Florida Power & Light Company, 6501 S. Ocean Drive, Jensen Beach, FL 34957

FPL

September 18, 2003

L-2003-199
10 CFR 50.90

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

RE: St. Lucie Units 1 and 2
Docket Nos. 50-335 and 50-389
Proposed License Amendments
Control Room Ventilation System and Miscellaneous Minor Changes

Pursuant to 10 CFR 50.90, Florida Power & Light Company (FPL) requests to amend Facility Operating Licenses DPR-67 and NPF-16 for St. Lucie Units 1 and 2. The proposed amendments revise the Technical Specification (TS) for control room ventilation systems to model the Combustion Engineering Standard Technical Specifications NUREG-1432 (CE STS). The change includes revising both the Unit 1 and Unit 2 control room ventilation system TS to replace detailed filter testing surveillance requirements with a requirement to test in accordance with the Ventilation Filter Testing Program.

In addition to the above changes, FPL proposes to revise Unit 1 and Unit 2 TS Table 3.3-6, Radiation Monitoring Instrumentation, in order to resolve minor inconsistencies that resulted from changes associated with TS Amendments 184 (Unit 1) and 127 (Unit 2). This change also proposes to correct some minor typographical errors.

Attachment 1 is a description of the proposed changes and the supporting justification. Attachment 2 is the Determination of No Significant Hazards and Environmental Considerations. Attachments 3 and 4 are marked up copies of the proposed Technical Specification changes. Attachments 5 and 6 are copies of the retyped TS pages.

The St. Lucie Facility Review Group and the Florida Power & Light Company Nuclear Review Board have reviewed the proposed amendments. In accordance with 10 CFR 50.91 (b)(1), a copy of the proposed amendments is being forwarded to the State Designee for the State of Florida.

A-003

Approval of these proposed license amendments is requested within one year of submittal. Please issue the amendment to be effective on the date of issuance and to be implemented within 60 days of receipt by FPL. Please contact George Madden at 772-467-7155 if there are any questions about this submittal.

Very truly yours,

William Jefferson, Jr.
Vice President
St. Lucie Plant

WJ/GRM

Attachments

cc: Mr. William A. Passetti, Florida Department of Health

STATE OF FLORIDA)
) ss.
COUNTY OF ST. LUCIE)

William Jefferson, Jr. being first duly sworn, deposes and says:

That he is Vice President, St. Lucie Plant, for the Nuclear Division of Florida Power & Light Company, the Licensee herein;

That he has executed the foregoing document; that the statements made in this document are true and correct to the best of his knowledge, information, and belief, and that he is authorized to execute the document on behalf of said Licensee.

William Jefferson, Jr.

STATE OF FLORIDA

COUNTY OF ST LUCIE

Sworn to and subscribed before me

this 18 day of Sept., 2003
by William Jefferson, Jr., who is personally known to me.

Leslie J. Whitwell
Name of Notary Public - State of Florida

Leslie J. Whitwell
MY COMMISSION # DD020212 EXPIRES
May 12, 2005
BONDED THRU TROY FAIN INSURANCE, INC.

(Print, type or stamp Commissioned Name of Notary Public)

ATTACHMENT 1

DESCRIPTION OF THE PROPOSED CHANGES AND JUSTIFICATION

Introduction

Florida Power & Light Company (FPL) requests to amend Facility Operating Licenses DPR-67 and NPF-16 for St. Lucie Units 1 and 2. The proposed amendments revise the Technical Specification (TS) for control room ventilation systems to model the requirements in the Combustion Engineering Standard Technical Specifications NUREG-1432 (CE STS). The change includes revising both the Unit 1 and Unit 2 control room ventilation system TS to replace detailed filter testing surveillance requirements with a requirement to test in accordance with the Ventilation Filter Testing Program.

In addition to the above changes, FPL proposes to revise Unit 1 and Unit 2 TS Table 3.3-6, Radiation Monitoring Instrumentation, to resolve minor inconsistencies that resulted from changes associated with TS Amendments 184 (Unit 1) and 127 (Unit 2), which related to system operability requirements during the movement of recently irradiated fuel assemblies. This change also proposes to correct some minor typographical errors.

BACKGROUND

FPL determined that the assumptions made in the Unit 1 fuel handling accident (FHA) analysis that was used in support of recently approved TS changes related to the handling of "recently irradiated fuel" did not properly reflect TS applicability requirements. The FHA analysis of record was documented and approved as part of TS Amendments 184 (Unit 1) and 127 (Unit 2). The FHA analysis assumes the control room ventilation system is operable and that within 30 minutes outside air intake will be isolated and the system switched to a filtered recirculation mode of operation. Currently, the Unit 1 Technical Specifications have no requirement for control room ventilation operability in Modes 5 and 6, whereas the Unit 2 Technical Specifications have such a requirement. The Technical Specification changes proposed are required in order to ensure that FHA analysis assumptions regarding control room ventilation system operability remain valid.

DESCRIPTION OF PROPOSED CHANGES

Unit 1

The following changes are proposed for Technical Specification 3/4.7.7.1, Control Room Emergency Ventilation System:

- LCO applicability for Modes 5 and 6 and "During movement of irradiated fuel assemblies" is being added.

- Actions for Modes 5 and 6 and "During movement of irradiated fuel assemblies" are being added.
- Surveillance Requirements (SR) associated with ventilation filter testing are being replaced with a reference to the Ventilation Filter Testing Program.
- SR 4.7.7.1.a (verification control room air temperature $\leq$120°F) is being deleted.
- SR 4.7.7.1.e.3 is being revised to allow for conducting the control room pressure test on a staggered test basis.

The following changes are proposed for Table 3.3-6, Radiation Monitoring Instrumentation:

- Applicability for the CIS monitor is being changed from Mode 6 to "During movement of recently irradiated fuel assemblies within containment."
- Applicability for the fuel storage pool area ventilation system gaseous and particulate monitors is being changed from "With irradiated fuel in the storage pool or whenever there is fuel movement within the pool or crane operation with heavy loads over the storage pool." to "With recently irradiated fuel in the storage pool."

The following change is proposed for TS Section 6, Administrative Controls:

- The Ventilation Filter Testing Program is being added as Section 6.8.4.k.

The following typographical error corrections are proposed:

- For TS 3.4.1.4.1, an asterisk is being added to the LCO in reference to an existing footnote.
- For TS 6.8.4.h.a, The Type B and C leakage rate acceptance criteria is being changed from <6.0 L_a to 0.60 L_a.

<u>Unit 2</u>

The following changes are proposed for Technical Specification 3/4.7.7, Control Room Emergency Air Cleanup System:

- LCO applicability "During movement of irradiated fuel assemblies" is being added.
- Mode 5 and 6 Actions are being modified to also apply "During movement of irradiated fuel assemblies."
- For Action "a" under Modes 5 and 6 or during the movement of irradiated fuel assemblies, added "or suspend movement of irradiated fuel assemblies" as an alternative action.
- For Actions "b" and "c" under Modes 5 and 6 or during the movement of irradiated fuel assemblies, replaced "suspend core alterations or positive reactivity changes" with "suspend movement of irradiated fuel assemblies."

- Surveillance Requirements (SR) associated with ventilation filter testing are being replaced with a reference to the Ventilation Filter Testing Program.
- SR 4.7.7.a (verification control room air temperature ≤120°F) is being deleted.
- SR 4.7.7.e.3 is being revised to allow for conducting the control room pressure test on a staggered test basis.

The following changes are proposed for Table 3.3-6, Radiation Monitoring Instrumentation:

- Applicability for the containment isolation monitor is being changed from Mode 6 to "During movement of recently irradiated fuel assemblies within containment."
- Applicability for the fuel storage pool area ventilation system gaseous and particulate monitors is being changed from "With irradiated fuel in the storage pool or whenever there is fuel movement within the pool or crane operation with loads over the storage pool." to "With recently irradiated fuel in the storage pool."
- Action Statement #24, which applies to the fuel storage pool area ventilation system gaseous and particulate monitors, is being changed to require the suspension of the movement of recently irradiated fuel in place of the requirement to suspend movement of fuel and suspension of crane operations with loads over the spent fuel storage pool.

