

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. 161

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10 CFR 50.90, hereby submit Amendment Application No. 161. This amendment application consists of Proposed Change Number NPF-10-468 to Facility Operating License NPF-10. Proposed Change Number NPF-10-468 is a request to change Unit 2 Amendment No. 127 approved Technical Specifications to implement Option B to Appendix J of 10 CFR Part 50, as modified by approved exemptions and Regulatory Guide 1.163, dated September, 1995. The affected sections are: Surveillance Requirement (SR) 3.6.1.1, SR 3.6.2.1, and SR 3.6.3.6.

Subscribed on this 30th day of May, 1996.

Respectfully Submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By:



Dwight E. Nunn

Vice President

State of California

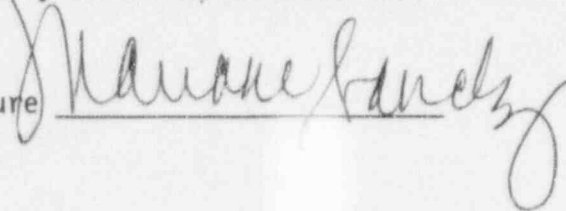
County of San Diego

On May 30, 1996 before me, Mariane Sanchez,  
personally appeared Dwight E. Nunn, personally known to

me 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



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. 145

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10 CFR 50.90, hereby submit Amendment Application No. 145. This amendment application consists of Proposed Change Number NPF-15-468 to Facility Operating License NPF-15. Proposed Change Number NPF-15-468 is a request to change the Unit 3 Amendment No. 116 approved Technical Specifications to implement Option B to Appendix J of 10 CFR Part 50, as modified by approved exemptions and Regulatory Guide 1.163, dated September, 1995. The affected sections are: Surveillance Requirement (SR) 3.6.1.1, SR 3.6.2.1, SR 3.6.3.6.

Subscribed on this 30th day of May, 1996.

Respectfully Submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By:

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Vice President

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County of San Diego

On May 30, 1996 before me, Mariane Sanchez,  
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me 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 Mariane Sanchez



ENCLOSURE 1

DESCRIPTION AND SAFETY ANALYSIS  
OF PROPOSED CHANGE NPF-10/15-468

## DESCRIPTION AND SAFETY ANALYSIS OF PROPOSED CHANGE NPF-10/15-468

Proposed Change Number (PCN) 468 is a request to implement Option B to Appendix J of 10 CFR Part 50, as modified by approved exemptions and Regulatory Guide 1.163, Performance-Based Containment Leak-Test Program, dated September, 1995, at San Onofre Nuclear Generating Station (SONGS) Units 2 and 3.

Unit 2 Amendment No. 127 and Unit 3 Amendment No. 116 Approved Technical Specifications

Unit 2: See Attachment "A"

Unit 3: See Attachment "B"

Proposed Technical Specifications

Unit 2: See Attachment "C"

Unit 3: See Attachment "D"

### **DESCRIPTION OF CHANGES:**

The proposed change is to allow implementation of the recently approved Option B to 10 CFR Part 50, Appendix J (Option B). This new rule allows for a performance-based option for determining the test frequency for containment leakage rate testing. This amendment request will change the SONGS Units 2 and 3 Technical Specifications (TSs) by replacing "Appendix J, as modified by approved exemptions" with "Appendix J, Option B, as modified by approved exemptions and Regulatory Guide 1.163, dated September, 1995." The affected TS sections are Surveillance Requirement (SR) 3.6.1.1, SR 3.6.2.1, and SR 3.6.3.6. The affected TS Basis sections are Basis (B) SR 3.0.2, B 3.6.1, B 3.6.2, B 3.6.3.6, and B 3.9.3; the changes to the Basis sections are included in Attachments A, B, C, and D for information only.

### **BACKGROUND:**

10 CFR Part 50, Appendix A, "General Design Criteria for Nuclear Power Plants," Criterion 16, "Containment Design" requires that "Reactor containment and associated systems shall be provided to establish an essentially leak-tight barrier against the uncontrolled release of radioactivity to the environment and to assure that the containment design conditions important to safety are not exceeded for as long as postulated accident conditions require." Further, 10 CFR Part 50.54(o) requires that "Primary reactor containments for water cooled power reactors shall be subjected to the requirements set forth in appendix J to this part." The purposes of the tests required by 10 CFR Part 50, Appendix J, as described in its Introduction, "are to assure that (a) leakage through the primary reactor containment and systems and components penetrating primary containment shall not exceed allowable leakage rate values as specified in the technical specifications or associated bases and (b) periodic surveillance of reactor containment penetrations and isolation valves is performed so that proper maintenance and repairs are made

during the service life of containment, and systems and components penetrating primary containment."

