

October 24, 2001

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

Subject: **Docket Nos. 50-361 and 50-362**  
**Supplement 1 to Proposed Technical Specification**  
**Change Number NPF-10/15-519**  
**Ventilation Filter Testing Program Clarification**  
**San Onofre Nuclear Generating Station Units 2 and 3**

Reference: Letter dated March 21, 2001 from D. E. Nunn (SCE) to Document Control Desk (USNRC). Subject: Docket Nos. 50-361 and 50-362, Proposed Technical Specification Change Number NPF-10/15-519, Ventilation Filter Testing Program Clarification, San Onofre Nuclear Generating Station, Units 2 and 3

Gentlemen:

Enclosed is Supplement 1 to Amendment Application Number 202 to Facility Operating License NPF-10, and Amendment Application Number 187 to Facility Operating License NPF-15, for the San Onofre Nuclear Generating Station, Units 2 and 3, respectively. The Amendment Applications consist of Proposed Technical Specification Change Number (PCN)-519.

Supplement 1 completely supersedes the original Amendment Application Number 202 to Facility Operating License NPF-10, and Amendment Application Number 187 to Facility Operating License NPF-15, for the San Onofre Nuclear Generating Station, Units 2 and 3, respectively. In particular, Technical Specification (TS) section 5.5.2.12, "Ventilation Filter Testing Program," will be modified by replacing the references to the ASME Code to ANSI N510-1975. In addition, specific temperature and relative humidity for laboratory testing of charcoal adsorber samples will be included and a Note clarifying HEPA filter testing will be included in the proposed change.

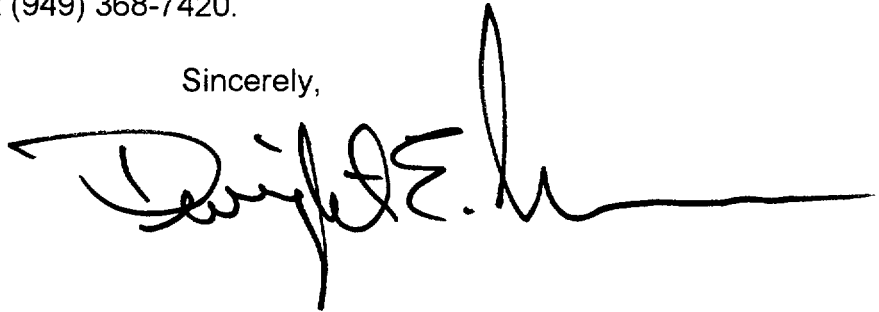
AD 01

October 24, 2001

Southern California Edison requests these amendments be issued effective as of the date of issuance, to be implemented within 30 days from the date of issuance.

If you have any questions regarding these amendment applications, please contact me or Mr. Jack L. Rainsberry at (949) 368-7420.

Sincerely,

A handwritten signature in black ink, appearing to read "David E. L.", with a long horizontal flourish extending to the right.

Attachments:

- Attachment 1 – Supplement 1 to Amendment Applications No. 202 and 187
- Attachment 2 – Licensee's Evaluation
- Attachment 3 – Existing Technical Specification Pages, Unit 2
- Attachment 4 – Existing Technical Specification Pages, Unit 3
- Attachment 5 – Proposed Technical Specification Pages  
(Redline & Strikeout Version), Unit 2
- Attachment 6 – Proposed Technical Specification Pages  
(Redline & Strikeout Version), Unit 3
- Attachment 7 – Proposed Technical Specification Pages (Retyped Version), Unit 2
- Attachment 8 – Proposed Technical Specification Pages (Retyped Version), Unit 3

cc:

E. W. Merschoff, Regional Administrator, NRC Region IV  
M. L. Scott, NRC Project Manager, San Onofre Units 2, and 3  
C. C. Osterholtz, NRC Senior Resident Inspector, San Onofre Units 2 and 3  
S.Y. Hsu, Department of Health Services, Radiologic Health Branch

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  
Supplement 1 to Amendment  
Application No. 202

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10CFR50.90, hereby  
submit Supplement 1 to Amendment Application No. 202. This Supplement 1 to  
amendment application consists of clarifications to Proposed Change No. PCN-519 to  
Facility Operating License NPF-10. PCN-519 is a request to revise Technical  
Specification (TS) 5.5.2.12, "Ventilation Filter Testing Program (VFTP)."

Subscribed on this 23rd day of October, 2001.

Respectfully Submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

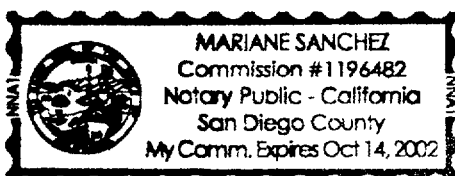
By: [Signature]  
Dwight E. Nunn  
Vice President  
Engineering and Technical Services

State of California  
County of San Diego

On 10/23/01 before me, Mariane Sanchez,

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

WITNESS my hand and official seal.