The following change is proposed for TS Section 6, Administrative Controls:

- The Ventilation Filter Testing Program is being added as Section 6.8.4.k.

The following typographical error corrections are proposed:

- Item 2.1.1.2 (Peak Linear Heat Rate) is being deleted from the Index.

- TS 3.9.8.2 LCO is being revised to change "The independent shutdown cooling loops shall be OPERABLE. . ." to "Two independent shutdown cooling loops shall be OPERABLE. . ."

JUSTIFICATION OF THE PROPOSED CHANGE

Control Room Ventilation LCO Applicability

For Unit 1, the LCO applicability is being expanded to include Modes 5 and 6 and during the movement of irradiated fuel assemblies. This change is more conservative than the existing Unit 1 TS, which has no applicability for these plant conditions. This addition is considered appropriate since the plant's fuel handling accident assumes the operability of the control room ventilation system. Details of the FHA were recently presented to and reviewed by the NRC as a part of TS Amendment 184.

For Unit 2, the LCO applicability currently includes Modes 5 and 6. This change will expand the applicability to include "During the movement of irradiated fuel assemblies."

Like Unit 1, this addition is considered appropriate since the plant's fuel handling accident analysis assumes the operability of the control room ventilation system. Details of the FHA were recently presented to and reviewed by the NRC as a part of TS Amendment 127.

The proposed changes to LCO applicability will make the Unit 1 and Unit 2 TS similar to the CE STS.

These changes are considered acceptable because they are consistent with the plant's design basis and accident analysis, they are conservative with respect to the current TS, and they are consistent with the CE STS.

Control Room Ventilation Actions – Modes 5 and 6 or During the Movement of Irradiated Fuel

The current Unit 1 TS do not include any actions for these plant conditions; however, the most recent fuel handling accident (FHA), which evaluated the movement of recently irradiated fuel, assumes operability of the control room ventilation system. As such, it is appropriate for the TS to ensure that the system is operable in plant modes where irradiated fuel may be moved. Although the FHA evaluated recently irradiated fuel, the proposed change is more conservative in that it requires system operability for the movement of any irradiated fuel. The actions added for these plant conditions are modeled after the CE STS.

Currently, the Unit 2 TS include actions for Modes 5 and 6; however, the TS do not include actions applicable during the movement of irradiated fuel. As noted above for Unit 1, the FHA assumes operability of the control room ventilation system. As such, it is appropriate for the TS to ensure that the system is operable in plant modes where irradiated fuel may be moved. Although the FHA evaluated recently irradiated fuel, the proposed change is more conservative in that it requires system operability for the movement of any irradiated fuel. The actions have been slightly modified to be similar to those added for Unit 1 and with the CE STS.

These changes are considered acceptable because they are consistent with the plant's design basis and accident analysis, they are conservative with respect to the current TS and they are similar to the CE STS.

Deletion of Control Room Air Temperature Surveillance

Unit 1 SR 4.7.7.1.a and Unit 2 SR 4.7.7.a both require verification every 12 hours that control room air temperature is $\leq$120°F. This surveillance requirement is being deleted. The basis for the deletion is that the surveillance does not appear in the CE STS.

Per the TS Bases (both units), operability of the control room ventilation system ensures that the ambient air temperature does not exceed the allowable temperature for continuous duty rating of the equipment and instrumentation cooled by this system, and

the control room will remain habitable for operations personnel during and following all credible accident conditions.

Because the control room is manned continuously, and because any increase in air temperatures that remotely approaches 120°F will be noticed by operators, the surveillance requirement is of no practical value. Should control room air temperatures increase significantly above their normal value, control room operators would generate a plant condition report to document the condition and to initiate corrective actions. It is reasonable to assume that this would occur well before the 120°F limit is reached.

10 CFR 50.36 provides the regulatory basis for plant technical specifications. Per 50.36, technical specifications are required for items or parameters associated with a safety limit, limiting safety system setting, limiting control setting, or limiting condition for operation. The monitoring of control room air temperature does not meet any of these criteria.

These changes are considered acceptable since they are similar to the requirements in the CE STS, and because there is no 10 CFR 50.36 basis for such a surveillance.

Control Room Pressure Test on a Staggered Test Basis

Unit 1 SR 4.7.7.1.e.3 and Unit 2 SR 4.7.7.e.3 currently require the control room pressure test be performed for both trains at least once per 18 months. The proposed change will allow for conducting this surveillance on a staggered test basis such that for each unit, one train will be tested at least every 18 months. Note that the definition of "Staggered Test Basis" for the St. Lucie TS is slightly different than that found in the CE STS. As such, the surveillance interval proposed for this change is 36 months, which will thus require a train to be tested every 18 months. This results in the same testing frequency as that required by the CE STS.

As noted in the CE STS Bases, the frequency of [18] months on a staggered test basis is consistent with the guidance provided in NUREG-0800, Section 6.4.

This change is considered acceptable since it is consistent with the CE STS and the regulatory guidance of NUREG-0800.

Changes to Table 3.3-6, Radiation Monitoring Instrumentation

As a result of the TS changes associated with recently issued Unit 1 TS Amendment 184 and Unit 2 TS Amendment 127, the LCO applicability associated with the containment isolation system (CIS) radiation monitors requires revision. The applicability is currently identified as Mode 6; however, the noted action is to comply with the action of TS 3.9.9 (Containment Isolation System), which was revised as a result of the noted amendments. The amendments changed the applicability of TS 3.9.9 to "During the movement of recently irradiated fuel assemblies within containment." Thus as it currently stands, the Mode 6 requirement for the CIS radiation

monitor is inconsistent with the TS requirement for containment isolation system operability. The proposed change (both units) is to revise the CIS radiation monitor "Applicable Modes" to "During movement of recently irradiated fuel within containment."

Similarly, the applicability for the fuel storage pool ventilation system gaseous and particulate monitors requires revision. Unit 1 TS Amendment 184 revised the fuel handling building ventilation system LCO to only require operability "Whenever recently irradiated fuel is in the spent fuel pool." Unit 2 TS Amendment 127 revised the shield building ventilation system (SBVS) TS LCO to only require Mode 5 and Mode 6 operability during movement of recently irradiated fuel assemblies or during crane operations with loads over recently irradiated fuel assemblies in the spent fuel storage pool. Note that for Unit 2, the SBVS provides the credited ventilation of the spent fuel pool area. Based on the above, the proposed change is to revise the "Applicable Modes" for the Unit 1 and Unit 2 fuel storage pool area ventilation system gaseous and particulate monitors to "With recently irradiated fuel in the storage pool."

These changes are considered acceptable because they resolve inconsistencies that were inadvertently established with the implementation of Unit 1 TS Amendment 184 and Unit 2 TS Amendment 127. With the proposed changes, the monitoring instrumentation will be required to be operable whenever the associated plant systems are required to be operable.

Ventilation Filter Testing Program

Current plant TS surveillance requirements include details for the surveillance testing of the control room ventilation system filter trains, including details on testing frequency and filter performance requirements. The CE STS simplify these surveillance tests by referring to a Ventilation Filter Testing Program (VFTP). The bases of the STS state, "The VFTP includes testing of HEPA filter performance, charcoal adsorber efficiency, minimum system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specific test frequencies and additional information are discussed in detail in the VFTP."

The proposed change will delete surveillance requirements associated with the filter testing of the control room ventilation systems. With the noted exceptions below, the change is administrative in that there is no change being proposed that would alter the current scope of ventilation system testing, the method of testing, or the established acceptance criteria. The deleted surveillance requirements are captured in the newly created VFTP. Note that Unit 2 Surveillance Requirements 4.7.7.c.1, Visual Examination, and 4.7.7.c.2, Airflow Distribution, are effectively deleted with this proposed change (there are no similar surveillance requirements in the Unit 1 TS). In NRC Regulatory Guide 1.52, Revision 2, the airflow distribution test is considered a post-maintenance test that is to be performed after maintenance affecting flow distribution. Also in RG 1.52, the visual examination is only required prior to the flow distribution test, which effectively makes the examination a part of the post-maintenance testing; and it is required as a prerequisite to the performance of in-place filter testing.

