ATTACHMENT (2)

IMPROVED TECHNICAL SPECIFICATIONS, REVISION 2

AMENDMENT REVISION BY CHANGE

1. A new Discussion of Deviation has been provided (Discussion of Deviation 27 to Section 5.0) to describe the current Calvert Cliffs requirement that the operations manager hold or have held a senior reactor operator license. This Discussion of Deviation justifies the change to NUREG-1432 Specification 5.2.2.f [Improved Technical Specification (ITS) 5.2.2.f] as requested by the Nuclear Regulatory Commission (NRC) in their comments to Section 5.0 (comment 3).

5.2 Organization

5.2.2 Unit Staff

The unit staff organization shall include the following:

a. A total of three non-licensed operators shall be assigned to the Units 1 and 2 shift crews.

b. Those licensed operators counted toward minimum shift crew composition required by 10 CFR 50.54(m)(2)(i) shall be licensed for both units.

c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.

d. A radiation protection technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

e. The amount of overtime worked by unit staff members performing safety related functions shall be limited and controlled in accordance with the Nuclear Regulatory Commission Policy Statement on working hours (Generic Letter 82-12).

f. The General Supervisor-Nuclear Plant Operations shall hold a Senior Reactor Operator (SRO) license. The operations manager shall hold or have held a SRO license for Calvert Cliffs. | 2

<CTS> 5.2 Organization

<6.2.2> 5.2.2 Unit Staff (continued)

2. An individual should not be permitted to work more than 16 hours in any 24 hour period, nor more than 24 hours in any 48 hour period, nor more than 72 hours in any 7 day period, all excluding shift turnover time;

3. A break of at least 8 hours should be allowed between work periods, including shift turnover time;

4. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized in advance by the [Plant Superintendent] or his designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.

Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the [Plant Superintendent] or his designee to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

OR

<6.4.1.e> e. The amount of overtime worked by unit staff members performing safety related functions shall be limited and controlled in accordance with the NRC Policy Statement on working hours (Generic Letter 82-12).

<6.2.2.f> f. The [Operations Manager or Assistant Operations Manager] shall hold an SRO license.

<6.2.2.g> g. The Shift Technical Advisor (STA) shall provide advisory technical support to the Shift Supervisor (SS) in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

INSERT G

shall hold or have held a SRO license at Calvert Cliffs.

The General Supervisor - Nuclear Plant Operations

This change has been proposed as a change to the ITS NUREG as TSTF-65, but has not yet been approved by the NRC.

27. The Calvert Cliffs current licensing basis requires the General Supervisor-Nuclear Plant Operations to hold a license, and also requires the operations manager (the individual the General Supervisor-Nuclear Plant Operations reports to) to hold or have held a Senior Reactor Operator license at Calvert Cliffs. This requirement is being retained in the ITS.

28. This change incorporates the current Calvert Cliffs requirements for the Iodine Removal System into the Ventilation Filter Testing Program. This requirement is consistent with the Calvert Cliffs current licensing basis.

29. The gas storage tank radioactivity limit in NUREG-1432 Specification 5.5.12.b has been changed to be consistent with the Calvert Cliffs current licensing basis. The Calvert Cliffs ITS radioactivity limit will be that in the event of an uncontrolled release of the tank's contents, the resulting total body exposure to a member of the public at the site boundary will not exceed accident guidelines.

30. The CTS state that the Occupational Radiation Exposure Report for the Independent Spent Fuel Storage Installation is reported separately from the Units 1 and 2 Occupational Radiation Exposure Report. Therefore, for clarity, the Note to ITS 5.6.1 has been modified to preclude combining the reports into a single submittal.

31. The phrase ", as modified by approved exemptions" has been added to the ITS 5.6.3 requirement that the Radioactive Effluent Release Report be submitted in accordance with 10 CFR 50.36a. Current Technical Specification 6.6.3 footnote "**" allows an exemption to 10 CFR 50.36a that allows the Sr^{89} and Sr^{90} analysis results to be submitted at a later date. The addition of the phrase ", as modified by approved exemptions" is consistent with its use in other ITS that allow exemptions (e.g., ITS 3.6.1).

32. The current Calvert Cliffs licensing basis surveillance frequencies have been provided in ITS 5.5.11. In addition, for clarity the NUREG-1432 discussion concerning the provisions of SR 3.0.2 and SR 3.0.3 have been moved to the end of this specification after the discussion of frequencies, since it applies only to the frequencies.

33. The statement in NUREG-1432 Specification 5.5.11, "at the system flowrate specified below [+-10%]" has been deleted since it is redundant. Each of the requirements in NUREG-1432 Specification 5.5.11 that require a specific flowrate have the same statement.

2. Discussion of Deviation 5 to Section 5.0 has been revised to provide the Current Technical Specification (CTS) Amendment number that added the Shift Technical Advisor requirements to the Calvert Cliffs CTS. This revised Discussion of Deviation justifies the change to NUREG-1432 Specification 5.2.2.g (ITS 5.2.2.g) based on current licensing basis. This was requested by the NRC in their comments to Section 5.0 (comment 4).

PLANT SPECIFIC CHANGES

1. This change incorporates the Calvert Cliffs-specific information into brackets.

2. The NUREG-1432 requirement (5.2.2.a) that two non-licensed operators be available for each unit in Modes 1, 2, 3, and 4, and a total of three be assigned for both units when the plant is shutdown or defueled, is being replaced by a requirement to have a total of three non-licensed operators available for both units at all times when the Technical Specifications are applicable. This requirement is consistent with Calvert Cliffs current licensing basis.

3. NUREG-1432 Specification 5.5.4 contains information regarding the Radioactive Effluent Controls Program. Calvert Cliffs Improved Technical Specifications (ITS) revise the wording for some of the requirements consistent with Calvert Cliffs Technical Specification Amendments 217 and 197, respectively, for Calvert Cliffs Units 1 and 2. This change is consistent with Calvert Cliffs current licensing basis.

4. The NUREG-1432 overtime policy (5.2.2.e) in brackets was changed to be consistent with Calvert Cliffs current licensing basis. The changes involved deleting the information in the first set of brackets and adopting the information in the second set of brackets, which is consistent with Calvert Cliffs current licensing basis.

5. The Shift Technical Advisor requirements in NUREG-1432 (5.2.2.g) were replaced by Calvert Cliffs-specific requirements for the Shift Technical Advisor. These changes are consistent with the Calvert Cliffs current licensing basis and were recently added to the CTS (as approved by the NRC) in Amendments 217 and 197, respectively, for Calvert Cliffs Units 1 and 2.

6. This change deletes the bracketed information labeled Reviewers Notes. This is acceptable because the Reviewers Notes are information for the Nuclear Regulatory Commission (NRC) reviewers and not intended to be maintained in the individual plant's Technical Specifications.

7. The bracketed information in NUREG-1432 Section 5.4.1.f, about Core Protection Calculator Addressable Constants, have been deleted because Calvert Cliffs does not have Core Protection Calculators.

8. The acronym "FSAR" is being change to "UFSAR" to reflect that Calvert Cliffs has an Updated Final Safety Analysis Report.

9. The applicable sections from Current Technical Specification (CTS) 3.4.5, "Steam Generators," were included as the Steam Generator Tube Surveillance Program as required by the Reviewer's Note in NUREG-1432.

10. The bracketed information in NUREG-1432 Section 5.5.11.e, Ventilation Filter Testing Program, is being deleted because Calvert Cliffs does not utilize heaters in their filtration trains.

11. The outdoor liquid storage tank requirements in Section 5.5.12 of NUREG-1432, including the program description, the liquid radwaste quantities are determined, and the surveillance program requirements, are being deleted because Calvert Cliffs does not have any outdoor liquid radwaste tanks. This change is consistent with the Calvert Cliffs current licensing basis.

3. Discussion of Change LA.3 to Section 5.0 has been revised to state that the relocated details will be moved to the Quality Assurance Policy, which is controlled by the provisions of 10 CFR 50.54(a). The change control process was requested to be provided by the NRC in their comments to Section 5.0 (comment 5).

TECHNICAL CHANGES - MOVEMENT OF INFORMATION TO LICENSEE-CONTROLLED DOCUMENTS

LA.1 Current Technical Specification 6.2.2.e, which specifies the requirements of the fire brigade, is being moved to the Fire Protection Program. All fire protection-related Technical Specifications are being relocated from the Technical Specifications into the Fire Protection Program which is incorporated by a reference into the UFSAR, as allowed in Generic Letter 88-12. These requirements can be adequately controlled in the Fire Protection Program. Any changes to the Fire Protection Program will require a 10 CFR 50.59 evaluation. This change is consistent with NUREG-1432.

LA.2 Current Technical Specification 6.2.2.f requires the operations manager to hold or have held an SRO license at Calvert Cliffs, and that the General Supervisor, Shift Supervisor, and Control Room Supervisor hold an SRO license. The proposed change will remove the requirements for the Shift Supervisor and Control Room Supervisor to hold an SRO license as this requirement is stated in the regulations. The requirement for the General Supervisor-Nuclear Plant Operations to hold an SRO license will remain in the Technical Specifications. This change is consistent with NUREG-1432.

LA.3 Current Technical Specification 6.5.1.c.2 requires changes to the Offsite Dose Calculation Manual (ODCM) become effective upon review by the onsite review function and approval by the Plant Manager. The proposed change will move the requirement that changes to the ODCM be reviewed by the onsite review committee to the QA Policy. The requirement that changes to the ODCM be subject to the onsite review function is not required to be in the Technical Specifications because changes to the ODCM are currently subject to the onsite review function per the QA Policy, which describes the duties of the onsite review committee. Therefore, any changes to the functions of the onsite review committee will require a 10 CFR 50.54(a) evaluation. These evaluations ensure that any changes to these requirements will be appropriately reviewed. This change is consistent with NUREG-1432.

LA.4 Current Technical Specification 3.6.1.6, "Containment Structural Integrity," SRs, and figures are being relocated to the Technical Requirements Manual (TRM). Note that the Unit 1 and Unit 2 requirements differ. The Unit 1 and Unit 2 containments are identical and were constructed at the same time. Testing on the Unit 1 containment is representative of the condition of the Unit 2 containment. Therefore, the CTS contains the majority of the testing requirements in the Unit 1 Technical Specifications. What testing will be performed on each containment will be described in the TRM. The description of the program is being incorporated into Chapter 5.0. The requirements of ITS 5.5.6 are adequate to ensure the containment structural integrity is maintained. Improved Technical Specification 5.5.6 provides regulatory control over the containment tendons, end anchorages, and adjacent concrete surfaces, and containment surface limitations and surveillances proposed to be relocated. As a result, the requirements proposed to be relocated are not required to be included in the ITS to ensure the containment structural integrity is maintained. The TRM will be incorporated by reference into the UFSAR at ITS implementation. Any changes to these relocated requirements will be controlled by the provisions of 10 CFR 50.59. This change is consistent with NUREG-1432.