The Nuclear Regulatory Commission has recently amended 10 CFR Part 50, Appendix J to provide a performance-based option for leakage rate testing of containment. This new Option B may be adopted by licensees on a voluntary basis as a substitute for the requirements of 10 CFR Part 50, Appendix J, Option A. To implement the provisions of Option B, the Technical Specifications must be revised as required by 10 CFR Part 50, Appendix J, Option B, Section V.B.2.

## **DISCUSSION:**

The proposed TS change involves the replacement of the current, prescriptive method of leakage rate testing with a performance based approach for establishing the testing intervals recently allowed by the new Option B to Appendix J of 10 CFR Part 50. This new option will significantly reduce the amount of personnel exposure through the reduction of 10 CFR Part 50, Appendix J, Type A, B, and C testing with only a marginal, potential change in dose to the public. The longer testing intervals, as documented and approved by the NRC in NUREG-1493, Performance-Based Containment Leak-Test Program, result in an insignificant increase in the consequences of a malfunction of containment integrity.

The proposed TS changes will result in increased intervals between containment leakage rate tests determined through a performance based approach. The interval between such tests is not related in any way to conditions which cause accidents, and plant structures, systems, and components will not be operated in a different manner as a result of the proposed TS change.

Containment leakage may result from accidents which are evaluated in the Updated Final Safety Analysis Report. The proposed TS changes may result in an acceptably small increase in post-accident containment leakage. This increase is calculated as a statistical expectation using the probability that leakage through a penetration will exceed the administrative limit and through the increased time needed to detect such excess leakage. NUREG-1493, which is the technical basis for 10 CFR Part 50, Appendix J, Option B, contains a detailed evaluation of the expected leakage and its consequences.

The change in risk due to the lengthening of the intervals between Type A, B, and C leakage rate tests is also evaluated in NUREG-1493. Using a statistical approach, NUREG-1493 determined that the theoretical increase in expected dose to the public resulting from extending the testing interval is extremely small. NUREG-1493 concluded that such a small theoretical increase is justifiable due to the real benefits which accrue from interval extension.

The primary benefit is the reduction in occupational exposure. The reduction, on a per person basis, is orders of magnitude greater than the small, theoretical increase in dose to the public which is statistically derived using conservative assumptions.



Since no change in the way that plant structures, systems, or components will be operated is being proposed, the proposed change will not affect the probability of previously evaluated accidents or malfunctions of equipment important to safety. No new failure modes or accident initiators will be introduced by the proposed change, therefore, the possibility of accidents or malfunctions of a different type are not created.

#### **SAFETY ANALYSIS:**

The proposed change described above shall be deemed to involve a significant hazards consideration if there is any positive finding in any one of the following areas.

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

Response: No.

Since the interval between containment leakage rate tests is not related in any way to conditions which cause accidents, and plant structures, systems, and components will not be operated in a different manner as a result of the proposed Technical Specification (TS) change, the proposed changes will not increase the probability of an accident previously evaluated.

Containment leakage may result from accidents which are evaluated in the Updated Final Safety Analysis Report. The proposed TS changes may result in an acceptably small increase in post-accident containment leakage. Using a statistical approach, NUREG-1493 determined that the increase in hypothetical dose to the public resulting from extending the testing interval is extremely small. NUREG-1493 concluded that such small hypothetical dose increases to the public are justifiable due to the real reduction in occupational exposure resulting from interval extension. Therefore, the proposed change does not significantly increase the consequences of an accident previously evaluated.

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

The proposed change only incorporates the performance based approach for containment leak rate testing authorized in the new Option B to Appendix J of 10 CFR Part 50. The interval extensions allowed, through this approach, do not have the potential for creating the possibility of new or different kinds of accidents from those previously evaluated because plant structures, systems, and components will not be operated in a different manner as a result of the TS change and, therefore, will not introduce any new or different failure modes or initiators. Therefore the proposed change does not create the possibility of a new or different kind of accident from any accident 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

The proposed Technical Specification does not alter the allowable containment leakage rate. The proposed change replaces the current, prescriptive testing requirements with a new performance based approach for establishing the testing intervals. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

**SAFETY AND SIGNIFICANT HAZARDS DETERMINATION:**

Based on the above Safety Analysis, it is concluded that: (1) the proposed change does not constitute a significant hazards consideration as defined by 10 CFR 50.92; and (2) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed change. Moreover, because this action does not involve a significant hazards consideration, it will also not result in a condition which significantly alters the impact of the station on the environment as described in the NRC Final Environmental Statement.

ATTACHMENT A

UNIT 2 AMENDMENT NO. 127

APPROVED TECHNICAL SPECIFICATIONS