Although not part of the VFTP as provided in the STS, these deleted TS Surveillance requirements will continue to be implemented via the plant procedure as part of the plant's UFSAR commitment to Reg. Guide 1.52 as documented in Unit 2 UFSAR Table 6.5-1.

The St. Lucie VFTP will be documented as a program in Section 6 of the TS and will be controlled via plant procedures. The plant procedure is the primary implementing document for the St. Lucie Unit 1 and Unit 2 surveillance testing of the control room ventilation systems' filters. This procedure currently includes the testing scope, methodology, frequency and acceptance criteria consistent with the current TS requirements.

The CE STS format captures ventilation filter testing for all TS-related ventilation systems within the VFTP. The current proposed VFTP for the St. Lucie TS only includes the control room ventilation systems; however, once the VFTP format is established in the TS, similar changes may be proposed in the future for other TS-related ventilation systems.

These changes are considered acceptable since they are similar to the requirements in the CE STS, and because there is no effective change in the testing methods, requirements, or acceptance criteria.

Correction of Typographical Errors

Unit 1 TS 3.4.1.4.1 has a missing asterisk in the LCO. The asterisk should be there to refer to an existing footnote. The asterisk was unintentionally deleted during the electronic TS conversion process. The missing asterisk was not identified during proofreading of the converted TS. This electronic TS page was subsequently used for the TS markup that was ultimately issued with St. Lucie Unit 1 Amendment 179. As such, reinsertion of the asterisk is acceptable.

Unit 1 TS 6.8.4.h.a the acceptance criteria for the Type B and C leakage tests is incorrectly stated as <6.0 L_a the acceptance value should be <0.60 L_a. The error was introduced in License Amendment 149. FPL letter L-96-244, for the containment leakage rate testing program, proposed the acceptance value to be <0.60 L_a, however on February 10, 1997 when the revised TS page was issued with the typographical error, the acceptance value was <6.0 L_a. Plant procedures contain the correct value of <0.6 L_a. CR 03-3131 was written to document the TS error.

Unit 2 TS Page III (Index) identifies Section 2.1.1.2, PEAK LINEAR HEAT RATE, as being on Page 2-1. Section 2.1.1.2, along with the associated index listing, was deleted in St. Lucie Unit 2 Amendment 105; however, prior to the NRC's issuing of Amendment 105, FPL submitted another proposed license amendment (PLA) via letter L-2000-160 that also affected Page III. This later PLA included a version of Page III that included the listing for Section 2.1.1.2. The NRC subsequently issued St. Lucie Unit 2

Amendment 117 that unintentionally reinserted the index listing for Section 2.1.1.2. As such, deletion of Section 2.1.1.2 from the Index is acceptable.

Unit 2 TS LCO 3.9.8.2 reads "The independent shutdown cooling loops shall be OPERABLE. . ." The original wording of this LCO is "Two independent shutdown cooling loops shall be OPERABLE. . ." The "Two" was inadvertently changed to "The" during the electronic TS conversion process and was not identified during the proofreading process. This page, with the typographical error, was subsequently issued in Amendment 122. As such, changing "The" to "Two" is acceptable.

Note – Condition Report 02-0098 was written to document TS errors originating from the electronic conversion process.

Applicable Regulatory Requirements/Criteria

NUREG-1432, Standard Technical Specifications Combustion Engineering Plants, is, by definition, endorsed by the NRC. The Preface to this NUREG states that "Licensees are encouraged to upgrade their technical specifications consistent with those criteria and conforming, to the practical extent, to Revision 2 to the improved STS."

Conclusions

The proposed changes are acceptable. Adoption of the CE STS format for the control room ventilation systems results in improved technical specifications that are more up to date with the latest regulatory guidance and it provides consistency between the two units. Although the control room ventilation filter testing surveillances are being removed from the individual TS, the creation of the new VFTP adequately captures the testing requirements in a format that has been accepted by the NRC via the CE STS.

ATTACHMENT 2

DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION

Introduction

Florida Power & Light Company (FPL) requests to amend Facility Operating Licenses DPR-67 and NPF-16 for St. Lucie Units 1 and 2. The proposed amendments revise the Technical Specification (TS) for control room ventilation systems to a format similar to the Combustion Engineering Standard Technical Specifications NUREG-1432 (CE STS) in order to achieve similarity between the two units. The change includes revising both the Unit 1 and Unit 2 control room ventilation system TS to replace detailed filter testing surveillance requirements with a requirement to test in accordance with the Ventilation Filter Testing Program. This change adopts the format similar to that used in the CE STS.

In addition to the above changes, FPL proposes to revise Unit 1 and Unit 2 TS Table 3.3-6, Radiation Monitoring Instrumentation, in order to resolve minor inconsistencies that resulted from changes associated with TS Amendments 184 (Unit 1) and 127 (Unit 2), which related to system operability requirements during the movement of recently irradiated fuel assemblies. This change also proposes to correct some typographical errors.

Determination of No Significant Hazards Consideration

The standards used to arrive at a determination that a request for amendment involves a no significant hazards consideration are included in the Commission's regulation, 10 CFR 50.92, which states that no significant hazards considerations are involved if the operation of the facility in accordance with the 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. Each standard is discussed as follows:

(1) Operation of the facility in accordance with the proposed amendments would not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed changes to the St. Lucie Unit 1 & 2 Technical Specifications will adopt the format of the NUREG-1432 Combustion Engineering Standard Technical Specifications for the Unit 1 control room emergency ventilation system and the Unit 2 control room emergency air cleanup system. Additionally, the Ventilation Filter Testing Program of the CE STS is being adopted for the aforementioned ventilation systems. No changes are being made to the methods of testing, testing scope, or acceptance criteria.

The proposed changes also correct mode applicability requirements for the containment isolation radiation monitor (both units) and the fuel storage pool gaseous and particulate monitors (both units). These corrections are necessary in order to restore consistency with related technical specification requirements for the containment isolation system and associated fuel pool area ventilation systems.

The equipment and systems involved are associated with accident mitigation. The surveillance testing of this equipment has no bearing on the initiation of an accident previously evaluated nor on the probability of any accident previously evaluated.

Implementing the proposed changes does not significantly increase the consequences of an accident previously evaluated. The performance requirements and acceptance criteria for the affected ventilation systems are not being changed. The ability of the affected systems to mitigate the effects of postulated accidents is not diminished by the proposed changes.

The changes being proposed do not affect assumptions contained in the plants' safety analyses or the physical design of the plants, nor do they affect other technical specifications that preserve safety analysis assumptions. Therefore, operation of the facility in accordance with the proposed amendments would not involve a significant increase in the probability or consequences of an accident previously analyzed.

(2) Operation of the facility in accordance with the proposed amendments would not create the possibility of a new or different kind of accident from any previously evaluated.

The proposed amendments do not involve any changes to the operation or performance requirements of the affected systems, nor do they involve the addition or modification of any plant equipment. As such, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

(3) Operation of the facility in accordance with the proposed amendments would not involve a significant reduction in a margin of safety.

The margin of safety as defined by 10 CFR Part 100 has not been significantly reduced. There will be no decrease in the ability of the affected systems to perform their intended safety functions as assumed in accident analyses. The proposed changes do not alter the bases for assurance that safety-related activities are performed correctly or the basis for any Technical Specification related to the establishment of or maintenance of a safety margin.

Based on the above, we have determined that the proposed amendments do not (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the possibility of a new or different kind of accident from any previously evaluated, or (3) involve a significant reduction in a margin of safety; and therefore does not involve a significant hazards consideration.

Environmental Impact Consideration Determination

The proposed license amendments change requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The proposed amendments involve no significant increase in the amounts and no significant change in the types of any effluents that may be released off-site, and no significant increase in individual or cumulative occupational radiation exposure. FPL has concluded that the proposed amendments involve no significant hazards consideration, and therefore, meet the criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), an environmental impact statement or environmental assessment need not be prepared in connection with issuance of the amendments.