LA.5 Current Technical Specification 3.11.1.1 and 3.11.1.2 requirements are being relocated to the TRM. The requirements of ITS 5.5.12 are adequate to ensure the quantity of radioactivity in

4. A new Discussion of Change has been provided (Discussion of Change M.6 to Section 5.0) to discuss the addition of the prefilters to the pressure drop tests of CTS 4.6.3.1.d.1, 4.6.6.1.d.1, 4.7.6.1.e.1, 4.7.7.1.d, and 4.9.1.2.d.1 (ITS 5.5.11.d). This change was requested by the NRC in their comments to Section 5.0 (comment 13).

Specification 5.0

CREVS PORTION OF VFTP

INSERT 5.5.11
(page 3 of 15)

A.16

5.5.11 VFTP

A.1

~~3/4.7 PLANT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11.c ~~f.~~ Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). — A.23 — 2

5.5.11.d ~~g.~~ Verifying a system flow rate of 2000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975. — 2

5.5.11 ~~d.~~ After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). — A.23 — 2

5.5.11 Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers ~~remove~~ ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow of 2000 cfm ± 10%. — 2

5.5.11.b shows a penetration and system bypass ≤ 1.0% — A.23

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

5.5.11.d ~~f.~~ Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the ventilation system at a flow rate of 2000 cfm ± 10%. — prefilters — M.6 — 2

2. Verifying that on a Control Room high radiation test signal, the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks and that both of the isolation valves in each inlet duct and common exhaust duct, and the isolation valve in the toilet area exhaust duct, close.

See Discussion of Change for Specification 3.7.8 CREVS

ECCS PREAFS PORTION OF VFTP

INSERT 5.5.11
(page 6 of 15)

5.5.11 VFTP (A.16)

~~3/4.7 PLANT SYSTEMS~~ (A-1)

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11.a ~~3.~~ Verifying that the HEPA filter banks ~~remove > 99% of the DOP when they are tested in-place in accordance~~ with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%. (A.23) shows a penetration and system bypass ≤ 1.0%

5.5.11.c ~~3.~~ Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). (A.23) (2)

5.5.11.d ~~4.~~ Verifying a system flow rate of 3000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975.

5.5.11 ~~b.~~ After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). (A.23)

(A.23) shows a penetration and system bypass ≤ 1%

5.5.11 Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 3000 cfm ± 10%.

5.5.11.b

5.5.11 ~~d.~~ At least once per 18 months by verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the filter train at a flow rate of 3000 cfm ± 10%. (2)

5.5.11.d

> prefilters, (M.6) (2)

INSERT 5.5.11
(page 10 of 15)

Specification 5.0

PREFS PORTION OF VFTP (A.16)

5.5.11 VFTP

~~3/4.6 CONTAINMENT SYSTEMS~~ (A.1)

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11

~~d.~~ At least once per 18 months by:

5.5.11.d ~~2.~~ Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 6 inches Water Gauge while operating the filter train at a flow rate of 2000 cfm ± 10%. (prefilters, M.6)

~~2.~~ Verifying that the filter train starts on Containment Isolation Test Signal (See Discussion of change to specification 3.7.12 "PREFS")

5.5.11.a 5.5.11.c ~~3.~~ 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%. (2)

5.5.11.b 5.5.11.e 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510 1975. (L.6)

shows a penetration or system bypass ≤ 1.0% (A.23)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies. (A.25)

SFP Ventilation System Portion of VFTP

INSERT 5.5.11
(page 12 of 15)

5.5.11 VFTP (A.16)

(A.1)

3/4.9 REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

(A.23) shows a penetration or system bypass ≤ 1.0 %.

5.5.11.b Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers remove ~~≥ 99%~~ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%. *

(2)

5.5.11 d. At least once per 18 months by:

5.5.11.d 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

(prefilters) (M.6)

2. Verifying that each exhaust fan maintains the spent fuel storage pool area at a measurable negative pressure relative to the outside atmosphere during system operation.

See Discussion of Changes for Specification 3.7.11, SFP Ventilation System

5.5.11 e. 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

5.5.11.a

(A.23) shows a penetration or system bypass ≤ 1.0 %

f. 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

5.5.11.b

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510-1975.

(L.6)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

(A.25)

Specification 5.0

IRS Portion of VFTP

(A.16)

INSERT 5.5.11
(page 14 of 15)

5.5.11 VFTP

(A.1)

~~3/4.6 CONTAINMENT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11.c ~~3.~~ Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 95% for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.). (A.23)

5.5.11.d ~~4.~~ Verifying a filter train flow rate of 20,000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975. (1)

5.5.11 c. After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 95% for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.). (A.23)

5.5.11.b Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%.

Shows a penetration and system bypass ≤ 1.0%

24 months

(A.23)

5.5.11 ~~d.~~ At least once per ~~REFUELING INTERVAL~~ by:

5.5.11.d 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 6 inches Water Gauge while operating the filter train at a flow rate of 20,000 cfm ± 10%.

(prefilters)

(M.6)

CREVS Portion of VFTP

Specification 5.0

Insert 5.5.11
(page 3 of 15)

A.16

5.5.11 VFTP

A.1

~~3/4.7 PLANT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

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

5.5.11 ~~e.~~ After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.).

A.23

2

5.5.11 Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by ~~also~~ verifying that the charcoal adsorbers remove ≥ 99% of a ~~halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow of 2000 cfm ± 10%.

5.5.11.b

shows penetration and system bypass of ≤ 1.0%

A.23

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

5.5.11.d ~~1.~~ Verifying that the pressure drop across the combined HEPA filters (pre filters) and charcoal adsorber banks is < 4 inches Water Gauge while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

M.6

2a

2. Verifying that on a control room high radiation test signal, the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks and that both of the isolation valves in each inlet duct and common exhaust duct, and the isolation valve in the toilet area exhaust duct, close.

A see Discussion of Changes for Specification 3.7.8, "CREVS"

ECCS PREAFs Portion of VFTP

specification 5.0

Insert 5.5.11
(Pg 6 of 15)

5.5.11 VFTP (A.16)

~~3/4.7 PLANT SYSTEMS~~

SURVEILLANCE REQUIREMENTS (Continued)

(A.23)

5.5.11.a) ~~g.~~ Verifying that the HEPA filter banks ~~remove ≥ 99% of the DOP when they are tested in-place in accordance~~ with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%. (shows a penetration and system bypass ≤ 1.0 %)

5.5.11.b) ~~h.~~ Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.).

5.5.11.d) ~~i.~~ Verifying a system flow rate of 3000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975. (2)

5.5.11 ~~j.~~ After every 720 hours of charcoal adsorber operation by:

5.5.11.c) Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). (A.23)

(A.23)

5.5.11 Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 3000 cfm ± 10%. (shows a penetration and system bypass ≤ 1.0 %)

5.5.11.b)

5.5.11 ~~k.~~ At least once per 18 months by verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the filter train at a flow rate of 3000 cfm ± 10%. (2)

5.5.11.d) → prefilters, (M.6)

[PREFS Portion of VFTP]

Insert 5 5.11
(page 10 of 15)

specification 5.0

5.5.11 VFTP

A.1

A.16

~~3/4.6 CONTAINMENT SYSTEMS~~

SURVEILLANCE REQUIREMENTS (Continued)

5.5.11

Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated ~~OPERABLE~~ by ~~verifying that the charcoal adsorbers remove ≥ 99% of~~ the halogenated ~~hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

5.5.11.b

M.6

shows a penetration and system bypass ≤ 1.0%.

A.23

5.5.11.a At least once per 18 months by:

prefilters

5.5.11.d 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 6 inches Water Gauge while operating the filter train at a flow rate of 2000 cfm ± 10%.

2. Verifying that the filter train starts on Containment Isolation Test Signal.

see Discussion of Change for Spec 3.7.12, "PREFS"

5.5.11.e 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

5.5.11.a

shows a penetration and system bypass ≤ 1.0%.

A.23

5.5.11.f 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

5.5.11.b

g. ~~After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510 1975.~~

L.6

2

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

A.25

SFP Ventilation System portion of VFTP

Specification 5.0

Insert 5.5.11
(Page 12 of 15)

5.5.11 VFTP (A.16) (A.1)

3/4.9 REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

5.5.11 e. After every 720 hours of charcoal adsorber operation by:

(A.23)

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.).

(2)

5.5.11

5.5.11.b Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers ~~remove~~ ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

show a penetration and system bypass ≤ 1.0%

(A.23)

5.5.11 d. At least once per 18 months by: prefilters (M.6)

5.5.11.d 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

(2)

2. Verifying that each exhaust fan maintains the spent fuel storage pool area at a measurable negative pressure relative to the outside atmosphere during system operation.

see Discussion of CHANGE to specification 3.7.11, "SFP Ventilation System"

5.5.11 e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks ~~remove~~ ≥ ~~99%~~ of the DOP

5.5.11.a when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

(2)

TRS Portion of VFTP

Insert 5.5.11
(page 15 of 15)

specification 5.0

5.5.11 VFTP

A.1

~~3/4.6 CONTAINMENT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11 d. At least once per ~~REFUELING INTERVAL~~ (24 months) by:

5.5.11.d 1. Verifying that the pressure drop across the combined HEPA filters, prefilters, and charcoal adsorber banks is < 6 inches Water Gauge while operating the filter train at a flow rate of 20,000 cfm ± 10%. (M.6) (A.2)

2. Verifying that the filter train starts on the appropriate ESFAS test signal. (see Discussion of Change for specification 3.6.8, "IRS")

5.5.11 e. 5.5.11.a 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%. (A.2)

5.5.11 f. 5.5.11.b 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%. (shows a penetration and system bypass ≤ 1.0%) (A.23)

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510-1975. (L.6) (A.2)

The provisions of SR 3.0.2 and 3.0.3 are applicable to the VFTP Test Frequencies

(A.25) (A.2)

M.5 Not used.

M.6 Current Technical Specifications SR 4.6.3.1.d.1, 4.6.6.1.d.1, 4.7.6.1.e.1, 4.7.7.1.d, and 4.9.1.2.d.1 require a pressure drop test across the combined HEPA filters and charcoal adsorber banks every 18 months be within specified limits. Improved Technical Specification 5.5.11.d requires the test to be performed across the prefilters, in addition to the HEPA filters and charcoal adsorber banks, with no change to the current acceptance limit. This change is more restrictive on plant operations and will ensure that the filter trains are operating as designed to reduce the concentration of fission products as assumed in the accident analysis.