Signature [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  
Supplement 1 to Amendment  
Application No. 187

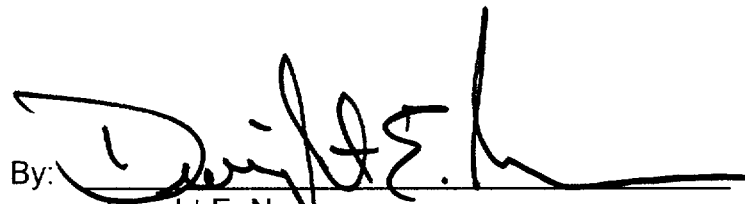
SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10CFR50.90,  
hereby submit Supplement 1 to Amendment Application No. 187. This Supplement 1 to  
amendment application consists of clarifications to Proposed Change No. 519 to  
Facility Operating License NPF-15. PCN-519 is a request to revise Technical  
Specification (TS) 5.5.2.12, "Ventilation Filter Testing Program (VFTP)."

Subscribed on this 23rd day of October, 2001.

Respectfully Submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By:

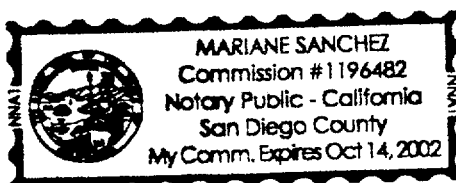
  
Dwight E. Nunn  
Vice President  
Engineering and Technical Services

State of California  
County of San Diego

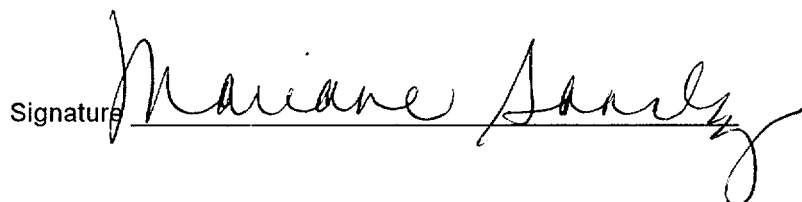
On 10/23/01 before me, Mariane Sanchez,

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

WITNESS my hand and official seal.



Signature



**LICENSEE'S EVALUATION**

- 1.0 INTRODUCTION**
- 2.0 DESCRIPTION OF PROPOSED AMENDMENT**
- 3.0 BACKGROUND**
- 4.0 REGULATORY REQUIREMENTS & GUIDANCE**
- 5.0 TECHNICAL ANALYSIS**
- 6.0 REGULATORY ANALYSIS**
- 7.0 NO SIGNIFICANT HAZARDS CONSIDERATION**
- 8.0 ENVIRONMENTAL CONSIDERATION**
- 9.0 PRECEDENT**
- 10.0 REFERENCES**

## **1.0 INTRODUCTION**

This letter is a request to amend Operating Licenses NPF-10 and NPF-15 for the San Onofre Nuclear Generating Station Units 2 and 3 (SONGS 2&3), respectively.

The purpose of this request is to revise the San Onofre Nuclear Generating Station Units 2 and 3 Technical Specifications (TSs), Section 5.5.2.12, "Ventilation Filter Testing Program (VFTP)."

## **2.0 DESCRIPTION OF PROPOSED AMENDMENT**

Southern California Edison (SCE) is requesting a change to the operating licenses for the San Onofre Nuclear Generating Station Units 2&3 to change the referenced standard from the ASME N510-1989 to ANSI N510-1975 to more accurately describe the design and surveillance testing of the facility.

## **3.0 BACKGROUND**

The proposed change will remove the reference to Regulatory Guide RG 1.52, Revision 2, and ASME N510-1989 from the first paragraph of TS 5.5.2.12. The proposed change will modify the reference to ASME Code in subsection 5.5.2.12.a, and 5.5.2.12.b. Specifically, the proposed change would change the reference to the ASME Code from ASME N510-1989 to ANSI N510-1975. This change is requested to ensure clarity of the methodology used to test Control Room Emergency Air Cleanup System (CREACUS) and Post-Accident Cleanup Filter System (PACU) High Efficiency Particulate Air (HEPA) filters. Although the test methodology is slightly different than that in ASME N510-1989, the acceptance criteria are the same and the current methodology is conservative.

Subsections 5.5.2.12.a and 5.5.2.12.b will be modified by including the reference to Note 1, concerning sample and injection points qualification for inplace testing of HEPA filters and charcoal adsorbers. Subsection 5.5.2.12.c will be modified by specifying relative humidity and temperature for laboratory testing of charcoal adsorber samples. Also, Note 1, concerning sample and injection points qualification for inplace testing of HEPA filters and charcoal adsorbers, will be included in TS 5.5.2.12. Based on the provisions of section 10.4 of ASME N510-1989, this Note also allows replacement of DOP with a suitable alternate. The reference to Regulatory Guide (RG) 1.52, Revision 2 and ASME N510-1989 in subsection 5.5.2.12.d will be deleted. RG 1.52, Revision 2 and ASME N510-1989 do not address pressure drop testing.