ATTACHMENT 3

ST. LUCIE UNIT 1 MARKED-UP TECHNICAL SPECIFICATION PAGES

TS Pages

3/4 7-20

3/4 7-21

3/4 7-22

3/4 7-23

3/4 3-22

6-15b

6-15c

3/4 4-1d

PLANT SYSTEMS

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.7.1 The control room emergency ventilation system shall be OPERABLE with:

a. Two booster fans,

b. Two isolation valves in each outside air intake duct,

c. Two isolation valves in the toilet area air exhaust duct,

d. One filter train,

e. At least two air conditioning units, and

f. Two isolation valves in the kitchen area exhaust duct.

APPLICABILITY: MODES 1, 2, 3 and 4, 5 and 6, or during movement of irradiated fuel assemblies.

ACTION:

MODES 1, 2, 3 and 4:

a. With one booster fan inoperable, restore the inoperable fan to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With one isolation valve per air duct inoperable, operation may continue provided the other isolation valve in the same duct is maintained closed; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

c. With the filter train inoperable, restore the filter train to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

d. With only one air conditioning unit OPERABLE, restore at least two air conditioning units to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

MODES 5 and 6 or during movement of irradiated fuel assemblies:

[INSERT 1]

INSERT 1

a. With one booster fan inoperable, restore the inoperable fan to OPERABLE status within 7 days or initiate and maintain operation of the remaining OPERABLE control room emergency ventilation system in the recirculation mode or suspend movement of irradiated fuel assemblies.

b. With one isolation valve in an air duct inoperable, maintain the other isolation valve in the same air duct closed or suspend movement of irradiated fuel assemblies.

c. With the filter train inoperable, suspend movement of irradiated fuel assemblies.

d. With only one air conditioning unit OPERABLE, restore at least two air conditioning units to OPERABLE status within 7 days or suspend movement of irradiated fuel assemblies.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

4.7.7.1 The control room emergency ventilation system shall be demonstrated OPERABLE:

~~a. At least once per 12 hours by verifying that the control room air temperature is ≤ 120°F.~~

a ~~b.~~ At least once per 31 days by:

1. Initiating flow through the HEPA filter and charcoal adsorber train and verifying that each booster fan operates for at least 15 minutes.

2. Starting (unless already operating) each air conditioning unit and verifying that it operates for at least 8 hours.

b ~~c.~~ ~~At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housing, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:~~

1. Verifying that the charcoal adsorbers remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

2. Verifying that the HEPA filter banks remove ≥ 99% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

3. Verifying that a laboratory analysis of a carbon sample from either at least one test canister or at least two carbon samples removed from one of the charcoal adsorbers demonstrates a removal efficiency of ≥ 97.5% for radioactive methyl iodide when the sample is tested in accordance with ASTM D3803-1989 (30°C, 70% RH). The carbon samples not obtained from test canisters shall be prepared by either:

   a) Emptying one entire bed from a removed adsorber tray, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed, or

By performing required control room emergency ventilation system filter testing in accordance with the Ventilation Filter Testing Program.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

b) Emptying a longitudinal sample from an adsorber tray, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed.

4. Verifying a system flow rate of 2000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975.

d. After every 720 hours of system operation by either:

1. Verifying that a laboratory analysis of a carbon sample obtained from a test canister demonstrates a removal efficiency of ≥ 97.5% for radioactive methyl iodide when the sample is tested in accordance with ASTM D3803-1989 (30°C, 70% RH); or

2. Verifying that a laboratory analysis of at least two carbon samples demonstrate a removal efficiency of ≥ 97.5% for radioactive methyl iodide when the samples are tested in accordance with ASTM D3803-1989 (30°C, 70% RH) and the samples are prepared by either:

a) Emptying one entire bed from a removed adsorber tray, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed, or

b) Emptying a longitudinal sample from an adsorber tray, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed.

Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the system shall be demonstrated OPERABLE by also:

a) Verifying that the charcoal adsorbers remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the ventilation system at a flow rate of 2000 cfm ± 10%, and

b) Verifying that the HEPA filter banks remove ≥ 99% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

c. ~~e.~~ At least once per 18 months by:

~~1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4.15 inches Water Gauge while operating the ventilation system at a flow rate of 2000 cfm ± 10%.~~

~~2.~~ Verifying that on a containment isolation signal the system automatically isolates the control room within 35 seconds and switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks.

~~3.~~ Verifying that ~~the system~~ one control room emergency ventilation train maintains the control room at a positive pressure ≥ 1/8 inch W.G. relative to the outside atmosphere during system operation with ≤ 450 cfm outside air intake.

~~f. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove ≥ 99% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the ventilation system at a flow rate of 2000 cfm ± 10%.~~

~~g. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the ventilation system at a flow rate of 2000 cfm ± 10%.~~

d. At least once per 36 months on a STAGGERED TEST BASIS by:

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION

INSTRUMENT	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ALARM SETPOINT	MEASUREMENT RANGE	ACTION
1. AREA MONITORS					
a. Fuel Storage Pool Area	1	*	≤ 15 mR/hr	$10^{-1} - 10^{4}$ mR/hr	13
b. Containment (CIS)	3	~~6~~ *****	≤ 90 mR/hr	$1 - 10^{5}$ mR/hr	16
c. Containment Area – Hi Range	1	1, 2, 3, & 4	≤ 10 R/hr	$1 - 10^{7}$ R/hr	15
2. PROCESS MONITORS					
a. Containment					
i. Gaseous Activity RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$10 - 10^{6}$ cpm	14
ii. Particulate Activity RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$10 - 10^{6}$ cpm	14
b. Fuel Storage Pool Area Ventilation System					
i. Gaseous Activity	1	**	***	$10^{-7} - 10^{5}$ µCi/cc	12
ii. Particulate Activity	1	**	***	$1 - 10^{6}$ cpm	12

* With fuel in the storage pool or building.

** With recently irradiated fuel in the storage pool ~~or whenever there is fuel movement within the pool or crane operation with loads over the storage pool.~~

*** The Alarm Setpoints are determined and set in accordance with requirements of the Offsite Dose Calculation Manual.

***** During movement of recently irradiated fuel assemblies within containment.

(2) conform to the guidance of Appendix I to 10 CFR Part 50, and
(3) include the following:

1) Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM.

2) A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and

3) Participation in a Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

h. Containment Leakage Rate Testing Program

A program to implement the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50 Appendix J, Option B, as modified by approved exemptions. This program is in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," as modified by the following exception(s):

a) Bechtel Topical Report, BN-TOP-1 or ANS 56.8-1994 (as recommended by R.G. 1.163) will be used for type A testing.

b) The first Type A test performed after the May 1993 Type A test shall be no later than May 2008.

The peak calculated containment internal pressure for the design basis loss of coolant accident P_a, is 39.6 psig. The containment design pressure is 44 psig.

The maximum allowed containment leakage rate, L_a, at P_a, shall be 0.50% of containment air weight per day.

Leakage rate acceptance criteria are:

a. Containment leakage rate acceptance criterion is $\leq 1.0\ L_a$. During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are $\leq 0.60\ L_a$ for the Type B and C tests, $\leq 0.75\ L_a$ for Type A tests, and $\leq 0.27\ L_a$ for secondary containment bypass leakage paths.

b. Air lock testing acceptance criteria are:

1) Overall air lock leakage rate is $\leq 0.05\ L_a$ when tested at $\geq P_a$.

2) For the personnel air lock door seal, leakage rate is $< 0.01\ L_a$ when pressurized to $\geq 1.0\ P_a$.

3) For the emergency air lock door seal, leakage rate is $< 0.01\ L_a$ when pressurized to ≥ 10 psig.

ADMINISTRATIVE CONTROLS (continued)

The provisions of T.S. 4.0.2 do not apply to test frequencies in the Containment Leak Rate Testing Program.