M.7 Current Technical Specification 3/4.6.5.1 Action a.1 requires a special report to be submitted to the NRC when one containment hydrogen analyzer is inoperable and not restored to operable status within the allowed restoration time. Improved Technical Specification 5.6.7 will require the special report to be submitted within 14 days, instead of the current 30 days, after the restoration time for one inoperable hydrogen analyzer has expired. In addition, CTS 3/4.3.3.1 Action 30 and CTS 3/4.3.3.6 Action 35 require that, if two containment area high range monitors or reactor vessel water level post-accident monitoring (PAM) instruments are inoperable and not restored to Operable status within the allowed restoration time, a special report be submitted to the NRC within 30 days after the event (i.e., after the instruments become inoperable). Improved Technical Specification 5.6.7 will require the special report to be submitted 14 days after the restoration time has expired. In CTS 3/4.3.3.1 Action 30 and ITS 3.3.10 Action C, the time provided to restore a containment area high range monitor when both are inoperable is 7 days. Thus, ITS 5.6.7 effectively changes the due date of the special report when both containment high range monitors are inoperable from 30 days after the event to 21 days after the event. In ITS 3.3.10, the restoration time of two inoperable reactor vessel water level instruments has been extended from 48 hours to 7 days. Thus, ITS 5.6.7 also effectively changes the due date of the special report when both reactor vessel water level instruments are inoperable from 30 days after the event to 21 days after the event. These changes will ensure the NRC is properly notified in a timely manner when PAM instrumentation is not restored within the Technical Specification allowed restoration time, and of the actions being taken to restore or compensate for the inoperability. This change is a more restrictive change and is consistent with NUREG-1432.

TECHNICAL CHANGES - RELOCATIONS

None

5. A new Discussion of Deviation has been provided (Discussion of Deviation 28 to Section 5.0) to describe the current Calvert Cliffs requirement for the testing of the Iodine Removal System filter trains. This Discussion of Deviation justifies the change to NUREG-1432 Specification 5.5.11.c (ITS 5.5.11.c) as requested by the NRC in their comments to Section 5.0 (comment 14).

5.5.11 Ventilation Filter Testing Program (VFTP) (continued)

N510-1989, at the system flowrate specified as follows ~~[± 10%]~~:

ESF Ventilation System: CREVS; ECCS Pump Room EAFS; Penetration Room EAFS; SFP Ventilation System — IRS

Flowrate: 2,000 cfm; 3,000 cfm; 2,000 cfm; 32,000 cfm — 20,000 cfm

b. 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 ~~[~~Regulatory Guide 1.52, Revision 2, and ASME N510-1989~~]~~ at the system flowrate specified as follows ~~[± 10%]~~:

ESF Ventilation System: CREVS; ECCS Pump Room EAFS; Penetration Room EAFS; SFP Ventilation System — IRS

Flowrate: 2,000 cfm; 3,000 cfm; 2,000 cfm; 32,000 cfm — 20,000 CFM or equal to

c. 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 greater than or equal to the relative humidity specified as follows:

(elemental iodine for IRS) (130°C for IRS) ANSI N510-1975

ESF Ventilation System: CREVS; ECCS Pump Room EAFS; Penetration Room EAFS; SFP Ventilation System — IRS

Penetration: 10%; 10%; 10%; 10% — 5%

RH: 95%; 95%; 95%; 95% — 95%

(continued)

This change has been proposed as a change to the ITS NUREG as TSTF-65, but has not yet been approved by the NRC.

27. The Calvert Cliffs current licensing basis requires the General Supervisor-Nuclear Plant Operations to hold a license, and also requires the operations manager (the individual the General Supervisor-Nuclear Plant Operations reports to) to hold or have held a Senior Reactor Operator license at Calvert Cliffs. This requirement is being retained in the ITS.

28. This change incorporates the current Calvert Cliffs requirements for the Iodine Removal System into the Ventilation Filter Testing Program. This requirement is consistent with the Calvert Cliffs current licensing basis.

29. The gas storage tank radioactivity limit in NUREG-1432 Specification 5.5.12.b has been changed to be consistent with the Calvert Cliffs current licensing basis. The Calvert Cliffs ITS radioactivity limit will be that in the event of an uncontrolled release of the tank's contents, the resulting total body exposure to a member of the public at the site boundary will not exceed accident guidelines.

30. The CTS state that the Occupational Radiation Exposure Report for the Independent Spent Fuel Storage Installation is reported separately from the Units 1 and 2 Occupational Radiation Exposure Report. Therefore, for clarity, the Note to ITS 5.6.1 has been modified to preclude combining the reports into a single submittal.

31. The phrase ", as modified by approved exemptions" has been added to the ITS 5.6.3 requirement that the Radioactive Effluent Release Report be submitted in accordance with 10 CFR 50.36a. Current Technical Specification 6.6.3 footnote "**" allows an exemption to 10 CFR 50.36a that allows the Sr^{89} and Sr^{90} analysis results to be submitted at a later date. The addition of the phrase ", as modified by approved exemptions" is consistent with its use in other ITS that allow exemptions (e.g., ITS 3.6.1).

32. The current Calvert Cliffs licensing basis surveillance frequencies have been provided in ITS 5.5.11. In addition, for clarity the NUREG-1432 discussion concerning the provisions of SR 3.0.2 and SR 3.0.3 have been moved to the end of this specification after the discussion of frequencies, since it applies only to the frequencies.

33. The statement in NUREG-1432 Specification 5.5.11, "at the system flowrate specified below [+-10%]" has been deleted since it is redundant. Each of the requirements in NUREG-1432 Specification 5.5.11 that require a specific flowrate have the same statement.

6. Discussion of Deviation 11 to Section 5.0 has been revised to clearly state that the outdoor liquid storage tank requirements of Section 5.5.12 are being deleted. The NUREG markup of this Section has also been annotated with this Discussion of Deviation number. This change was requested by the NRC in their comments to Section 5.0 (comment 15) in order to more clearly justify the change to NUREG-1432.

<CTS>

5.5 Programs and Manuals

5.5.11 Ventilation Filter Testing Program (VFTP) (continued)

Reviewer's Note: Allowable penetration = [100% - methyl iodide efficiency for charcoal credited in staff safety evaluation]/(safety factor).

Safety factor = [5] for systems with heaters.
= [7] for systems without heaters.

(6)

d. For each of the ESF systems, demonstrate the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers is less than the value specified below when tested in accordance with [Regulatory Guide 1.52, Revision 2, and ASME N510-1989] at the system flowrate specified as follows [± 10%]:

(4.7.6.1.e.1) (4.7.7.1.d) (4.6.6.1.d) (4.9.12.d) (4.6.3.1.d)

(1) (1) (75)

ESF Ventilation System	Delta P	Flowrate
CREVS	4 inwg	2,000 cfm
ECCS Pump Room EAFS	4 inwg	3,000 cfm
Penetration Room EAFS	6 inwg	2,000 cfm
SFP Ventilation System	6 inwg	12,000 cfm
IRS	6 inwg	20,000 cfm

e. Demonstrate that the heaters for each of the ESF systems dissipate the following specified value [± 10%] when tested in accordance with [ASME N510-1989].

(10)

ESF Ventilation System	Wattage

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

Move to Insert 5.5.7-B Page 5.0-12

(4)

5.5.12 Explosive Gas and Storage Tank Radioactivity Monitoring Program

(and)

This program provides control for potentially explosive gas mixtures contained in the [Waste Gas Holdup System], [the quantity of radioactivity contained in gas storage tanks ~~or fed into the offgas treatment system, and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks~~]. The

(New)

Spec 5.0 DOC A.20

(1)

(11) (2)

(continued)

<CTS> 5.5 Programs and Manuals

5.5.12 Explosive Gas and Storage Tank Radioactivity Monitoring Program (continued)

gaseous radioactivity quantities shall be determined following the methodology in ~~[Branch Technical Position (BTP) ETSB 11-5, "Postulated Radioactive Release due to Waste Gas System Leak or Failure"]~~. ~~The liquid radwaste quantities shall be determined in accordance with [Standard Review Plan, Section 15.7.3, "Postulated Radioactive Release due to Tank Failures"]~~. the ODCM (1) (11) (2)

The program shall include:

a. The limits for concentrations of hydrogen and oxygen in the ~~[Waste Gas Holdup System]~~ and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria (i.e., whether or not the system is designed to withstand a hydrogen explosion); and <3.11.2.5>

b. A surveillance program to ensure that the quantity of radioactivity contained in ~~[each gas storage tank and fed into the offgas treatment system]~~ is less than the amount that would result in a whole body exposure of ≥ 0.5 rem to any individual in an unrestricted area, in the event of [an uncontrolled release of the tanks' contents]; ~~and~~ <3.11.2.6> (13) (1) (29) (2) or equal to 58,500 curies noble gases (considered as Xe-133).

~~c. A surveillance program to ensure that the quantity of radioactivity contained in all outdoor liquid radwaste tanks that are not surrounded by liners, dikes, or walls, capable of holding the tanks' contents and that do not have tank overflows and surrounding area drains connected to the [Liquid Radwaste Treatment System] is less than the amount that would result in concentrations less than the limits of 10 CFR Part 20, Appendix B, Table 2, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area, in the event of an uncontrolled release of the tanks' contents.~~ (11)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

(continued)

PLANT SPECIFIC CHANGES

1. This change incorporates the Calvert Cliffs-specific information into brackets.

2. The NUREG-1432 requirement (5.2.2.a) that two non-licensed operators be available for each unit in Modes 1, 2, 3, and 4, and a total of three be assigned for both units when the plant is shutdown or defueled, is being replaced by a requirement to have a total of three non-licensed operators available for both units at all times when the Technical Specifications are applicable. This requirement is consistent with Calvert Cliffs current licensing basis.

3. NUREG-1432 Specification 5.5.4 contains information regarding the Radioactive Effluent Controls Program. Calvert Cliffs Improved Technical Specifications (ITS) revise the wording for some of the requirements consistent with Calvert Cliffs Technical Specification Amendments 217 and 197, respectively, for Calvert Cliffs Units 1 and 2. This change is consistent with Calvert Cliffs current licensing basis.

4. The NUREG-1432 overtime policy (5.2.2.e) in brackets was changed to be consistent with Calvert Cliffs current licensing basis. The changes involved deleting the information in the first set of brackets and adopting the information in the second set of brackets, which is consistent with Calvert Cliffs current licensing basis.

5. The Shift Technical Advisor requirements in NUREG-1432 (5.2.2.g) were replaced by Calvert Cliffs-specific requirements for the Shift Technical Advisor. These changes are consistent with the Calvert Cliffs current licensing basis and were recently added to the CTS (as approved by the NRC) in Amendments 217 and 197, respectively, for Calvert Cliffs Units 1 and 2.