## **4.0 REGULATORY REQUIREMENTS & GUIDANCE**

Regulatory Guide 1.52, "Design, Inspection, and Testing Criteria for Air Filtration and Adsorption Units of Post-Accident Engineered-Safety-Feature Atmosphere Cleanup Systems in Light-Water-Cooled Nuclear Power Plants," gives guidance for testing of the equipment in the VFTP.

ANSI N510-1975 provides specific guidance for testing of HEPA and charcoal filters. This was the standard in place at the time of initial licensing of San Onofre 2&3. ASME N510-1989 is a later version of this standard.

ASTM D3803-1989 provided specific guidance for the testing of charcoal filters using Dioctyle Phthalate (DOP) testing.

## **5.0 TECHNICAL ANALYSIS**

Technical Specification (TS) 3.7.11, "Control Room Emergency Air Cleanup System (CREACUS)" Surveillance Requirement (SR) 3.7.11.2 and TS 3.7.14, "Fuel Handling Building Post-Accident Cleanup Filter System (PACU)," SR 3.7.14.2 require CREACUS and PACU filter testing "in accordance with the Ventilation Filter Testing Program (VFTP)." The requirement to have a VFTP is established in TS 5.5.2.12, "Ventilation Filter Testing Program (VFTP)."

TS 5.5.2.12 indicates that certain aspects of the filter testing shall be in accordance with Regulatory Guide RG 1.52, Revision 2 and ASME N510-89. In particular, the first paragraph of the section 5.5.2.12 reads:

"This Program establishes the required testing of the Engineered Safety Feature filter ventilation systems, "Control Room Emergency Air Cleanup System" and "Fuel Handling Building Post-accident Cleanup Filter System," in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989. The frequency of testing shall be in accordance with Regulatory Guide 1.52, Revision 2. As a minimum the VFTP program shall include the following:"

Section 5.5.2.12.a states:

"Inplace testing of the high efficiency particulate air (HEPA) filters to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989; and,"

Section 5.5.2.12.b states:

"Inplace testing of the charcoal adsorber to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989; and"

Section 5.5.2.12.c states:

"Laboratory testing of charcoal adsorber samples obtained in accordance with Regulatory Guide 1.52, Revision 2 and tested at the appropriate temperature and relative humidity in accordance with ASTM D3803-1989 to show acceptable methyl iodide penetration; and"

Section 5.5.2.12.d states:

"Testing to demonstrate the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers, when tested at the appropriate system flowrate, is acceptable in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989."

This VFTP is documented in SONGS Units 2 and 3 procedure SO23-V-9. As described in SO23-V-9, Revision 1, section 6.3.1, the CREACUS units HEPA filters are currently tested to ANSI N510-1975. The VFTP Dioctyle Phthalate (DOP) leak test methodology satisfies the requirements of ANSI N510-1975, which was the current standard during plant startup. During that era of DOP testing, the DOP generator flow rates were lower than can be achieved today, thus requiring the use of the Alternate Shroud Method for large flow rate units such as the CREACUS. Accordingly, the HEPA filters were tested using the Alternate Shroud Method (a.k.a. "Shroud Method") for testing individual filters or groups of filters, as permitted by ANSI N510-1975, Section 10.6.

Due to advances in DOP generator technology, beginning in 1980, the Shroud Method was omitted from ASME N510-1980, and later versions of N510: ASME/ANSI N510-1980 and ASME N510-1989, since it was no longer necessary as the high DOP generation rates needed for high flow rate units had become available. However, SONGS has continued to use the more conservative ANSI N510-1975 standard, which tests individual filters (or groups of filters), as opposed to testing the entire bank permitted by the ASME N510-1989 standard. As both methods use the same acceptance criteria, the 1975 standard is actually more conservative. That is, if all the filters in the bank pass the 0.05% acceptance criterion, the entire bank is therefore going to pass the 0.05% criterion as well.

Section 10 of ANSI N510-1975 provides the HEPA testing method for acceptance and surveillance tests. The downstream sample point should be a representative single sample point. If a single downstream sample is not achievable, then the Multiple Sampling Technique (Section 11 of ANSI N510-1975) should be used. An Alternate Shroud Test is also included in this section. It can be used provided that a satisfactory housing leak test and frame leak test have been made. The Shroud Test tests each filter or group of filters individually rather than the entire bank.

Section 10 of ASME N510-1989 provides the methodology to test a HEPA filter bank. The single point downstream sample points shall be downstream of a fan, or downstream sample manifolds shall be qualified per ASME N509. This section of the 1989 Standard does not have the "Alternate Shroud Test." The code also recognizes that there is a potential that DOP can be replaced in the future thus providing a clause in Section 10.4 "Apparatus" to allow a suitable alternate.