The provisions of T.S. 4.0.3 are applicable to the Containment Leak Rate Testing Program.

i. Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2 and 3 components (pumps and valves). The program shall include the following:

a. Testing frequencies specified in Section XI of the ASME Boiler and Pressure Vessel Code* and applicable addenda as follows:

ASME Boiler and Pressure Vessel Code* and applicable Addenda terminology for inservice testing activities	Required Frequencies for performing inservice testing activities
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days
Biennially or every 2 years	At least once per 731 days

b. The provisions of Specification 4.0.2 are applicable to the above required frequencies for performing inservice testing activities;

c. The provisions of Specification 4.0.3 are applicable to inservice testing activities; and

d. Nothing in the ASME Boiler and Pressure Vessel Code* shall be construed to supersede the requirements of any technical specification.

j. Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

1. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.

2. Licensees may make changes to Bases without prior NRC approval provided the changes do not require either of the following:

   a. a change in the TS incorporated in the license; or

   b. a change to the updated UFSAR or Bases that requires NRC approval pursuant to 10 CFR 50.59.

3. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the UFSAR.

4. Proposed changes that meet the criteria of Specification 6.8.4.j.2.a or 6.8.4.j.2.b, above, shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

[INSERT 2]

* Where ASME Boiler and Pressure Vessel Code is referenced it also refers to the applicable portions of ASME/ANSI OM-Code, "Operation and Maintenance of Nuclear Power Plants," with applicable addenda, to the extent it is referenced in the Code.

INSERT 2

k. Ventilation Filter Testing Program (VFTP)

A program shall be established to implement the following required testing of Engineered Safety Feature (ESF) filter ventilation systems at the frequencies specified in Regulatory Guide 1.52, Revision 2.

1. Demonstrate for each of the ESF systems that an inplace test of the high efficiency particulate air (HEPA) filters shows a penetration and system bypass $\leq$ 1% when tested in accordance with ANSI N510-1975 at the system flowrate specified below.

ESF Ventilation System	Flowrate
Control Room Emergency Ventilation	2000 $\pm$ 200 cfm

2. Demonstrate for each of the ESF systems that an inplace test of the charcoal adsorber shows a penetration and system bypass $\leq$ 1% when tested in accordance with ANSI N510-1975 at the system flowrate specified below.

ESF Ventilation System	Flowrate
Control Room Emergency Ventilation	2000 $\pm$ 200 cfm

3. Demonstrate for each of the ESF systems that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows the methyl iodide penetration less than the value specified below when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and the relative humidity specified below.

ESF Ventilation System	Penetration	RH
Control Room Emergency Ventilation	$\leq$2.5%	70%

4. Demonstrate for each of the ESF systems that the pressure drop across the combined HEPA filters and charcoal adsorbers is less than the value specified below when tested at the system flowrate specified below.

ESF Ventilation System	Delta P	Flowrate
Control Room Emergency Ventilation	<4.15" W.G.	2000 $\pm$ 200 cfm

The provisions of SR 4.0.2 and SR 4.0.3 are applicable to the VFTP test frequencies.

REACTOR COOLANT SYSTEM

COLD SHUTDOWN – LOOPS FILLED

LIMITING CONDITION FOR OPERATION

3.4.1.4.1 At least one shutdown cooling loop shall be OPERABLE and in operation* and either:

a. One additional shutdown cooling loop shall be OPERABLE#, or

b. The secondary side water level of at least two steam generators shall be greater than 10% of narrow range indication.

APPLICABILITY: MODE 5 with reactor coolant loops filled##.

ACTION:

a. With less than the above required loops OPERABLE or with less than the required steam generator level, within one (1) hour initiate corrective action to return the required loops to OPERABLE status or to restore the required level.

b. With no shutdown cooling loop in operation, suspend operations that would cause introduction into the RCS, coolant with boron concentration less than required to meet SHUTDOWN MARGIN of Technical Specification 3.1.1.2 and within one (1) hour initiate corrective action to return the required shutdown loop to operation.

SURVEILLANCE REQUIREMENTS

4.4.1.4.1.1 The secondary side water level of at least two steam generators when required shall be determined to be within limits at least once per 12 hours.

4.4.1.4.1.2 At least one shutdown cooling loop shall be determined to be in operation and circulating reactor coolant at least once per 12 hours.

---

* The shutdown cooling pump may be de-energized for up to 1 hour provided 1) no operations are permitted that would cause introduction into the RCS, coolant with boron concentration less than required to meet the SHUTDOWN MARGIN of Technical Specification 3.1.1.2 and 2) core outlet temperature is maintained at least 10°F below saturation temperature.

\# One shutdown cooling loop may be inoperable for up to 2 hours for surveillance testing provided the other shutdown cooling loop is OPERABLE and in operation.

\## A reactor coolant pump shall not be started with two idle loops unless the secondary water temperature of each steam generator is less than 30°F above each of the Reactor Coolant System cold leg temperatures.

ATTACHMENT 4

ST. LUCIE UNIT 2 MARKED-UP TECHNICAL SPECIFICATION PAGES

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PLANT SYSTEMS

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.7.1 The control room emergency ventilation system shall be OPERABLE with:

a. Two booster fans,

b. Two isolation valves in each outside air intake duct,

c. Two isolation valves in the toilet area air exhaust duct,

d. One filter train,

e. At least two air conditioning units, and

f. Two isolation valves in the kitchen area exhaust duct.

APPLICABILITY: MODES 1, 2, 3 ~~and~~ 4, 5 and 6 or (During movement of irradiated fuel assemblies.

ACTION:

MODES 1, 2, 3 and 4:

a. With one booster fan inoperable, restore the inoperable fan to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With one isolation valve per air duct inoperable, operation may continue provided the other isolation valve in the same duct is maintained closed; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

c. With the filter train inoperable, restore the filter train to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

d. With only one air conditioning unit OPERABLE, restore at least two air conditioning units to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

MODES 5 and 6 or during movement of irradiated fuel assemblies:

[INSERT 1]

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

4.7.7 Each control room emergency air cleanup system shall be demonstrated OPERABLE:

~~a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 120°F.~~

a ~~b.~~ At least once per 31 days by (1) initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 15 minutes and (2) starting, unless already operating each air conditioning unit and verifying that it operates for at least 8 hours.

b ~~c.~~ At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:

1. Performing a visual examination of CREACS in accordance with ANSI N-510-1980.

2. Performing air flow distribution to HEPA filters and charcoal adsorbers in accordance with ANSI N-510-1980. The distribution shall be ± 20% of the average flow per unit.

3. Verifying that the charcoal adsorbers remove ≥ 99.95% of a halogenated hydrocarbon refrigerant test gas when they are tested in accordance with ANSI N-510-1980 while operating the system at 2000 cfm ± 10%.

4. Verifying that the HEPA filters remove ≥ 99.95% of the DOP when they are tested in accordance with ANSI N-510-1980 while operating the system at 2000 cfm ± 10%.

5. Verifying a system flow rate of 2000 cfm ±10%.

d. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a 4-inch laboratory sample from the installed sample canisters demonstrates a removal efficiency of ≥ 99.825% for methyl iodide when tested in accordance with ASTM D3803-1989 (30°C, 95% RH).

e. At least once per 18 months by:

1. Verifying that the pressure drop across the combined prefilters, HEPA filters and charcoal adsorber banks is less than 7.4 inches Water Gauge while operating the system at a flow rate of 2000 cfm ± 10%.

By performing required control room emergency air cleanup system filter testing in accordance with the Ventilation Filter Testing Program.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (continued)

c. At least once per 18 months by:

1. ~~2.~~ Verifying that on a containment isolation test signal from Unit 2, the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks.

3. Verifying that ~~the system~~ one control room emergency air cleanup system train maintains the control room at a positive pressure of greater than or equal to 1/8 inch Water Gauge relative to the outside atmosphere during system operation with ≤ 450 cfm outside air intake.

2. ~~4.~~ Verifying that on a containment isolation test signal from Unit 1 the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks.