6. This change deletes the bracketed information labeled Reviewers Notes. This is acceptable because the Reviewers Notes are information for the Nuclear Regulatory Commission (NRC) reviewers and not intended to be maintained in the individual plant's Technical Specifications.

7. The bracketed information in NUREG-1432 Section 5.4.1.f, about Core Protection Calculator Addressable Constants, have been deleted because Calvert Cliffs does not have Core Protection Calculators.

8. The acronym "FSAR" is being change to "UFSAR" to reflect that Calvert Cliffs has an Updated Final Safety Analysis Report.

9. The applicable sections from Current Technical Specification (CTS) 3.4.5, "Steam Generators," were included as the Steam Generator Tube Surveillance Program as required by the Reviewer's Note in NUREG-1432.

10. The bracketed information in NUREG-1432 Section 5.5.11.e, Ventilation Filter Testing Program, is being deleted because Calvert Cliffs does not utilize heaters in their filtration trains.

11. The outdoor liquid storage tank requirements in Section 5.5.12 of NUREG-1432, including the program description, the liquid radwaste quantities are determined, and the surveillance program requirements, are being deleted because Calvert Cliffs does not have any outdoor liquid radwaste tanks. This change is consistent with the Calvert Cliffs current licensing basis.

7. A new Discussion of Deviation has been provided (Discussion of Deviation 29 to Section 5.0) to describe the current Calvert Cliffs gas storage tank radioactivity limit. The Discussion of Deviation justifies the change to NUREG-1432 Specification 5.5.12.b (ITS 5.5.12.b) as requested by the NRC in their comments to Section 5.0 (comment 16).

<CTS> 5.5 Programs and Manuals

5.5.12 Explosive Gas and Storage Tank Radioactivity Monitoring Program (continued)

gaseous radioactivity quantities shall be determined following the methodology in ~~[Branch Technical Position (BTP) ETSB 11-5, "Postulated Radioactive Release due to Waste Gas System Leak or Failure"]~~. ~~The liquid radwaste quantities shall be determined in accordance with [Standard Review Plan, Section 15.7.3, "Postulated Radioactive Release due to Tank Failures"]~~. the ODCM (1) (11) (2)

The program shall include:

a. The limits for concentrations of hydrogen and oxygen in the ~~[~~Waste Gas Holdup System~~]~~ and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria (i.e., whether or not the system is designed to withstand a hydrogen explosion); and <3.11.2.5>

b. A surveillance program to ensure that the quantity of radioactivity contained in ~~[~~each gas storage tank ~~and fed into the of gas treatment system~~]~~ is less than ~~the amount~~ that would result in a whole body exposure of ≥ 0.5 rem to any individual in an unrestricted area, in the event of [an uncontrolled release of the tanks' contents]; ~~and~~ <3.11.2.6> (13) (1) (29) (2)

or equal to 58,500 curies noble gases (considered as Xe-133).

~~c.~~ A surveillance program to ensure that the quantity of radioactivity contained in all outdoor liquid radwaste tanks that are not surrounded by liners, dikes, or walls, capable of holding the tanks' contents and that do not have tank overflows and surrounding area drains connected to the [Liquid Radwaste Treatment System] is less than the amount that would result in concentrations less than the limits of 10 CFR Part 20, Appendix B, Table 2, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area, in the event of an uncontrolled release of the tanks' contents. (11)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

(continued)

This change has been proposed as a change to the ITS NUREG as TSTF-65, but has not yet been approved by the NRC.

27. The Calvert Cliffs current licensing basis requires the General Supervisor-Nuclear Plant Operations to hold a license, and also requires the operations manager (the individual the General Supervisor-Nuclear Plant Operations reports to) to hold or have held a Senior Reactor Operator license at Calvert Cliffs. This requirement is being retained in the ITS.

28. This change incorporates the current Calvert Cliffs requirements for the Iodine Removal System into the Ventilation Filter Testing Program. This requirement is consistent with the Calvert Cliffs current licensing basis.

29. The gas storage tank radioactivity limit in NUREG-1432 Specification 5.5.12.b has been changed to be consistent with the Calvert Cliffs current licensing basis. The Calvert Cliffs ITS radioactivity limit will be that in the event of an uncontrolled release of the tank's contents, the resulting total body exposure to a member of the public at the site boundary will not exceed accident guidelines.

30. The CTS state that the Occupational Radiation Exposure Report for the Independent Spent Fuel Storage Installation is reported separately from the Units 1 and 2 Occupational Radiation Exposure Report. Therefore, for clarity, the Note to ITS 5.6.1 has been modified to preclude combining the reports into a single submittal.

31. The phrase ", as modified by approved exemptions" has been added to the ITS 5.6.3 requirement that the Radioactive Effluent Release Report be submitted in accordance with 10 CFR 50.36a. Current Technical Specification 6.6.3 footnote "**" allows an exemption to 10 CFR 50.36a that allows the Sr^{89} and Sr^{90} analysis results to be submitted at a later date. The addition of the phrase ", as modified by approved exemptions" is consistent with its use in other ITS that allow exemptions (e.g., ITS 3.6.1).

32. The current Calvert Cliffs licensing basis surveillance frequencies have been provided in ITS 5.5.11. In addition, for clarity the NUREG-1432 discussion concerning the provisions of SR 3.0.2 and SR 3.0.3 have been moved to the end of this specification after the discussion of frequencies, since it applies only to the frequencies.

33. The statement in NUREG-1432 Specification 5.5.11, "at the system flowrate specified below [+-10%]" has been deleted since it is redundant. Each of the requirements in NUREG-1432 Specification 5.5.11 that require a specific flowrate have the same statement.

8. Discussion of Changes M.4 and M.5 to Section 5.0 have been combined into Discussion of Change M.4, and Discussion of Change A.26 to Section 5.0 has been replaced with Discussion of Change L.3. These Discussions relate to the changes to the current Calvert Cliffs diesel generator stored fuel oil testing requirements. Discussion of Change M.4 now describes the addition of the new fuel oil testing requirements and Discussion of Change L.3 describes the change in the stored fuel oil testing requirements. An associated No Significant Hazards Consideration has also been provided. These changes were requested by the NRC in their comments to Section 5.0 (comments 17.a, 17.b, and 17.c).

INSERT 5.5.13
pg 2

5.5.13 Diesel Fuel Oil Testing Program

~~3/4.8 ELECTRICAL POWER SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Cont'nued)~~

A.1

4.8.1.1.2 (cont'd.)

~~b. At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank is within the acceptable limits specified in Table 1 of ASTM D975-81 when checked for viscosity, water and sediment.~~

INSERT 5.5.13

M.4

L.3

2

c. At least once per 184 days by verifying the diesel starts from ambient condition and accelerates to at least 60 Hz in ≤ 10 seconds.

d. At least once per **REFUELING INTERVAL** by:

1. Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service.

2. Verifying the generator capability to reject a load of ≥ 500 hp without tripping.

3. Simulating a loss of offsite power in conjunction with a safety injection actuation test signal, and:

   a) Verifying de-energization of the emergency busses and load shedding from the emergency busses.

   b) Verifying the diesel starts from ambient condition on the auto-start signal, energizes the emergency busses with permanently connected loads, energizes the auto-connected emergency loads through the load sequencer and operates for ≥ 5 minutes while its generator is loaded with the emergency loads.

   c) Verifying that automatically bypassed diesel trips are automatically bypassed on a Safety Injection Actuation Signal.

4. Verifying the diesel generator operates for ≥ 60 minutes while loaded to ≥ 4000 kW for No. 1A Emergency Diesel Generator or ≥ 2700 kW for No. 1B Emergency Diesel Generator.

5. Verifying that the auto-connected loads to each diesel generator do not exceed 4000 kW for No. 1A Emergency Diesel Generator or 2700 kW for No. 1B Emergency Diesel Generator.

* All engine starts for the purpose of this Surveillance Requirement may be preceded by an engine pre-lube period recommended by the manufacturer so that mechanical wear and stress on the diesel engine is minimized.

See Discussion of changes for Specification 3.8.1, "AC Sources - Operating"

Insert 5.5.13
(pg 1 of 2)

5.5.13 Diesel Fuel Oil Testing Program

A.1 See Discussion of change for Specification 3.8.1, "A.C. Sources - Operating"

~~3/4.8 ELECTRICAL POWER SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

2. For the 69 kV SMECO offsite power circuit, within one hour of substitution for a 500 kV offsite power circuit, and at least once per 8 hours thereafter during use by verifying correct breaker alignments and indicated power availability; and

b. Demonstrated **OPERABLE** at least once per **REFUELING INTERVAL** during shutdown by manually transferring unit power supply from the normal circuit to the alternate circuit.

4.8.1.1.2 Each diesel generator shall be demonstrated **OPERABLE**:

a. At least once per 31 days on a **STAGGERED TEST BASIS** by:

1. Verifying the fuel level in the day fuel tank.

2. Verifying the fuel level in the fuel storage tank.

3. Verifying the fuel transfer pump can be started and transfers fuel from the storage system to the day tank.

4. Verifying the diesel starts and achieves a generator voltage and frequency of 4160 ± 420 volts and 60 ± 1.2 Hz, respectively.

5. Verifying the generator is synchronized, loaded to ≥ 2700 kW, and operates for ≥ 60 minutes.

6. Verifying the diesel generator is aligned to provide standby power to the associated emergency busses.

7. Verifying that the automatic load sequencer timer is **OPERABLE** with the interval between each load block within ± 10% of its design interval.

~~b. At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank is within the acceptable limits specified in Table 1 of ASTM D975-81 when checked for viscosity, water and sediment.~~

Insert 5.5.13 (M.4) (L.3) (2)

* All engine starts for the purpose of this Surveillance Requirement may be preceded by an engine prelube period and/or other warmup procedures recommended by the manufacturer so that mechanical wear and stress on the diesel engine is minimized.

or particulates, respectively. Improved Technical Specifications 5.5.11.a and 5.5.11.b require each bank to show a penetration and system bypass of < 1.0%. The CTS requires the measurement of the amount removed, while the ITS requires the measurement of the amount that is not removed. Both these requirements can be directly correlated to one another. Therefore, this change is administrative because both requirements are essentially equivalent. In addition, CTS 3.6.3, 3.6.3.1, 3.6.7, 3.7.7, and 3.9.12 requirements for laboratory analysis requires the sample to be obtained from an adsorber tray or an adsorber test tray. Since these are the only two locations to obtain samples, it is not necessary to state this in the ITS. Therefore, the ITS does not include this detail and this change is considered administrative. These changes are consistent with NUREG-1432.

A.24 The requirement in CTS 4.4.10.1.1 requires the reactor coolant pump flywheel to be inspected per the recommendations of Regulatory Guide 1.14. The proposed change moves this requirement to the Administrative Controls section of the ITS (ITS 5.5.7). This change is considered administrative because the requirements in the CTS will remain intact. This change is consistent with NUREG-1432.