The principal reason to continue using the 1975 standard is that the entire bank would require performing an Air-Aerosol Mixing Uniformity Test, which is unnecessary if individual filters are tested. This would require an extensive backfit of a distribution plenum to enable this testing. This is not necessary since the existing system and test methods adequately demonstrate system Operability.



The PACU units were qualified to and are tested to ANSI N510-1975. The original startup tests used the methodology outlined in ANSI N510-1975 to qualify the current test method. In particular, the PACU in-place HEPA filter testing methodology employed at SONGS has a downstream sampling point location which differs from the location suggested in ASME N510-1989. ASME N510-1989 specifies new methods of doing the testing. These new methods would require installation of new equipment and qualification of new test points which are currently not part of the SONGS design. While the testing is currently performed per the 1975 version of ANSI N510, the results satisfy the scope and intent of the 1989 version of this Code. The proposed change will modify the version of ASME/ANSI Code N510 from 1989 to 1975 in subsections 5.5.2.12.a and 5.5.2.12.b to reflect the established plant practice in testing HEPA filters for CREACUS and PACU units. It will also reference Note 1, concerning sample and injection points qualification for inplace testing of HEPA filters and charcoal adsorbers for CREACUS and PACU. Note 1 will also specify that HEPA filters testing may be conducted with a suitable alternate to DOP aerosol. This is based on the provisions of Section 10.4.1 of ASME N510-1989.

The proposed version of the first paragraph of TS 5.5.2.12 reads:

"This Program establishes the required testing of the Engineered Safety Feature filter ventilation systems, "Control Room Emergency Air Cleanup System" and "Fuel Handling Building Post-accident Cleanup Filter System." The frequency of testing shall be in accordance with Regulatory Guide 1.52, Revision 2. As a minimum the VFTP program shall include the following:"

The proposed version of section 5.5.2.12.a reads:

"Inplace testing of the high efficiency particulate air (HEPA) filters to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1975 (see Note 1); and"

The proposed version of section 5.5.2.12.b reads:

"Inplace testing of the charcoal adsorber to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1975 (see Note 1); and"

Section 5.5.2.12.c will be modified by clarifying temperature and relative humidity values for laboratory testing of charcoal adsorbers. It will also make it clear that the charcoal adsorber samples will be obtained in accordance with RG 1.52, Revision 2; and will be tested per the methodology of ASTM D3803-1989 at 30°C and 70% relative humidity to show acceptable methyl iodide penetration. In 1999, the NRC issued Generic Letter 99-02, "Laboratory Testing of Nuclear-Grade Activated Charcoal," in which it requested that all addressees determine

whether their technical specifications reference ASTM D3803-1989 for charcoal filter laboratory testing. In its response to the NRC (September 29, 1999), SCE emphasized that charcoal adsorber samples are tested per the methodology of ASTM D3803-1989 at the appropriate temperature and relative humidity, which were specified as 30°C and 70%.

The proposed version of section 5.5.2.12.c reads:

“Laboratory testing of charcoal adsorber samples obtained in accordance with Regulatory Guide 1.52, Revision 2 and tested per the methodology of ASTM D3803-1989 at 30°C and 70% relative humidity to show acceptable methyl iodide penetration; and”

Section 5.5.2.12.d will be modified by deleting the references to RG 1.52, Revision 2, and ASME N510-1989. There are no requirements for pressure drop test across combined HEPA filters, the prefilters, and the charcoal adsorbers in RG 1.52, Revision 2 and ASME N510-1989.

The proposed version of section 5.5.2.12.d reads:

“Testing to demonstrate the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers, when tested at the appropriate system flowrate.”

Section 5.5.2.12 will include Note 1, which reads:

“Sample and injection points shall be qualified per ANSI N510-1975 unless manifolds have been qualified per ASME N510-1989. HEPA testing will be conducted with DOP aerosol or suitable alternate.”

## **6.0 REGULATORY ANALYSIS**

San Onofre 2&3 were originally designed, constructed and licensed to ANSI N510-1975. The PACU units were qualified to and are tested to ANSI N510-1975. The original startup tests used the methodology outlined in ANSI N510-1975 to qualify the current test method. In particular, the PACU in-place HEPA filter testing methodology employed at SONGS has a downstream sampling point location which differs from the location suggested in ASME N510-1989. ASME N510-1989 specifies new methods of doing the testing. These new methods would require installation of new equipment and qualification of new test points which are currently not part of the SONGS design. While the testing is currently performed per 1975 version of ANSI N510, the results satisfy the scope and intent of the 1989 version of this Code.

The CREACUS units HEPA filters are currently tested to ANSI N510-1975. The VFTP Dioctyle Phthalate (DOP) leak test methodology satisfies the requirements of ANSI N510-1975, which was the current standard during plant construction. During that era of DOP testing, the DOP generator flow rates were lower than can be achieved today, thus requiring the use of the Alternate Shroud Method for large flow rate units such as the CREACUS. Accordingly, the HEPA filters were tested using the Alternate Shroud Method (a.k.a. "Shroud Method") for testing individual filters or groups of filters, as permitted by ANSI N510-1975, Section 10.6.