~~f. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.95% of the DOP when they are tested in-place in accordance with ANSI N-510-1980 while operating the system at a flow rate of 2000 cfm ± 10%.~~

~~g. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.95% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N-510-1980 while operating the system at a flow rate of 2000 cfm ± 10%.~~

d. At least once per 36 months on a STAGGERED TEST BASIS by:

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION

INSTRUMENT	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ALARM/TRIP SETPOINT	MEASUREMENT RANGE	ACTION
1. AREA MONITORS					
a. Fuel Storage Pool Area					
i. Criticality and Ventilation System Isolation Monitor	4	*	≤ 20 mR/hr	$10^{-1} – 10^{4}$ mR/hr	22
b. Containment Isolation	3	**** ~~6~~	≤ 90 mR/hr	$1 – 10^{7}$ mR/hr	25
c. Control Room Isolation	1 per intake	ALL MODES	≤ 2x background	$10^{-7} – 10^{-2}$ µCi/cc	26
d. Containment Area – Hi Range	1	1, 2, 3 & 4	Not Applicable	$1 - 10^{7}$ R/hr	27
2. PROCESS MONITORS					
a. Fuel Storage Pool Area Ventilation System					
i. Gaseous Activity	1	**	***	$10^{-7} – 10^{-2}$ µCi/cc	24
ii. Particulate Activity	1	**	***	$1 – 10^{6}$ cpm	24
b. Containment					
i. Gaseous Activity RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$10^{-7} – 10^{-2}$ µCi/cc	23
ii. Particulate Activity RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$1 – 10^{6}$ cpm	23

* With fuel in the storage pool or building.

** With recently irradiated fuel in the storage pool ~~or whenever there is fuel movement within the pool or crane operation with loads over the storage pool.~~

*** The Alarm/Trip Setpoints are determined and set in accordance with requirements of the Offsite Dose Calculation Manual.

**** During movement of recently irradiated fuel assemblies within containment.

TABLE 3.3-6 (Continued)

ACTION STATEMENTS

ACTION 22 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, perform area surveys of the monitored area with portable monitoring instrumentation at least once per 24 hours.

ACTION 23 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.4.6.1.

ACTION 24 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, suspend all operations involving movement of recently irradiated fuel within the spent fuel storage pool. ~~and crane operations with loads over the spent fuel storage pool.~~

ACTION 25 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.9.9.

ACTION 26 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirements, within 1 hour initiate and maintain operation of the control room emergency ventilation system in the recirculation mode of operation.

ACTION 27 - With the number of OPERABLE Channels less than required by the Minimum Channels OPERABLE requirement, either restore the inoperable Channel(s) to OPERABLE status within 72 hours, or:

1) Initiate the preplanned alternate method of monitoring the appropriate parameter(s), and

2) Prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within 14 days following the event outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

ADMINISTRATIVE CONTROLS (continued)

j. Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

1. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.

2. Licensees may make changes to Bases without prior NRC approval provided the changes do not require either of the following:

   a. a change in the TS incorporated in the license; or

   b. a change to the updated UFSAR or Bases that requires NRC approval pursuant to 10 CFR 50.59.

3. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the UFSAR.

4. Proposed changes that meet the criteria of Specification 6.8.4.j.2.a or 6.8.4.j.2.b, above, shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

[INSERT 1]

INSERT 1

k. Ventilation Filter Testing Program (VFTP)

A program shall be established to implement the following required testing of Engineered Safety Feature (ESF) filter ventilation systems at the frequencies specified in Regulatory Guide 1.52, Revision 2.

1. Demonstrate for each of the ESF systems that an inplace test of the high efficiency particulate air (HEPA) filters shows a penetration and system bypass ≤ 0.05% when tested in accordance with ANSI N510-1980 at the system flowrate specified below.

ESF Ventilation System	Flowrate
Control Room Emergency Air Cleanup	2000 ± 200 cfm

2. Demonstrate for each of the ESF systems that an inplace test of the charcoal adsorber shows a penetration and system bypass ≤ 0.05% when tested in accordance with ANSI N510-1980 at the system flowrate specified below.

ESF Ventilation System	Flowrate
Control Room Emergency Air Cleanup	2000 ± 200 cfm

3. Demonstrate for each of the ESF systems that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows the methyl iodide penetration less than the value specified below when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and the relative humidity specified below.

ESF Ventilation System	Penetration	RH
Control Room Emergency Air Cleanup	≤0.175%	95%

4. Demonstrate for each of the ESF systems that the pressure drop across the combined HEPA filters and charcoal adsorbers is less than the value specified below when tested at the system flowrate specified below.

ESF Ventilation System	Delta P	Flowrate
Control Room Emergency Air Cleanup	<7.4" W.G.	2000 ± 200 cfm

The provisions of SR 4.0.2 and SR 4.0.3 are applicable to the VFTP test frequencies.

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REFUELING OPERATIONS

LOW WATER LEVEL

LIMITING CONDITION FOR OPERATION

3.9.8.2 ~~The~~ TWO independent shutdown cooling loops shall be OPERABLE and at least one shutdown cooling shall be in operation.

APPLICABILITY: MODE 6 when the water level above the top of the reactor pressure vessel flange is less than 23 feet.

ACTION:

a. With less than the required shutdown cooling loops OPERABLE, within 1 hour initiate corrective action to return the required loops to OPERABLE status, or to establish greater than or equal to 23 feet of water above the reactor pressure vessel flange, as soon as possible.

b. With no shutdown cooling loop in operation, suspend operations that would cause introduction into the RCS, coolant with boron concentration less than required to meet the boron concentration of Technical Specification 3.9.1 and within 1 hour initiate corrective action to return the required shutdown cooling loop to operation. Close all containment penetrations providing direct access from the containment atmosphere to the outside atmosphere within 4 hours.

SURVEILLANCE REQUIREMENTS

4.9.8.2 At least once per 12 hours:

a. At least one shutdown cooling loop shall be verified to be in operation.

b. The total flow rate of reactor coolant to the reactor pressure vessel shall be verified to be greater than or equal to 3000 gpm.*

---

* The reactor coolant flow rate requirement may be reduced to 1850 gpm if the following conditions are satisfied before the reduced requirement is implemented: the reactor has been determined to have been subcritical for at least 125 hours, the maximum RCS temperature is ≤ 117°F, and the temperature of CCW to the shutdown cooling heat exchanger is ≤ 87°F.

ATTACHMENT 5

ST. LUCIE UNIT 1 RETYPED TECHNICAL SPECIFICATION PAGES

The attached retype reflects the currently issued version of the Technical Specifications. Pending Technical Specification changes or Technical Specification changes issued subsequent to this submittal are not reflected in the enclosed retype. The enclosed retype should be checked for continuity with Technical Specifications prior to issuance.

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6.15b – (Also changed by PLA L-2003-224)

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PLANT SYSTEMS

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.7.1 The control room emergency ventilation system shall be OPERABLE with:

a. Two booster fans,

b. Two isolation valves in each outside air intake duct,

c. Two isolation valves in the toilet area air exhaust duct,

d. One filter train,

e. At least two air conditioning units, and

f. Two isolation valves in the kitchen area exhaust duct.

APPLICABILITY: MODES 1, 2, 3, 4, 5 and 6 or during movement of irradiated fuel assemblies.

ACTION:

MODES 1, 2, 3 and 4:

a. With one booster fan inoperable, restore the inoperable fan to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With one isolation valve per air duct inoperable, operation may continue provided the other isolation valve in the same duct is maintained closed; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

c. With the filter train inoperable, restore the filter train to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

d. With only one air conditioning unit OPERABLE, restore at least two air conditioning units to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

PLANT SYSTEMS

ACTION: (continued)

MODES 5 and 6 or during movement of irradiated fuel assemblies:

a. With one booster fan inoperable, restore the inoperable fan to OPERABLE status within 7 days or initiate and maintain operation of the remaining OPERABLE control room emergency ventilation system in the recirculation mode or suspend movement of irradiated fuel assemblies.

b. With one isolation valve in an air duct inoperable, maintain the other isolation valve in the same air duct closed or suspend movement of irradiated fuel assemblies.

c. With the filter train inoperable, suspend movement of irradiated fuel assemblies.

d. With only one air conditioning unit OPERABLE, restore at least two air conditioning units to OPERABLE status within 7 days or suspend movement of irradiated fuel assemblies.