A.25 A requirement which states that the provisions of ITS SRs 3.0.2 and 3.0.3 are applicable to the VFTP Test Frequencies was added. These requirements are currently applicable to CTS 3.6.3.1, 3.6.6, 3.7.6, 3.7.7, and 3.9.12 Surveillances. Therefore, since these requirements are currently applicable to the CTS, the change is administrative in nature. This change is consistent with NUREG-1432.

A.26 Not used.

A.27 Current Technical Specifications 6.2.2.b and 6.2.2.c require at least a certain number of non-licensed Operators to be assigned to shift crews and licensed Operators to be present in the Control Room during specific plant operation. Improved Technical Specification 5.2.2 will not contain this requirement. These requirements are being deleted because they are duplicative of regulations. Title 10 of the Code of Federal Regulations 50.54(m)(2)(iii) and 10 CFR 50.54(k) provide the same requirements. The existing requirements will be met through compliance with these regulations and are not required to be reiterated in the ITS. This change is administrative because no requirements are being changed. This change is consistent with NUREG-1432, as modified by Generic Change TSTF-121.

A.28 Unit 1 Specification 6.2.2.i states, "Those licensed operators counted toward minimum shift crew composition required by 10 CFR 50.54(m)(2)(i) shall be licensed on both units." Unit 2 Specification 6.2.2.i, "Unit Staff," states, "Licensed operators shall be licensed for both units." In the ITS, the Unit 1 wording shall be used. Both the Unit 1 and Unit 2 requirements are the same, as the section of the Administrative Controls containing the requirements describes minimum crew composition. Also, all of the Calvert Cliffs licensed operators are licensed for both units. A change which is consistent with the current application of a requirement is considered administrative.

A.29 Unit 2 CTS 4.4.10.1.1 contains a footnote that allows the reactor coolant pump flywheel inspections for the first inservice inspection interval to be completed during Unit 2, refueling outage number 9. This footnote is being deleted. Unit 2, refueling outage number 9 has been completed and this note is not longer needed.

A.30 Current Technical Specification 4.4.5.5 requires that steam generator inspection reports be submitted pursuant to 10 CFR 50.4. Improved Technical Specification 5.6.9, "Steam Generator Tube Inspection Report, "will not reference 10 CFR 50.4. Title 10 of the Code of Federal Regulations 50.4 contains general requirements on correspondence and applies whether or not it is referenced. Eliminating a reference to a regulation is considered administrative.

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 Not used.

M.2 The proposed change incorporates the following new programs into the Technical Specifications.

- Component Cyclic or Transient Limit (ITS 5.5.5) - This program is set up to provide controls to track the UFSAR-identified cyclic and transient occurrences to ensure that components are maintained within the design limits. This program currently exists at Calvert Cliffs.

- Secondary Water Chemistry Program (ITS 5.5.10) - This program provides controls for monitoring secondary water chemistry to inhibit steam generator tube degradation and low pressure turbine disc stress corrosion cracking. This type of monitoring currently exists at Calvert Cliffs.

The addition of these new requirements to Technical Specifications is considered a more restrictive change with no adverse impact on plant safety. This change is consistent with NUREG-1432.

M.3 Improved Technical Specification 5.1.1 adds requirements to CTS 6.1.1 which require the Plant Manager or his designee to approve tests, experiments, or modification to systems or equipment that affect nuclear safety prior to implementation. The proposed change also adds a requirement that the Control Room Supervisor shall be responsible for the Control Room command function; and during his absence in Modes 1, 2, 3, or 4, a Senior Reactor Operator (SRO) will be designated to assume the Control Room command function; and during Modes 5 or 6, an SRO or a Reactor Operator will be designated to assume the Control Room command function. The addition of these new requirements to the Technical Specifications constitute a more restrictive change with no adverse impact on plant safety. This change is consistent with NUREG-1432.

M.4 Current Technical Specification SR 4.8.1.1.2.b requires that a sample from the fuel oil storage tank (stored fuel oil) be verified to be within acceptable limits. The Diesel Fuel Oil Testing Program (ITS 5.5.13) will require that a representative sample of stored fuel oil be verified to be within limits. It will also require that certain parameters be within limits prior to adding fuel oil to the fuel oil storage tanks, and that the new fuel oil meet other ASTM 2D limits after adding to the fuel oil storage tanks. Although Calvert Cliffs currently samples the new fuel oil, it is not a Technical Specification requirement. Adding new requirements to the Technical Specification is considered a more restrictive change. It will ensure the fuel oil meets proper limits, ensuring high quality fuel oil is added to the storage tanks. This change is consistent with NUREG-1432.

M.5 Not used.

M.6 Current Technical Specifications SR 4.6.3.1.d.1, 4.6.6.1.d.1, 4.7.6.1.e.1, 4.7.7.1.d, and 4.9.1.2.d.1 require a pressure drop test across the combined HEPA filters and charcoal adsorber banks every 18 months be within specified limits. Improved Technical Specification 5.5.11.d requires the test to be performed across the prefilters, in addition to the HEPA filters and charcoal adsorber banks, with no change to the current acceptance limit. This change is more restrictive on plant operations and will ensure that the filter trains are operating as designed to reduce the concentration of fission products as assumed in the accident analysis.

M.7 Current Technical Specification 3/4.6.5.1 Action a.1 requires a special report to be submitted to the NRC when one containment hydrogen analyzer is inoperable and not restored to operable status within the allowed restoration time. Improved Technical Specification 5.6.7 will require the special report to be submitted within 14 days, instead of the current 30 days, after the restoration time for one inoperable hydrogen analyzer has expired. In addition, CTS 3/4.3.3.1 Action 30 and CTS 3/4.3.3.6 Action 35 require that, if two containment area high range monitors or reactor vessel water level post-accident monitoring (PAM) instruments are inoperable and not restored to Operable status within the allowed restoration time, a special report be submitted to the NRC within 30 days after the event (i.e., after the instruments become inoperable). Improved Technical Specification 5.6.7 will require the special report to be submitted 14 days after the restoration time has expired. In CTS 3/4.3.3.1 Action 30 and ITS 3.3.10 Action C, the time provided to restore a containment area high range monitor when both are inoperable is 7 days. Thus, ITS 5.6.7 effectively changes the due date of the special report when both containment high range monitors are inoperable from 30 days after the event to 21 days after the event. In ITS 3.3.10, the restoration time of two inoperable reactor vessel water level instruments has been extended from 48 hours to 7 days. Thus, ITS 5.6.7 also effectively changes the due date of the special report when both reactor vessel water level instruments are inoperable from 30 days after the event to 21 days after the event. These changes will ensure the NRC is properly notified in a timely manner when PAM instrumentation is not restored within the Technical Specification allowed restoration time, and of the actions being taken to restore or compensate for the inoperability. This change is a more restrictive change and is consistent with NUREG-1432.

TECHNICAL CHANGES - RELOCATIONS

None

L.3 Current Technical Specification 4.8.1.1.2.b requires a sample of diesel fuel oil to be taken every 92 days, and that the sample be within the limits specified in Table 1 of ASTM D975-81 when checked for viscosity, water, and sediment. Improved Technical Specification 5.5.13 replaces the parameters to be tested (viscosity, water, and sediment) with a total particulate concentration requirement. The ITS requires the total particulate concentration to be ≤ 10 mg/l, when determined by gravimetric analysis. Calvert Cliffs plant history has shown that the viscosity does not change over time and no additional water appears in the fuel oil storage tank over time. Additionally, ITS SR 3.8.3.3 continues to ensure that accumulated water that does appear in the tank is removed every 92 days. The current requirement to check for sediment is unnecessary with the addition of the requirement to check for particulate, since as fuel breaks down, it forms solids, which can be measured by either particulate or sediment analysis. Thus, the particulate check will determine a problem with the quality of the fuel oil at a time sooner than the sediment check.

L.4 Current Technical Specifications 4.6.1.1.c and 4.6.1.1.d require the equipment hatch to be verified closed and sealed and the containment purge blind flanges to be installed and sealed prior to entering Mode 4 (i.e., prior to the time containment integrity is required by the CTS and ITS) following a shutdown where the equipment hatch was opened or a blind flange was removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. These requirements have been deleted from the ITS since they are duplicative of requirements already contained in the CTS (and maintained in the ITS). Current Technical Specification 6.5.6 (ITS 5.5.16) requires a Containment Leakage Rate Testing Program be implemented as required by 10 CFR Part 50, Appendix J, Option B, and requires the program to be in accordance with the guidelines contained in Regulatory Guide 1.163, dated September 1995. Regulatory Guide 1.163, states that NEI 94-01, Revision 0, provides methods acceptable to the NRC for complying with 10 CFR Part 50, Appendix J, Option B. Section 10.2.1.3 of NEI 94-01 requires a Type B test to be performed prior to the time containment integrity is required, if a containment penetration is opened. Since the containment equipment hatch and the containment purge blind flanges are containment penetrations, ITS 5.5.16 already requires these penetrations to be type B tested after closure. Therefore, CTS 4.6.1.1.c and 4.6.1.1.d have been deleted because there is no need to repeat the specific requirements as separate surveillances.

L.5 Current Technical Specification 3/4.3.3.1 Action 30 and CTS 3/4.3.3.6 Action 34 require that if a containment area high range monitor or reactor vessel water level PAM instrumentation channel is inoperable and not restored to Operable status within the allowed restoration time, a special report be submitted to the NRC within 30 days after the event (i.e., after the instrument becomes inoperable). Improved Technical Specification 5.6.7 will require the special report to be submitted within 14 days after the restoration time has expired. In ITS 3.3.10, the restoration time of an inoperable instrument has been extended from 7 days to 30 days when one channel is inoperable. Thus, ITS 5.6.7 effectively changes the due date of the special report when one containment high range monitor or reactor vessel water level instrument is inoperable from 30 days after the event to 44 days after the event. This change will provide sufficient time to submit the report after the restoration time has expired. Given that the report is still required to be provided to the NRC, and actions are still required to be taken to restore the inoperable channel and compensate for the inoperability after the expiration of the restoration time, report submittal within 30 days after the event is not necessary to assure operation in a safe manner for the interval from 30 days to 44 days after the event. Additionally, there is no requirement for the NRC to approve the report.

for Technical Specification SRs. The margin of safety is not affected by this change. The proposed allowance provides the opportunity to perform the Inservice Test instead of declaring the component inoperable, and possibly entering Actions when the probable result of any particular test being performed is the verification of conformance. Therefore, the change does not involve a significant reduction in a margin of safety.