Due to advances in DOP generator technology, beginning in 1980, the Shroud Method was omitted from ASME N510-1980, and later versions of N510: ASME/ANSI N510-1980 and ASME N510-1989, since it was no longer necessary as the high DOP generation rates needed for high flow rate units had become available. However, SONGS has continued to use the more conservative ANSI N510-1975 standard, which tests individual filters (or groups of filters), as opposed to testing the entire bank permitted by the ASME N510-1989 standard. As both methods use the same acceptance criteria, the 1975 standard is actually more conservative. That is, if all the filters in the bank pass the 0.05% acceptance criterion, the entire bank is therefore going to pass the 0.05% criterion as well.

The proposed change will modify the version of ANSI Code N510 from 1989 to 1975 in subsections 5.5.2.12.a and 5.5.2.12.b to reflect the established plant practice in testing HEPA filters for CREACUS and PACU units. It will also reference Note 1, concerning sample and injection points qualification for inplace testing of HEPA filters and charcoal adsorbers for CREACUS and PACU. Based on the provisions of section 10.4 of ASME N510-1989, this Note also allows replacement of DOP with a suitable alternate.

Prior to conversion to the new Standard Technical Specifications (NUREG 1432 for Combustion Engineering facilities), the San Onofre 2&3 Technical Specifications referenced the 1975 version of ANSI N510. This change would restore the approved pre-conversion current licensing basis.

## **7.0 NO SIGNIFICANT HAZARDS CONSIDERATION**

The Commission has provided standards for determining whether a significant hazards consideration exists as stated in 10CFR50.92. A proposed amendment to an operating license for a facility 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 an accident previously evaluated?

Response: No.

The proposed change is to change the reference to ASME Code in subsection 5.5.2.12.a and 5.5.2.12.b from ASME N510-1989 to ANSI N510-1975. Technical Specification (TS) 3.7.11, "Control Room Emergency Air Cleanup System (CREACUS)", Surveillance Requirement (SR) 3.7.11.2 and TS 3.7.14, "Fuel Handling Building Post-Accident Cleanup Filter System (PACU)", SR 3.7.14.2 require CREACUS and PACU filter testing in accordance with the Ventilation Filter Testing Program (VFTP).

SONGS TS 5.5.12.a, "Ventilation Filter Testing Program," states that the in-place HEPA filter testing is performed in accordance with RG 1.52, Revision 2 and ASME N510-1989. The discrepancy arises because the HEPA filter testing method used at SONGS does not entirely meet the methodology which are delineated in ASME N510-1989. In particular, the CREACUS in-place HEPA filter testing uses a method (Alternate Shroud Test) which is no longer specified in ASME N510-1989. But this method is specified in ANSI N510-1975 and was used when the plant was licensed. In addition, the PACU in-place HEPA filter testing methodology which is employed at SONGS, has a downstream point location which differs from the location suggested in ASME N510-1989. ANSI N510-1975, while providing a suggestion where downstream sample could be located, nevertheless does not provide a specific location. The test acceptance criteria are the same for methods cited in ANSI N510-1975 and ASME N510-1989. The method which is employed at SONGS provides more conservative results because the test is performed on individual HEPA filters, which ensures that each of the HEPA filters in the tested bank meets the acceptance criteria, as compared to the method suggested in ASME N510-1989.

The locations of the PACU HEPA downstream sample points are different from the locations suggested in ASME N510-1989, though they meet the requirements delineated in ANSI N510-1975. ANSI N510-1975 requires that a single representative downstream sample point be established, if possible, at the location where adequate mixing may be achieved, or at a point downstream of a fan, or multiple downstream sampling points may be used (such as in the Alternate Shroud Technique used in the CREACUS system) if a single downstream sample point is not feasible.

Since the HEPA filters are tested to the same acceptance criteria, and the testing methodology is permitted by ANSI N510-1975, to which the plant was licensed, it is concluded, that the proposed change will not involve a significant increase in the probability or consequences of an accident previously evaluated.

Section 5.5.2.12.c will be modified by specifying the temperature and relative humidity for laboratory testing of charcoal adsorber samples. This modification clarifies that samples shall be obtained in accordance with RG 1.52, Revision 2, and tested per methodology of ASTM D3803-1989, at 30°C and relative humidity of 70%. This clarification eliminates possible misinterpretation of the current wording.

The proposed change will also include Note 1 which clarifies the inplace testing of charcoal adsorbers and HEPA filters. Based on the provisions of section 10.4 of ASME N510-1989, this Note allows replacement of DOP with a suitable alternate.

The proposed change also clarifies the statement of subsection 5.5.2.12.d. Pressure drop testing across combined HEPA filters, the prefilters, and the charcoal adsorbers is industry-wide practice which is based on good engineering practice and operating experience. This change will not increase the probability or consequences of an accident previously evaluated.