SURVEILLANCE REQUIREMENTS

4.7.7.1 The control room emergency ventilation system shall be demonstrated OPERABLE:

a. At least once per 31 days by:

1. Initiating flow through the HEPA filter and charcoal adsorber train and verifying that each booster fan operates for at least 15 minutes.

2. Starting (unless already operating) each air conditioning unit and verifying that it operates for at least 8 hours.

b. By performing required control room emergency ventilation system filter testing in accordance with the Ventilation Filter Testing Program.

SURVEILLANCE REQUIREMENTS (Continued)

DELETED

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

c. At least once per 18 months by verifying that on a containment isolation signal the system automatically isolates the control room within 35 seconds and switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks.

d. At least once per 36 months on a STAGGERED TEST BASIS by verifying that one control room emergency ventilation train maintains the control room at a positive pressure ≥ 1/8 inch W.G. relative to the outside atmosphere during system operation with ≤ 450 cfm outside air intake.

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION

INSTRUMENT	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ALARM SETPOINT	MEASUREMENT RANGE	ACTION
1. AREA MONITORS					
a. Fuel Storage Pool Area	1	*	≤ 15 mR/hr	$10^{-1} - 10^{4}$ mR/hr	13
b. Containment (CIS)	3	****	≤ 90 mR/hr	$1 - 10^{5}$ mR/hr	16
c. Containment Area – Hi Range	1	1, 2, 3, & 4	≤ 10 R/hr	$1 - 10^{7}$ R/hr	15
2. PROCESS MONITORS					
a. Containment					
i. Gaseous Activity RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$10 - 10^{6}$ cpm	14
ii. Particulate Activity RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$10 - 10^{6}$ cpm	14
b. Fuel Storage Pool Area Ventilation System					
i. Gaseous Activity	1	**	***	$10^{-7} - 10^{5}$ µCi/cc	12
ii. Particulate Activity	1	**	***	$1 - 10^{6}$ cpm	12

* With fuel in the storage pool or building.
** With recently irradiated fuel in the storage pool.
*** The Alarm Setpoints are determined and set in accordance with requirements of the Offsite Dose Calculation Manual.
**** During movement of recently irradiated fuel assemblies within containment.

(2) conform to the guidance of Appendix I to 10 CFR Part 50, and
(3) include the following:

1) Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM.

2) A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and

3) *Participation in a Interlaboratory Comparison Program* to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

h. Containment Leakage Rate Testing Program

A program to implement the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50 Appendix J, Option B, as modified by approved exemptions. This program is in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," as modified by the following exception(s):

a) Bechtel Topical Report, BN-TOP-1 or ANS 56.8-1994 (as recommended by R.G. 1.163) will be used for type A testing.

b) The first Type A test performed after the May 1993 Type A test shall be no later than May 2008.

The peak calculated containment internal pressure for the design basis loss of coolant accident P_a, is 39.6 psig. The containment design pressure is 44 psig.

The maximum allowed containment leakage rate, L_a, at P_a, shall be 0.50% of containment air weight per day.

Leakage rate acceptance criteria are:

a. Containment leakage rate acceptance criterion is $\leq 1.0\ L_a$. During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are $< 0.60\ L_a$ for the Type B and C tests, $\leq 0.75\ L_a$ for Type A tests, and $\leq 0.27\ L_a$ for secondary containment bypass leakage paths.

b. Air lock testing acceptance criteria are:

1) Overall air lock leakage rate is $\leq 0.05\ L_a$ when tested at $\geq P_a$.

2) For the personnel air lock door seal, leakage rate is $< 0.01\ L_a$ when pressurized to $\geq 1.0\ P_a$.

3) For the emergency air lock door seal, leakage rate is $< 0.01\ L_a$ when pressurized to ≥ 10 psig.

ADMINISTRATIVE CONTROLS (continued)

k. Ventilation Filter Testing Program (VFTP)

A program shall be established to implement the following required testing of Engineered Safety Feature (ESF) filter ventilation systems at the frequencies specified in Regulatory Guide 1.52, Revision 2.

1. Demonstrate for each of the ESF systems that an inplace test of the high efficiency particulate air (HEPA) filters shows a penetration and system bypass ≤ 1% when tested in accordance with ANSI N510-1975 at the system flowrate specified below.

ESF Ventilation System	Flowrate
Control Room Emergency Ventilation	2000 ± 200 cfm

2. Demonstrate for each of the ESF systems that an inplace test of the charcoal adsorber shows a penetration and system bypass ≤ 1% when tested in accordance with ANSI N510-1975 at the system flowrate specified below.

ESF Ventilation System	Flowrate
Control Room Emergency Ventilation	2000 ± 200 cfm

3. Demonstrate for each of the ESF systems that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows the methyl iodide penetration less than the value specified below when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and the relative humidity specified below.

ESF Ventilation System	Penetration	RH
Control Room Emergency Ventilation	≤ 2.5%	70%

4. Demonstrate for each of the ESF systems that the pressure drop across the combined HEPA filters and charcoal adsorbers is less than the value specified below when tested at the system flowrate specified below.

ESF Ventilation System	Delta P	Flowrate
Control Room Emergency Ventilation	< 4.15" W.G.	2000 ± 200 cfm

The provisions of SR 4.0.2 and SR 4.0.3 are applicable to the VFTP test frequencies.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the NRC.

STARTUP REPORT

6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment of the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal or hydraulic performance of the plant.

REACTOR COOLANT SYSTEM

COLD SHUTDOWN – LOOPS FILLED

LIMITING CONDITION FOR OPERATION

3.4.1.4.1 At least one shutdown cooling loop shall be OPERABLE and in operation* and either:

a. One additional shutdown cooling loop shall be OPERABLE#, or

b. The secondary side water level of at least two steam generators shall be greater than 10% of narrow range indication.

APPLICABILITY: MODE 5 with reactor coolant loops filled##.

ACTION:

a. With less than the above required loops OPERABLE or with less than the required steam generator level, within one (1) hour initiate corrective action to return the required loops to OPERABLE status or to restore the required level.

b. With no shutdown cooling loop in operation, suspend operations that would cause introduction into the RCS; coolant with boron concentration less than required to meet SHUTDOWN MARGIN of Technical Specification 3.1.1.2 and within one (1) hour initiate corrective action to return the required shutdown loop to operation.

SURVEILLANCE REQUIREMENTS

4.4.1.4.1.1 The secondary side water level of at least two steam generators when required shall be determined to be within limits at least once per 12 hours.

4.4.1.4.1.2 At least one shutdown cooling loop shall be determined to be in operation and circulating reactor coolant at least once per 12 hours.

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* The shutdown cooling pump may be de-energized for up to 1 hour provided 1) no operations are permitted that would cause introduction into the RCS, coolant with boron concentration less than required to meet the SHUTDOWN MARGIN of Technical Specification 3.1.1.2 and 2) core outlet temperature is maintained at least 10°F below saturation temperature.

\# One shutdown cooling loop may be inoperable for up to 2 hours for surveillance testing provided the other shutdown cooling loop is OPERABLE and in operation.

\## A reactor coolant pump shall not be started with two idle loops unless the secondary water temperature of each steam generator is less than 30°F above each of the Reactor Coolant System cold leg temperatures.

ATTACHMENT 6

ST. LUCIE UNIT 2 RETYPED TECHNICAL SPECIFICATION PAGES

The attached retype reflects the currently issued version of the Technical Specifications. Pending Technical Specification changes or Technical Specification changes issued subsequent to this submittal are not reflected in the enclosed retype. The enclosed retype should be checked for continuity with Technical Specifications prior to issuance.

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PLANT SYSTEMS

3/4.7.7 CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM (CREACS)

LIMITING CONDITION FOR OPERATION

3.7.7 Two independent control room emergency air cleanup systems shall be OPERABLE with:

a. A filter train and its associated fan per system, and

b. At least one air conditioning unit per system, and

c. Two isolation valves in the kitchen area exhaust duct, and

d. Two isolation valves in the toilet area exhaust duct, and

e. Two isolation valves in each (North and South) air intake duct.