Change L.3

1. **Does the change involve a significant increase in the probability or consequence of an accident previously evaluated?**

The proposed change will replace the stored fuel oil test for viscosity, water, and sediment for a stored fuel oil test for total particulates. Neither stored fuel oil, nor the associated diesel generators, are assumed to be initiators of an accident. While the diesel generators are assumed to mitigate the consequences of an accident, this change will not affect their capability since the fuel oil is still being tested, and total particulate concentration is a better indicator of fuel oil quality than sediment. In addition, plant history has shown that the viscosity does not change over time and no additional water appears in the fuel oil storage tank over time. Improved Technical Specification SR 3.8.3.3 continues to ensure that accumulated water that might appear in the tank is removed every 92 days. Therefore, this change will not increase the probability or consequences of an accident previously evaluated.

2. **Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed change will replace the stored fuel oil test for viscosity, water, and sediment for a stored fuel oil test for total particulates. This change will not physically alter the plant (no new or different type of equipment will be installed). This change will not introduce any new accident initiators. Therefore, the change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. **Does this change involve a significant reduction in a margin of safety?**

The proposed change will replace the stored fuel oil test for viscosity, water, and sediment for a stored fuel oil test for total particulates. This change does not delete the requirement to test the stored fuel oil; it only changes the parameters that are tested. The total particulate concentration is a better indicator of fuel oil quality than sediment. In addition, plant history has shown that the viscosity does not change over time and no additional water appears in the fuel oil storage tank over time. Improved Technical Specification SR 3.8.3.3 continues to ensure that accumulated water that might appear in the tank is removed every 92 days. Therefore, the change does not involve a significant reduction in a margin of safety.

Change L.4

1. **Does the change involve a significant increase in the probability or consequence of an accident previously evaluated?**

The proposed change deletes the duplicative requirements that the equipment hatch be verified closed and sealed and the containment purge blind flanges be installed and sealed prior to entering Mode 4 (i.e., prior to the time containment integrity is required by the CTS and ITS) following a shutdown where the equipment hatch was opened or a blind flange was removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. The ITS, through the requirement to

9. Discussion of Deviation 25 to Section 5.0 has been revised to clearly state the reason for substituting a gravimetric analysis requirement for total particulates in ITS 5.5.13.c instead of the ASTM D-2276-89, Method A-2 or A-3 requirements provided in NUREG-1432 Specification 5.5.13.c. This change was requested by the NRC in their comments to Section 5.0 (comment 18).

20. The Calvert Cliffs CTS 4.4.5.5 requirements for steam generator tube inspection reports were inserted into NUREG-1432 Section 5.6.9, Steam Generator Tube Inspector Report. This change is consistent with the Reviewer's Note for this section, which requires the licensee to incorporate their current licensing basis regarding steam generator tube inspection reports.

21. Calvert Cliffs will not include a section on High Radiation Area (as depicted in NUREG-1432 Section 5.7.1 as a bracketed specification) consistent with the current licensing basis.

22. The proposed change to NUREG-1432 adds a requirement that licensed operators counted towards the minimum shift crew composition shall be licensed for both units. This is a specific requirement for Calvert Cliffs and is consistent with the current licensing basis.

23. The proposed change to Specification 5.5.11.c changes the penetration requirements of methyl iodide from less than 10%, to less than or equal to 10%. This change is consistent with the Calvert Cliffs current licensing basis, which requires a $\geq$ 90% removed efficiency of methyl iodide.

24. The proposed changes to Specifications 5.5.11.a and 5.5.11.b change the penetration system bypass requirements of the high efficiency particulate air filters and charcoal absorbers from $< 1.0\%$ to $\leq 1.0\%$. This change is consistent with the current Calvert Cliffs licensing basis which requires a $\geq$ 99% removal efficiency.

25. NUREG-1432 requires the particulate concentration to be tested in accordance with American Society of Testing Material D-2276-89, Method A-2 or A-3. Calvert Cliffs ITS will include the requirement to test for particulates, but not in accordance with ASTM D-2276-89, Method A-2 or A-3. Total particulate concentration will be determined by gravimetric analysis. ASTM D-2276-89, Method A-2 is the test method for fuel systems under pressure. The Calvert Cliffs diesel fuel oil tanks are not under pressure, so this is not an appropriate test method. ASTM D-2276-89, Method A-3, is primarily a gravimetric analysis, but the test methods used at Calvert Cliffs to determine total particulate concentration do not match all detail contained in Method A-3. Among the differences between Calvert Cliffs test methods and ASTM D-2276-89, Method A.3, are:

    a. The reagents used are different,
    b. A filter reagent is not used,
    c. The preparation of apparatus is different, and
    d. The volumes of the sample are different.

26. The Calvert Cliffs CTS Administrative Controls uses generic titles provided in American National Standards Institute/American Nuclear Society 3.1 instead of plant specific titles. The plant-specific titles that correspond to the generic titles are given in the Updated Final Safety Analysis Report. The use of generic titles in the Administrative Controls was encouraged in a letter from C. I. Grimes (NRC) to Lee Bush (WOG), Brian Mann (CEOG), Clinton Szabo (B&WOG), and Andrew Maron (BWROG), dated November 10,1994. These generic titles are carried over into the Calvert Cliffs ITS. Also, some additional titles appear in NUREG-1432. For consistency, generic titles have been used in those locations. In addition, a change was made to allow the corresponding plant-specific titles to be placed in the Quality Assurance Plan or the Updated Final Safety Analysis Report. This is consistent with the November 10, 1994 letter.

10. Discussion of Deviation 12 to Section 5.0 has been revised to clearly state the reason for changing the total particulate test frequency from 31 days in NUREG-1432 to 92 days in the ITS. This was requested by the NRC in their comment to Section 5.0 (comment 19).

12. NUREG-1432 Diesel Fuel Oil Testing Program (5.5.13) requires a clear and bright test of new fuel oil, and requires the total particulates of stored fuel oil to be determined every 31 days. The Calvert Cliffs ITS 5.5.13 will require a water and sediment test be performed in lieu of the clear and bright test. Calvert Cliffs will not utilize a clear and bright test because the diesel fuel oil is dyed. The Calvert Cliffs ITS 5.5.0 will also require the total particulates of stored fuel oil to be determined every 92 days. Calvert Cliffs contains a CTS Surveillance Requirement which allows the interval for testing fuel oil in the stored diesel generator fuel oil tank to be 92 days. The current test, which checks for viscosity, water, and sediment, was replaced with the total particulate test, as described in Discussion of Change L.3 to Section 5.0. The change from 31 days required by the STS to the 92 days provided in the ITS is based on the current licensing basis time provided in the CTS and is justified since the sediment portion of the current 92 day test is testing for the same basic purpose as the proposed total particulate test; both are evaluating the quality of the fuel oil by looking at fuel breakdown (the fuel breaks down into solids, which then precipitate out as sediment).

13. This change was made to make an editorial correction (including renumbering) to be in compliance with the Writers Guide, or reword a requirement from being general to being specific to Calvert Cliffs.

14. This change to NUREG-1432 Section 5.6.1, Occupational Radiation Exposure Report, was made to reflect the actual mechanisms used at Calvert Cliffs to measure dose rates.

15. The bracketed information in NUREG-1432 Section 5.6.1, Occupational Radiation Exposure Report, is being deleted because Calvert Cliffs has already submitted their initial Occupational Radiation Exposure Report.

16. The bracketed information in NUREG-1432 Section 5.6.3 is being deleted because the information is not consistent with Calvert Cliffs design or current licensing basis.

17. The bracketed information in NUREG 1432 Section 5.6.4, Monthly Operating Report, discuses the inclusion of documentation of all challenges to the pressurizer power-operated relief valves or pressurizer safety valves, with the monthly operating report. This information is being deleted because Calvert Cliffs currently has (CTS 6.6.6) a requirement to report on an annual basis the challenges to the pressurizer power-operated relief valves and the safety valves. Calvert Cliffs will add the requirements for this report into the ITS. These changes are consistent with Calvert Cliffs current licensing basis.

18. NUREG-1432 Section 5.6.6, RCS Pressure and Temperature Limits Report (PTLR), will be deleted. Calvert Cliffs does not anticipate the temperature/pressure values to change from cycle to cycle, which would negate the benefits of the Pressure and Temperature Limits Report. Therefore, Calvert Cliffs will retain the specific pressure/temperature limits in the Technical Specifications.

19 NUREG-1432 Section 5.6.7, EDG Failures Report, will be deleted because Calvert Cliffs does not currently have a Technical Specification requirement to submit diesel generator failures. This change is consistent with the Calvert Cliffs current licensing basis. This change is also consistent with NUREG-1432, Generic Change TSTF-37.

11. Discussion of Change LA.6 to Section 5.0, which discusses the relocation of details on components that require Type B testing, has been replaced with Discussion of Change L.4. The new Discussion of Change justifies the deletion of the specific testing requirements, since they are duplicative of requirements that are maintained in the ITS. An associated No Significant Hazards Consideration has also been provided. This change responds to the NRC comments to Section 5.0 (comments 20 and 30).

BASES

The isolation devices for the penetrations in the containment boundary are a part of the containment leak tight barrier. To maintain this leak tight barrier:

a. All penetrations required to be closed during accident conditions are either:

   1. capable of being closed by an OPERABLE automatic containment isolation system, or

   2. closed by manual valves, blind flanges, or de-activated automatic valves secured in their closed positions, except as provided in LCO 3.6.3, "Containment Isolation Valves;"

b. Each air lock is OPERABLE, except as provided in LCO 3.6.2, "Containment Air Locks;"

c. The equipment hatch is closed and sealed. | 2

APPLICABLE SAFETY ANALYSES

The safety design basis for the containment is that the containment must withstand the pressures and temperatures of the limiting DBA without exceeding the design leakage rate.

The DBAs that result in a release of radioactive material within containment are a loss of coolant accident (LOCA), a main steam line break, and a control element assembly ejection accident (Ref. 2). In the analysis of each of these accidents, it is assumed that containment is OPERABLE such that release of fission products to the environment is controlled by the rate of containment leakage. The containment was designed with an allowable leakage rate of 0.20% of containment air weight per day (Ref. 3). This leakage rate is defined in 10 CFR Part 50, Appendix J, Option B (Ref. 1), as L_a: the maximum allowable containment leakage rate at the calculated maximum peak containment pressure (P_a) of 49.4 psig, which results from the limiting design basis LOCA (Ref. 2).

B 3.6 CONTAINMENT SYSTEMS

B 3.6.3 Containment Isolation Valves

BASES

BACKGROUND

The containment isolation valves form part of the containment pressure boundary and provide a means for fluid penetrations not serving accident consequence limiting systems to be provided with two isolation barriers that are closed on an automatic isolation signal. These isolation devices are either passive or active (automatic). Manual valves, de-activated automatic valves secured in their closed position (including check valves with flow through the valve secured), blind flanges, or equivalent, and closed systems are considered passive devices. Check valves, or other automatic valves designed to close without operator action following an accident, are considered active devices. Two barriers in series are provided for each penetration so that no single credible failure or malfunction of an active component can result in a loss of isolation or leakage that exceeds limits assumed in the safety analysis. One of these barriers may be a closed system.