Therefore, the probability or consequences of an accident previously evaluated will not be increased by operating the facility in accordance with this 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.

The proposed change does not change the design or configuration of the plant. The proposed change is to change the reference to ASME Code in subsection 5.5.2.12.a and 5.5.2.12.b from ASME N510-1989 to ANSI N510-1975 to reflect the standard used. Section 5.5.2.12.c will be modified by specifying the temperature and relative humidity for laboratory testing of charcoal adsorber samples. This is done for clarification purposes. Also, subsection 5.5.2.12.d will be changed by deleting the references to RG. 1.52, Revision 2, and ASME N510-1989 regarding pressure drop test across HEPA filters. RG. 1.52, Revision 2 and ASME N510-1989 do not require pressure drop test across HEPA filters.

Therefore, this proposed change will not create the possibility of a new or different kind of accident from any accident that has been 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 change is to change the reference to ASME Code in subsections 5.5.2.12.a and 5.5.2.12.b from ASME N510-1989 to ASME N510-1975. The CREACUS units HEPA filters are currently tested to N510-1975. Although the test methodology is slightly different than that in N510-1989, the acceptance criteria are the same and the current methodology is conservative. Thus the current testing satisfies the acceptance criteria of N510-1989, even though the test method is different. Section 5.5.2.12.c will be clarified by specifying the temperature and relative humidity for laboratory testing of charcoal adsorber samples.

The current methodology for HEPA filter testing will not change as a result of the proposed change. Also, deletion of references to RG 1.52, Revision 2 and ASME N510-1989 from subsection 5.5.2.12.d clarifies this section because these standards do not require HEPA filters pressure drop test. Consequently, there is no change to the design or operation of the plant as a result of this change.

Therefore, the operation of the facility in accordance with this proposed change will not involve a significant reduction in a margin of safety.

## **8.0 ENVIRONMENTAL CONSIDERATION**

SCE has determined that the proposed amendment 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).

## **9.0 PRECEDENT**

SCE is not aware of any direct precedence for this request. This change would restore the approved pre-NUREG 1432-conversion licensing basis, so this facility's pre-conversion license is itself a precedent.

## **10.0 REFERENCES**

10.1 ANSI N510-1975

10.2 ASME N510-1989

**ATTACHMENT 3**

**SAN ONOFRE NUCLEAR GENERATING STATION  
PCN-519, SUPPLEMENT 1**

**EXISTING TECHNICAL SPECIFICATION PAGES  
UNIT 2**

## 5.5 Procedures, Programs, and Manuals (continued)

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### 5.5.2.11 Steam Generator Tube Surveillance Program (continued)

- 5.5.2.11.1 The inservice inspection may be limited to one SG on a rotating schedule encompassing 6% of the tubes if the results of the first or previous inspections indicate that all SGs are performing in a like manner. Note that under some circumstances, the operating conditions in one SG may be found to be more severe than those in the other SG. Under such circumstances the sample sequence shall be modified to inspect the most severe conditions.
- 5.5.2.11.2 The other SG not inspected during the first inservice inspection shall be inspected. The third and subsequent inspections should follow the instructions described in Specification 5.5.2.11.1 above.

### 5.5.2.12 Ventilation Filter Testing Program (VFTP)

This Program establishes the required testing of the Engineered Safety Feature filter ventilation systems, "Control Room Emergency Air Cleanup System" and "Fuel Handling Building Post-accident Cleanup Filter System," in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989. The frequency of testing shall be in accordance with Regulatory Guide 1.52, Revision 2. As a minimum the VFTP program shall include the following:

- a. Inplace testing of the high efficiency particulate air (HEPA) filters to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989; and
- b. Inplace testing of the charcoal adsorber to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989; and
- c. Laboratory testing of charcoal adsorber samples obtained in accordance with Regulatory Guide 1.52, Revision 2 and tested at the appropriate temperature and relative humidity in accordance with ASTM D3803-1989 to show acceptable methyl iodide penetration; and
- d. Testing to demonstrate the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers, when tested at the appropriate system flowrate, is acceptable in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989.

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**ATTACHMENT 4**

**SAN ONOFRE NUCLEAR GENERATING STATION  
PCN-519, SUPPLEMENT 1**

**EXISTING TECHNICAL SPECIFICATION PAGES  
UNIT 3**

5.5 Procedures, Programs, and Manuals (continued)

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5.5.2.11 Steam Generator (SG) Tube Surveillance Program (continued)

- 5.5.2.11.1 The inservice inspection may be limited to one SG on a rotating schedule encompassing 6% of the tubes if the results of the first or previous inspections indicate that all SGs are performing in a like manner. Note that under some circumstances, the operating conditions in one SG may be found to be more severe than those in the other SG. Under such circumstances the sample sequence shall be modified to inspect the most severe conditions.
- 5.5.2.11.2 The other SG not inspected during the first inservice inspection shall be inspected. The third and subsequent inspections should follow the instructions described in Specification 5.5.2.11.1 above.