APPLICABILITY: MODES 1, 2, 3, 4, 5 and 6 or during movement of irradiated fuel assemblies.

ACTION:

MODES 1, 2, 3, and 4:

a. With one control room emergency air cleanup system inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With both control room emergency air cleanup systems inoperable, restore at least one system to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the next 30 hours.

c. With an isolation valve in an air intake duct or air exhaust duct inoperable, operation may continue provided the other isolation valve in the same air intake or air exhaust duct is maintained closed; otherwise be in at least HOT STANDBY in the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

MODES 5 and 6 or during movement of irradiated fuel assemblies:

a. With one control room emergency air cleanup system inoperable, restore the inoperable system to OPERABLE status within 7 days or initiate and maintain operation of the remaining OPERABLE control room emergency air cleanup system in the recirculation mode or suspend movement of irradiated fuel assemblies.

b. With both control room emergency air cleanup systems inoperable, suspend movement of irradiated fuel assemblies.

c. With an isolation valve in an air intake duct or air exhaust duct inoperable, maintain the other isolation valve in the same air intake or air exhaust duct closed or suspend movement of irradiated fuel assemblies.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

4.7.7 Each control room emergency air cleanup system shall be demonstrated OPERABLE:

a. At least once per 31 days by (1) initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 15 minutes and (2) starting, unless already operating each air conditioning unit and verifying that it operates for at least 8 hours.

b. By performing required control room emergency air cleanup system filter testing in accordance with the Ventilation Filter Testing Program.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

c. At least once per 18 months by:

1. Verifying that on a containment isolation test signal from Unit 2, the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks.

2. Verifying that on a containment isolation test signal from Unit 1 the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks.

d. At least once per 36 months on a STAGGERED TEST BASIS by:

1. Verifying that one control room emergency air cleanup system train maintains the control room at a positive pressure of greater than or equal to 1/8 inch Water Gauge relative to the outside atmosphere during system operation with $\leq$ 450 cfm outside air intake.

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION

INSTRUMENT	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ALARM/TRIP SETPOINT	MEASUREMENT RANGE	ACTION
1. AREA MONITORS					
a. Fuel Storage Pool Area					
i. Criticality and Ventilation System Isolation Monitor	4	*	≤ 20 mR/hr	10^{-1} – 10^{4} mR/hr	22
b. Containment Isolation	3	****	≤ 90 mR/hr	1 – 10^{7} mR/hr	25
c. Control Room Isolation	1 per intake	ALL MODES	≤ 2x background	10^{-7} – 10^{-2} µCi/cc	26
d. Containment Area – Hi Range	1	1, 2, 3 & 4	Not Applicable	1 - 10^{7} R/hr	27
2. PROCESS MONITORS					
a. Fuel Storage Pool Area Ventilation System					
i. Gaseous Activity	1	**	***	10^{-7} – 10^{-2} µCi/cc	24
ii. Particulate Activity	1	**	***	1 – 10^{6} cpm	24
b. Containment					
i. Gaseous Activity RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	10^{-7} – 10^{-2} µCi/cc	23
ii. Particulate Activity RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	1 – 10^{6} cpm	23

* With fuel in the storage pool or building.
** With recently irradiated fuel in the storage pool.
*** The Alarm/Trip Setpoints are determined and set in accordance with requirements of the Offsite Dose Calculation Manual.
**** During movement of recently irradiated fuel assemblies within containment.

TABLE 3.3-6 (Continued)

ACTION STATEMENTS

ACTION 22 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, perform area surveys of the monitored area with portable monitoring instrumentation at least once per 24 hours.

ACTION 23 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.4.6.1.

ACTION 24 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, suspend all operations involving movement of recently irradiated fuel within the spent fuel storage pool.

ACTION 25 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.9.9.

ACTION 26 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirements, within 1 hour initiate and maintain operation of the control room emergency ventilation system in the recirculation mode of operation.

ACTION 27 - With the number of OPERABLE Channels less than required by the Minimum Channels OPERABLE requirement, either restore the inoperable Channel(s) to OPERABLE status within 72 hours, or:

1) Initiate the preplanned alternate method of monitoring the appropriate parameter(s), and

2) Prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within 14 days following the event outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

ADMINISTRATIVE CONTROLS (continued)

j. Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

1. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.

2. Licensees may make changes to Bases without prior NRC approval provided the changes do not require either of the following:

   a. a change in the TS incorporated in the license; or

   b. a change to the updated UFSAR or Bases that requires NRC approval pursuant to 10 CFR 50.59.

3. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the UFSAR.

4. Proposed changes that meet the criteria of Specification 6.8.4.j.2.a or 6.8.4.j.2.b, above, shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

k. Ventilation Filter Testing Program (VFTP)

A program shall be established to implement the following required testing of Engineered Safety Feature (ESF) filter ventilation systems at the frequencies specified in Regulatory Guide 1.52, Revision 2.

1. Demonstrate for each of the ESF systems that an inplace test of the high efficiency particulate air (HEPA) filters shows a penetration and system bypass ≤ 0.05% when tested in accordance with ANSI N510-1980 at the system flowrate specified below.

ESF Ventilation System	Flowrate
Control Room Emergency Air Cleanup	2000 ± 200 cfm

2. Demonstrate for each of the ESF systems that an inplace test of the charcoal adsorber shows a penetration and system bypass ≤ 0.05% when tested in accordance with ANSI N510-1980 at the system flowrate specified below.

ESF Ventilation System	Flowrate
Control Room Emergency Air Cleanup	2000 ± 200 cfm

3. Demonstrate for each of the ESF systems that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows the methyl iodide penetration less than the value specified below when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and the relative humidity specified below.

ESF Ventilation System	Penetration	RH
Control Room Emergency Air Cleanup	≤ 0.175%	95%

ADMINISTRATIVE CONTROLS (continued)

k. Ventilation Filter Testing Program (VFTP) (continued)

4. Demonstrate for each of the ESF systems that the pressure drop across the combined HEPA filters and charcoal adsorbers is less than the value specified below when tested at the system flowrate specified below.

ESF Ventilation System	Delta P	Flowrate
Control Room Emergency Air Cleanup	< 7.4" W.G.	2000 ± 200 cfm

The provisions of SR 4.0.2 and SR 4.0.3 are applicable to the VFTP test frequencies.

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SAFETY LIMITS AND LIMITING SAFETY SYSTEM SETTINGS

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REFUELING OPERATIONS

LOW WATER LEVEL

LIMITING CONDITION FOR OPERATION

3.9.8.2 Two independent shutdown cooling loops shall be OPERABLE and at least one shutdown cooling shall be in operation.

APPLICABILITY: MODE 6 when the water level above the top of the reactor pressure vessel flange is less than 23 feet.

ACTION:

a. With less than the required shutdown cooling loops OPERABLE, within 1 hour initiate corrective action to return the required loops to OPERABLE status, or to establish greater than or equal to 23 feet of water above the reactor pressure vessel flange, as soon as possible.

b. With no shutdown cooling loop in operation, suspend operations that would cause introduction into the RCS, coolant with boron concentration less than required to meet the boron concentration of Technical Specification 3.9.1 and within 1 hour initiate corrective action to return the required shutdown cooling loop to operation. Close all containment penetrations providing direct access from the containment atmosphere to the outside atmosphere within 4 hours.

SURVEILLANCE REQUIREMENTS

4.9.8.2 At least once per 12 hours:

a. At least one shutdown cooling loop shall be verified to be in operation.

b. The total flow rate of reactor coolant to the reactor pressure vessel shall be verified to be greater than or equal to 3000 gpm.*

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* The reactor coolant flow rate requirement may be reduced to 1850 gpm if the following conditions are satisfied before the reduced requirement is implemented: the reactor has been determined to have been subcritical for at least 125 hours, the maximum RCS temperature is ≤ 117°F, and the temperature of CCW to the shutdown cooling heat exchanger is ≤ 87°F.