A blind flange is installed and sealed on the Containment Purge and Exhaust System in Modes 1, 2, 3, and 4 on Unit 2. Similar equipment will be used on Unit 1 after a modification is installed. Until the modification to Unit 1 is completed, the Containment Purge and Exhaust Isolation Valves will be required for Containment Penetration Operability. Containment Purge and Exhaust Isolation Valves are not required for Containment Penetration Operability when the blind flanges are installed. | 2 | 1

Containment isolation occurs upon receipt of a high containment pressure signal. The containment isolation signal (CIS) closes automatic containment isolation valves in fluid penetrations not required for operation of Engineered Safety Feature systems in order to prevent leakage of radioactive material. Upon actuation of safety

BASES

BACKGROUND (continued)

2. closed by manual valves, blind flanges, or de-activated automatic valves secured in their closed positions, except as provided in LCO 3.6.3, "Containment Isolation Valves";

b. Each air lock is OPERABLE, except as provided in LCO 3.6.2, "Containment Air Locks";

c. All equipment hatches are closed; and

d. The pressurized sealing mechanism associated with a penetration, except as provided in LCO 3.6.[ ], is OPERABLE.

APPLICABLE SAFETY ANALYSES

The safety design basis for the containment is that the containment must withstand the pressures and temperatures of the limiting DBA without exceeding the design leakage rate.

The DBAs that result in a release of radioactive material within containment are a loss of coolant accident, a main steam line break (MSLB), and a control element assembly ejection accident (Ref. 2). In the analysis of each of these accidents, it is assumed that containment is OPERABLE such that release of fission products to the environment is controlled by the rate of containment leakage. The containment was designed with an allowable leakage rate of ~~[0.10]~~ 0.20% of containment air weight per day (Ref. 3). This leakage rate is defined in 10 CFR 50, Appendix J, (Ref. 1), as L_a: the maximum allowable containment leakage rate at the calculated maximum peak containment pressure (P_a) of ~~[55.7]~~ 49.4 psig, which results from the limiting ~~DBA which is a~~ design basis MSLB (Ref. 2).

Option B

TSTF-52

LOCA

Satisfactory leakage rate test results are a requirement for the establishment of containment OPERABILITY.

The containment satisfies Criterion 3 of the NRC Policy Statement.

LCO

Containment OPERABILITY is maintained by limiting leakage to ≤ 1.0 L_a, except prior to the first startup after performing a required ~~10 CFR 50, Appendix J~~ Containment Leakage Rate Testing Program, leakage test. At this

(346,000 sccm)

(B)

TSTF-52

(continued)

B 3.6 CONTAINMENT SYSTEMS

B 3.6.3 Containment Isolation Valves ~~(Atmospheric and Dual)~~

BASES

BACKGROUND

The containment isolation valves form part of the containment pressure boundary and provide a means for fluid penetrations not serving accident consequence limiting systems to be provided with two isolation barriers that are closed on an automatic isolation signal. These isolation devices are either passive or active (automatic). Manual valves, de-activated automatic valves secured in their closed position (including check valves with flow through the valve secured), blind flanges, and closed systems are considered passive devices. Check valves, or other automatic valves designed to close without operator action following an accident, are considered active devices. Two barriers in series are provided for each penetration so that no single credible failure or malfunction of an active component can result in a loss of isolation or leakage that exceeds limits assumed in the safety analysis. One of these barriers may be a closed system.

Containment isolation occurs upon receipt of a high containment pressure signal or a low Reactor Coolant System (RCS) pressure signal. The containment isolation signal closes automatic containment isolation valves in fluid penetrations not required for operation of Engineered Safety Feature systems in order to prevent leakage of radioactive material. Upon actuation of safety injection, automatic containment isolation valves also isolate systems not required for containment or RCS heat removal. Other penetrations are isolated by the use of valves in the closed position or blind flanges. As a result, the containment isolation valves (and blind flanges) help ensure that the containment atmosphere will be isolated in the event of a release of radioactive material to containment atmosphere from the RCS following a Design Basis Accident (DBA).

The OPERABILITY requirements for containment isolation valves help ensure that containment is isolated within the time limits assumed in the safety analysis. Therefore, the OPERABILITY requirements provide assurance that the containment function assumed in the accident analysis will be maintained.

(continued)

and sealed

or equivalent

CE06-112

A blind flange is installed on the Containment Purge and Exhaust System in MODES 1, 2, 3 and 4 on Unit 2. Similar equipment will be used on Unit 1 after a modification is installed. Until the modification to Unit 1 is completed, the Containment Purge and Exhaust Isolation Valves will be required for Containment Penetration OPERABILITY. Containment Purge and Exhaust Isolation Valves are not required for Containment Penetration OPERABILITY when the blind flanges are installed.

or equivalent

or equivalent

CE06-112

Equivalent isolation methods must be approved in accordance with appropriate American Society of Mechanical Engineers (ASME) / American National Standards Institute (ANSI) Codes.

CE06-112

5.5 Programs and Manuals

safety function may exist when a support system is inoperable, and:

a. A required system redundant to system(s) supported by the inoperable support system is also inoperable; or

b. A required system redundant to system(s) in turn supported by the inoperable supported system is also inoperable; or

c. A required system redundant to support system(s) for the supported systems (a) and (b) above is also inoperable.

The Safety Function Determination Program identifies where a loss of safety function exists. If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

5.5.16 Containment Leakage Rate Testing Program

A program shall be established to implement the leakage testing of the containment as required by 10 CFR 50.54(O) and 10 CFR Part 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September 1995. | 2

The peak calculated containment internal pressure for the design basis loss of coolant accident, P_a, is 49.4 psig. The containment design pressure is 50 psig.

The maximum allowable containment leakage rate, L_a, at P_a, shall be 0.20% of containment air weight per day.

Leakage Rate acceptance criteria are:

a. Containment leakage rate acceptance criterion is < 1.0 La. During the first unit startup following testing in accordance with this program, the leakage rate acceptance are ≤ 0.60 L_a for the Type B and C tests and ≤ 0.75 L_a for Type A tests.

Containment Leakage Rate Testing Program

INSERT 5.5.16 (page 1 of 2)

3/4.6 CONTAINMENT SYSTEMS

3/4.6.1 PRIMARY CONTAINMENT

CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 Primary CONTAINMENT INTEGRITY shall be maintained.* #

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION: Without primary CONTAINMENT INTEGRITY, restore CONTAINMENT INTEGRITY within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

a. At least once per 31 days by verifying that all penetrations** not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions, except for valves that are open under administrative control as permitted by Specification 3.6.4.1.

b. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3.

c. By verifying that the equipment hatch is closed and sealed, prior to entering MODE 4 following a shutdown where the equipment hatch was opened, by conducting a Type B test per 10 CFR Part 50, Appendix J.

d. Insert A

L.4 | 2

* Hydrogen purge containment vent isolation valves shall be opened for containment pressure control, airborne radioactivity control, and surveillance testing purposes only.

\# The shutdown cooling isolation valves may be opened when the RCS temperature is below 300°F to establish shutdown cooling flow.

** Except valves, blind flanges, and deactivated automatic valves which are located inside the containment and are locked, sealed, or otherwise secured in the closed position. These penetrations shall be verified closed during each COLD SHUTDOWN except that such verification need not be performed more often then once per 92 days.

CALVERT CLIFFS - UNIT 1 3/4 6-1 Amendment No. 187

See Discussion of Change for Specification 3.6.3, "Containment Isolation Valves"

See Discussion of Change for Specification 3.6.1, "Containment"

NRC 96-042

Containment Leakage Rate Testing Program) Specification 5.0

INSERT 5.5.16
(P. 212)

Insert A

By verifying that the containment purge blind flanges are installed and sealed prior to entering Mode 4 following a shutdown where the blind flanges were removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. If only one blind flange was removed, only that blind flange must be tested unless testing is required by Technical Specification 4.6.1.2.

L.4 | 2

NRC 96-042

specification 5.0

Containment Leak Rate Testing Program

Insert 5.5.16
page 1 of 2

3/4.6 CONTAINMENT SYSTEMS

3/4.6.1 PRIMARY CONTAINMENT

CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 Primary **CONTAINMENT INTEGRITY** shall be maintained.*

APPLICABILITY: **MODES** 1, 2, 3 and 4.

ACTION: Without primary **CONTAINMENT INTEGRITY**, restore **CONTAINMENT INTEGRITY** within one hour or be in at least **HOT STANDBY** within the next 6 hours and in **COLD SHUTDOWN** within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.1 Primary **CONTAINMENT INTEGRITY** shall be demonstrated:

a. At least once per 31 days by verifying that all penetrations** not capable of being closed by **OPERABLE** containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions, except for valves that are open under administrative control as permitted by Specification 3.6.4.1.

b. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3.

c. By verifying that the equipment hatch is closed and sealed, prior to entering **MODE** 4 following a shutdown where the equipment hatch was opened, by conducting a Type B test per 10 CFR Part 50, Appendix J.

d. INSERT A

* Hydrogen purge containment vent isolation valves shall be opened for containment pressure control, airborne radioactivity control, and surveillance testing purposes only.

The shutdown cooling isolation valves may be opened when the RCS temperature is below 300°F to establish shutdown cooling flow.

** Except valves, blind flanges, and deactivated automatic valves which are located inside the containment and are locked, sealed, or otherwise secured in the closed position. These penetrations shall be verified closed during each **COLD SHUTDOWN** except that such verification need not be performed more often then once per 92 days.

See Discussion of Change for Specification 3.6.1.1 "Containment"

See Discussion of Change for Specification 3.6.3 "Containment Isolation Valves"

L.4

CALVERT CLIFFS - UNIT 2 3/4 6-1 Amendment No. 164

NRC 96-042

Page 47 of 57

Containment Leakage Rate Testing Program

Specification 5.0

Insert 5.5.16
(page 2 of 2)

Insert A

By verifying that the containment purge blind flanges are installed and sealed prior to entering Mode 4 following a shutdown where the blind flanges were removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. If only one blind flange was removed, only that blind flange must be tested unless testing is required by Technical Specification 4.6.1.2.

L.4 | 2

NRC 96-042

gas storage tanks and the explosive gas mixtures in the Waste Gas Holdup System are maintained within limits. Improved Technical Specification 5.5.12 provides regulatory control over the limitations and surveillances proposed to be relocated. As a result, the requirements proposed to be relocated are not required to be included in the ITS to ensure the quantity of radioactivity in gas storage tanks and the explosive gas mixtures in the Waste Gas Holdup System are maintained within limits. The TRM will be incorporated by reference into the UFSAR at ITS implementation. Any changes to the relocated requirements will be controlled by the provisions of 10 CFR 50.59. This change is consistent with NUREG-1432.