5.5.2.12 Ventilation Filter Testing Program (VFTP)

This Program establishes the required testing of the Engineered Safety Feature filter ventilation systems, "Control Room Emergency Air Cleanup System" and "Fuel Handling Building Post-accident Cleanup Filter System," in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989. The frequency of testing shall be in accordance with Regulatory Guide 1.52, Revision 2. As a minimum the VFTP program shall include the following:

- a. Inplace testing of the high efficiency particulate air (HEPA) filters to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989; and
- b. Inplace testing of the charcoal adsorber to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989; and
- c. Laboratory testing of charcoal adsorber samples obtained in accordance with Regulatory Guide 1.52, Revision 2 and tested at the appropriate temperature and relative humidity in accordance with ASTM D3803-1989 to show acceptable methyl iodide penetration; and
- d. Testing to demonstrate the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers, when tested at the appropriate system flowrate, is acceptable in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989.

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**ATTACHMENT 5**

**SAN ONOFRE NUCLEAR GENERATING STATION  
PCN-519, SUPPLEMENT 1**

**PROPOSED TECHNICAL SPECIFICATION PAGES  
(REDLINE & STRIKEOUT VERSION)  
UNIT 2**

## 5.5 Procedures, Programs, and Manuals (continued)

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### 5.5.2.11 Steam Generator Tube Surveillance Program (continued)

- 5.5.2.11.1 The inservice inspection may be limited to one SG on a rotating schedule encompassing 6% of the tubes if the results of the first or previous inspections indicate that all SGs are performing in a like manner. Note that under some circumstances, the operating conditions in one SG may be found to be more severe than those in the other SG. Under such circumstances the sample sequence shall be modified to inspect the most severe conditions.
- 5.5.2.11.2 The other SG not inspected during the first inservice inspection shall be inspected. The third and subsequent inspections should follow the instructions described in Specification 5.5.2.11.1 above.

### 5.5.2.12 Ventilation Filter Testing Program (VFTP)

This Program establishes the required testing of the Engineered Safety Feature filter ventilation systems, "Control Room Emergency Air Cleanup System" and "Fuel Handling Building Post-accident Cleanup Filter System," ~~in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989.~~ The frequency of testing shall be in accordance with Regulatory Guide 1.52, Revision 2. As a minimum the VFTP program shall include the following:

- a. Inplace testing of the high efficiency particulate air (HEPA) filters to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ASME ANSI N510-198975 (see Note 1); and
- b. Inplace testing of the charcoal adsorber to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ~~ASME-ANSI N510-198975~~ (see Note 1); and
- c. Laboratory testing of charcoal adsorber samples obtained in accordance with Regulatory Guide 1.52, Revision 2 and tested ~~at the appropriate temperature and relative humidity in accordance with~~ per the methodology of ASTM D3803-1989 at 30°C and 70% relative humidity to show acceptable methyl iodide penetration; and
- d. Testing to demonstrate the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers, when tested at the appropriate system flowrate., ~~is acceptable in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989.~~

Note 1: Sample and injection points shall be qualified per ANSI N510-1975 unless manifolds have been qualified per ASME N510-1989. HEPA testing will be conducted with DOP aerosol or suitable alternate.

(continued)

**ATTACHMENT 6**

**SAN ONOFRE NUCLEAR GENERATING STATION  
PCN-519, SUPPLEMENT 1**

**PROPOSED TECHNICAL SPECIFICATION PAGES  
(REDLINE & STRIKEOUT VERSION)  
UNIT 3**

5.5 Procedures, Programs, and Manuals (continued)

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5.5.2.11 Steam Generator (SG) Tube Surveillance Program (continued)

- 5.5.2.11.1 The inservice inspection may be limited to one SG on a rotating schedule encompassing 6% of the tubes if the results of the first or previous inspections indicate that all SGs are performing in a like manner. Note that under some circumstances, the operating conditions in one SG may be found to be more severe than those in the other SG. Under such circumstances the sample sequence shall be modified to inspect the most severe conditions.
- 5.5.2.11.2 The other SG not inspected during the first inservice inspection shall be inspected. The third and subsequent inspections should follow the instructions described in Specification 5.5.2.11.1 above.

