proposed revised wording is consistent with NUREG-1432, "Standard Technical Specifications Combustion Engineering Plants" (Reference 1)

NO SIGNIFICANT HAZARDS CONSIDERATIONS:

The Commission has provided standards for determining whether a significant hazards consideration exists as stated in 10 CFR 50.92. A proposed amendment to a facility operating license involves no significant hazards consideration if operation of the facility in accordance with a proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously

evaluated; or (3) involve a significant reduction in a margin of safety. A discussion of these standards as they relate to this amendment request follows.

1. Will operation of the facility in accordance with this proposed change involve a significant increase in the probability or consequences of any accident previously evaluated?

Response: No

The proposed change would delete the phrase in Limiting Condition For Operation (LCO) 3.4.9.b that the pressurizer heaters be "capable of being powered from an emergency power supply." The Bases for Technical Specification 3.4.9 state that safety analyses presented in the Updated Final Safety Analysis Report do not take credit for pressurizer heater operation. Therefore, the consequences of any accident previously evaluated are not increased by the proposed change. The pressurizer heaters are not themselves a credible initiator of any accident, and the requested amendment makes no change to the heaters themselves, so the probability of an accident will not be increased. Therefore, the probability or consequences of any accident previously evaluated will not be increased by the proposed change.

2. Will operation of the facility in accordance with this proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

This amendment request does not involve any change to plant equipment or operation. It is a request to bring the Technical Specifications (TS) for San Onofre Nuclear Generating Station Units 2 and 3 (SONGS 2 & 3) into agreement with NUREG-1432, "Standard Technical Specifications Combustion Engineering Plants." Deleting the phrase "capable of being powered from an emergency power supply" will not create the possibility of a new or different kind of accident from any previously evaluated.

3. Will operation of the facility in accordance with this proposed change involve a significant reduction in a margin of safety?

Response: No

This amendment does not change the manner in which safety limits or limiting safety settings are determined. The Bases for TS 3.4.9 state that, while pressurizer heaters are needed to maintain subcooling in the long term to

maintain natural circulation of the reactor coolant after a loss of offsite power, maintaining hot, high pressure conditions over an extended time period is not evaluated in the accident analyses. The heaters will continue to be powered from class 1E buses under all conditions, as designed. SONGS 2 & 3 will continue to meet the requirements of section II.E.3.1, "Emergency Power Supply For Pressurizer Heaters," of NUREG-0737, "Clarification of TMI Action Plan Requirements." Therefore, the proposed change will not involve a significant reduction in a margin of safety.

ENVIRONMENTAL CONSIDERATION:

Southern California Edison has determined that the proposed Technical Specification change involves no changes in the amount or type of effluent that may be released offsite, and results in no increase in individual or cumulative occupational radiation exposure. As described above, the proposed TS amendment involves no significant hazards consideration and, as such, meets the eligibility criteria for categorical exclusion set forth in 10CFR51.22(c)(9).

REFERENCES:

- (1) NUREG-1432, "Standard Technical Specifications Combustion Engineering Plants"
- (2) NUREG-0737, "Clarification of TMI Action Plan Requirements"
- (3) Updated Final Safety Analysis Report for SONGS 2 & 3, Section 5.4.10.2