5.5.2.12 Ventilation Filter Testing Program (VFTP)

This Program establishes the required testing of the Engineered Safety Feature filter ventilation systems, "Control Room Emergency Air Cleanup System" and "Fuel Handling Building Post-accident Cleanup Filter System," ~~in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989.~~ The frequency of testing shall be in accordance with Regulatory Guide 1.52, Revision 2. As a minimum the VFTP program shall include the following:

- a. Inplace testing of the high efficiency particulate air (HEPA) filters to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ASME ANSI N510-198975 (see Note 1); and
- b. Inplace testing of the charcoal adsorber to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ~~ASME-ANSI N510-198975~~ (see Note 1); and
- c. Laboratory testing of charcoal adsorber samples obtained in accordance with Regulatory Guide 1.52, Revision 2 and tested ~~at the appropriate temperature and relative humidity in accordance with~~ per the methodology of ASTM D3803-1989 at 30°C and 70% relative humidity to show acceptable methyl iodide penetration; and
- d. Testing to demonstrate the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers, when tested at the appropriate system flowrate, ~~is acceptable in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989.~~

Note 1: Sample and injection points shall be qualified per ANSI N510-1975 unless manifolds have been qualified per ASME N510-1989. HEPA testing will be conducted with DOP aerosol or suitable alternate.

(continued)

**ATTACHMENT 7**

**SAN ONOFRE NUCLEAR GENERATING STATION  
PCN-519, SUPPLEMENT 1**

**PROPOSED TECHNICAL SPECIFICATION PAGES  
(RETYPE VERSION)  
UNIT 2**

5.5 Procedures, Programs, and Manuals (continued)

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5.5.2.11 Steam Generator Tube Surveillance Program (continued)

5.5.2.11.1 The inservice inspection may be limited to one SG on a rotating schedule encompassing 6% of the tubes if the results of the first or previous inspections indicate that all SGs are performing in a like manner. Note that under some circumstances, the operating conditions in one SG may be found to be more severe than those in the other SG. Under such circumstances the sample sequence shall be modified to inspect the most severe conditions.

5.5.2.11.2 The other SG not inspected during the first inservice inspection shall be inspected. The third and subsequent inspections should follow the instructions described in Specification 5.5.2.11.1 above.

5.5.2.12 Ventilation Filter Testing Program (VFTP)

This Program establishes the required testing of the Engineered Safety Feature filter ventilation systems, "Control Room Emergency Air Cleanup System" and "Fuel Handling Building Post-accident Cleanup Filter System." The frequency of testing shall be in accordance with Regulatory Guide 1.52, Revision 2. As a minimum the VFTP program shall include the following:

- a. Inplace testing of the high efficiency particulate air (HEPA) filters to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1975 (see Note 1); and
- b. Inplace testing of the charcoal adsorber to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1975 (see Note 1); and
- c. Laboratory testing of charcoal adsorber samples obtained in accordance with Regulatory Guide 1.52, Revision 2 and tested per the methodology of ASTM D3803-1989 at 30°C and 70% relative humidity to show acceptable methyl iodide penetration; and
- d. Testing to demonstrate the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers, when tested at the appropriate system flowrate.

Note 1: Sample and injection points shall be qualified per ANSI N510-1975 unless manifolds have been qualified per ASME N510-1989. HEPA testing will be conducted with DOP aerosol or suitable alternate.

(continued)



**ATTACHMENT 8**

**SAN ONOFRE NUCLEAR GENERATING STATION  
PCN-519, SUPPLEMENT 1**

**PROPOSED TECHNICAL SPECIFICATION PAGES  
(RETYPE VERSION)  
UNIT 3**

5.5 Procedures, Programs, and Manuals (continued)

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5.5.2.11 Steam Generator (SG) Tube Surveillance Program (continued)

5.5.2.11.1 The inservice inspection may be limited to one SG on a rotating schedule encompassing 6% of the tubes if the results of the first or previous inspections indicate that all SGs are performing in a like manner. Note that under some circumstances, the operating conditions in one SG may be found to be more severe than those in the other SG. Under such circumstances the sample sequence shall be modified to inspect the most severe conditions.

5.5.2.11.2 The other SG not inspected during the first inservice inspection shall be inspected. The third and subsequent inspections should follow the instructions described in Specification 5.5.2.11.1 above.

5.5.2.12 Ventilation Filter Testing Program (VFTP)

This Program establishes the required testing of the Engineered Safety Feature filter ventilation systems, "Control Room Emergency Air Cleanup System" and "Fuel Handling Building Post-accident Cleanup Filter System." The frequency of testing shall be in accordance with Regulatory Guide 1.52, Revision 2. As a minimum the VFTP program shall include the following:

- a. Inplace testing of the high efficiency particulate air (HEPA) filters to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1975 (see Note 1); and
- b. Inplace testing of the charcoal adsorber to demonstrate acceptable penetration and system bypass when tested at the appropriate system flowrate in accordance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1975 (see Note 1); and
- c. Laboratory testing of charcoal adsorber samples obtained in accordance with Regulatory Guide 1.52, Revision 2 and tested per the methodology of ASTM D3803-1989 at 30°C and 70% relative humidity to show acceptable methyl iodide penetration; and
- d. Testing to demonstrate the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers, when tested at the appropriate system flowrate.

Note 1: Sample and injection points shall be qualified per ANSI N510-1975 unless manifolds have been qualified per ASME N510-1989. HEPA testing will be conducted with DOP aerosol or suitable alternate.

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