LA.6 Not used.

LA.7 Not used.

LA.8 The parenthetical statement in CTS 6.6.3, which emphasizes the information from 10 CFR 50.36a that time between submittal of the Radioactive Effluent Release Reports must be no longer than 12 months, is being removed. This detail is duplicative of 10 CFR 50.36 and does not need to be repeated in ITS. Also, the last paragraph specifically describing the contents of the report, in footnote **, which provides an exception for the Sr^{89} and Sr^{90} analysis results, is also being moved from the Technical Specifications. To provide clarification that an exemption exists, the phase "as modified by approved exemptions" has been added to the CTS 6.6.3 markup. These details are not necessary for the ITS. They are related to ODCM requirements, and are adequately controlled by the ODCM requirements in ITS 5.5.1. Changes to the relocated requirements will be controlled by the ODCM change control process in ITS 5.5.1 or 10 CFR 50.36, as appropriate.

TECHNICAL CHANGES - LESS RESTRICTIVE

L.1 Current Technical Specification 6.2.2.d requires an individual qualified in radiation protection procedures to be onsite when fuel is in the reactor. Improved Technical Specification 5.5.2.d will allow the position to be vacant for not more than two hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position. This change is reasonable because it allows time to restore a required staffing position for unexpected absences without violating the Technical Specifications Administrative Controls section, while ensuring the position is filled in a timely manner. This change is consistent with NUREG-1432.

L.2 Current Technical Specification 4.0.5 lists requirements of the Inservice Testing Program. Improved Technical Specification 5.5.8 adds a requirement which allows the provisions of ITS SR 3.0.3 to be applicable to inservice testing activities. This requirement will allow 24 hours or up to the limit of the Frequency, whichever is less, to perform Inservice Testing if discovered that Inservice Testing requirements were not performed, instead of declaring the component inoperable. This allowance is based on consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillance, and the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements. This change is consistent with NUREG-1432.

L.3 Current Technical Specification 4.8.1.1.2.b requires a sample of diesel fuel oil to be taken every 92 days, and that the sample be within the limits specified in Table 1 of ASTM D975-81 when checked for viscosity, water, and sediment. Improved Technical Specification 5.5.13 replaces the parameters to be tested (viscosity, water, and sediment) with a total particulate concentration requirement. The ITS requires the total particulate concentration to be ≤ 10 mg/l, when determined by gravimetric analysis. Calvert Cliffs plant history has shown that the viscosity does not change over time and no additional water appears in the fuel oil storage tank over time. Additionally, ITS SR 3.8.3.3 continues to ensure that accumulated water that does appear in the tank is removed every 92 days. The current requirement to check for sediment is unnecessary with the addition of the requirement to check for particulate, since as fuel breaks down, it forms solids, which can be measured by either particulate or sediment analysis. Thus, the particulate check will determine a problem with the quality of the fuel oil at a time sooner than the sediment check.

L.4 Current Technical Specifications 4.6.1.1.c and 4.6.1.1.d require the equipment hatch to be verified closed and sealed and the containment purge blind flanges to be installed and sealed prior to entering Mode 4 (i.e., prior to the time containment integrity is required by the CTS and ITS) following a shutdown where the equipment hatch was opened or a blind flange was removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. These requirements have been deleted from the ITS since they are duplicative of requirements already contained in the CTS (and maintained in the ITS). Current Technical Specification 6.5.6 (ITS 5.5.16) requires a Containment Leakage Rate Testing Program be implemented as required by 10 CFR Part 50, Appendix J, Option B, and requires the program to be in accordance with the guidelines contained in Regulatory Guide 1.163, dated September 1995. Regulatory Guide 1.163, states that NEI 94-01, Revision 0, provides methods acceptable to the NRC for complying with 10 CFR Part 50, Appendix J, Option B. Section 10.2.1.3 of NEI 94-01 requires a Type B test to be performed prior to the time containment integrity is required, if a containment penetration is opened. Since the containment equipment hatch and the containment purge blind flanges are containment penetrations, ITS 5.5.16 already requires these penetrations to be type B tested after closure. Therefore, CTS 4.6.1.1.c and 4.6.1.1.d have been deleted because there is no need to repeat the specific requirements as separate surveillances.

L.5 Current Technical Specification 3/4.3.3.1 Action 30 and CTS 3/4.3.3.6 Action 34 require that if a containment area high range monitor or reactor vessel water level PAM instrumentation channel is inoperable and not restored to Operable status within the allowed restoration time, a special report be submitted to the NRC within 30 days after the event (i.e., after the instrument becomes inoperable). Improved Technical Specification 5.6.7 will require the special report to be submitted within 14 days after the restoration time has expired. In ITS 3.3.10, the restoration time of an inoperable instrument has been extended from 7 days to 30 days when one channel is inoperable. Thus, ITS 5.6.7 effectively changes the due date of the special report when one containment high range monitor or reactor vessel water level instrument is inoperable from 30 days after the event to 44 days after the event. This change will provide sufficient time to submit the report after the restoration time has expired. Given that the report is still required to be provided to the NRC, and actions are still required to be taken to restore the inoperable channel and compensate for the inoperability after the expiration of the restoration time, report submittal within 30 days after the event is not necessary to assure operation in a safe manner for the interval from 30 days to 44 days after the event. Additionally, there is no requirement for the NRC to approve the report.

for Technical Specification SRs. The margin of safety is not affected by this change. The proposed allowance provides the opportunity to perform the Inservice Test instead of declaring the component inoperable, and possibly entering Actions when the probable result of any particular test being performed is the verification of conformance. Therefore, the change does not involve a significant reduction in a margin of safety.

Change L.3

1. **Does the change involve a significant increase in the probability or consequence of an accident previously evaluated?**

The proposed change will replace the stored fuel oil test for viscosity, water, and sediment for a stored fuel oil test for total particulates. Neither stored fuel oil, nor the associated diesel generators, are assumed to be initiators of an accident. While the diesel generators are assumed to mitigate the consequences of an accident, this change will not affect their capability since the fuel oil is still being tested, and total particulate concentration is a better indicator of fuel oil quality than sediment. In addition, plant history has shown that the viscosity does not change over time and no additional water appears in the fuel oil storage tank over time. Improved Technical Specification SR 3.8.3.3 continues to ensure that accumulated water that might appear in the tank is removed every 92 days. Therefore, this change will not increase the probability or consequences of an accident previously evaluated.

2. **Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed change will replace the stored fuel oil test for viscosity, water, and sediment for a stored fuel oil test for total particulates. This change will not physically alter the plant (no new or different type of equipment will be installed). This change will not introduce any new accident initiators. Therefore, the change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. **Does this change involve a significant reduction in a margin of safety?**

The proposed change will replace the stored fuel oil test for viscosity, water, and sediment for a stored fuel oil test for total particulates. This change does not delete the requirement to test the stored fuel oil; it only changes the parameters that are tested. The total particulate concentration is a better indicator of fuel oil quality than sediment. In addition, plant history has shown that the viscosity does not change over time and no additional water appears in the fuel oil storage tank over time. Improved Technical Specification SR 3.8.3.3 continues to ensure that accumulated water that might appear in the tank is removed every 92 days. Therefore, the change does not involve a significant reduction in a margin of safety.

Change L.4

1. **Does the change involve a significant increase in the probability or consequence of an accident previously evaluated?**

The proposed change deletes the duplicative requirements that the equipment hatch be verified closed and sealed and the containment purge blind flanges be installed and sealed prior to entering Mode 4 (i.e., prior to the time containment integrity is required by the CTS and ITS) following a shutdown where the equipment hatch was opened or a blind flange was removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. The ITS, through the requirement to

perform leakage testing in accordance with the guidelines of Regulatory Guide 1.163, already requires these tests to be performed. This change does not affect the probability of an accident. The performance of a Type B test is not an initiator of any analyzed event. The consequences of an accident will not be affected since the requirement to perform the tests is not changed. The change will not alter assumptions relative to the mitigation of an accident or transient. Therefore, this change will not involve a significant increase in the probability or consequence of an accident previously evaluated.

2. **Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed change deletes the duplicative requirements that the equipment hatch be verified closed and sealed and the containment purge blind flanges be installed and sealed prior to entering Mode 4 (i.e., prior to the time containment integrity is required by the CTS and ITS) following a shutdown where the equipment hatch was opened or a blind flange was removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. The ITS, through the requirement to perform leakage testing in accordance with the guidelines of Regulatory Guide 1.163, already requires these tests to be performed. This change will not physically alter the plant (no new or different type of equipment will be installed). The change will not introduce any new accident initiators. Therefore, the change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. **Does this change involve a significant reduction in a margin of safety?**

The proposed change deletes the duplicative requirements that the equipment hatch be verified closed and sealed and the containment purge blind flanges be installed and sealed prior to entering Mode 4 (i.e., prior to the time containment integrity is required by the CTS and ITS) following a shutdown where the equipment hatch was opened or a blind flange was removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. The ITS, through the requirement to perform leakage testing in accordance with the guidelines of Regulatory Guide 1.163, already requires these tests to be performed. Therefore, the margin of safety is not affected by this change.

Change L.5

1. **Does the change involve a significant increase in the probability or consequence of an accident previously evaluated?**

The proposed change will increase the time from 30 to 44 days to submit a post-accident monitoring special report, after a required indication channel of the containment area high range monitor or reactor vessel water level instrument becomes inoperable. This increases the amount of time allowed before submitting a report by 14 days. This change will not affect the probability of an accident. The report submittal requirement is not an initiator of any analyzed event. The report is still required to be provided to the NRC, and actions are still required to be taken to restore the inoperable channel to operable status. The submittal date of the special report is not required for the mitigation of an accident. The proposed change does not significantly affect initiators or mitigation of analyzed events, and therefore, does not involve a significant increase in the probability or consequences of an accident.

12. The Battery Inspection Program has been deleted from the Calvert Cliffs ITS submittal. This change only affects the portion of the program in Section 5.0. The portions of the submittal affected by the Battery Inspection Program deletion that are described in Section 3.8 will be deleted from the Calvert Cliffs ITS in a later revision to the submittal. This was requested by the NRC in a phone conversation with BGE while discussing NRC comment 21 to Section 5.0.

5.5 Programs and Manuals

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 each door, leakage rate is $\leq 0.0002\ L_a$ when pressurized to ≥ 15 psig.

The provisions of SR 3.0.2 do not apply to the test frequencies specified in the Containment Leakage Rate Testing Program.

The provisions of SR 3.0.3 are applicable to the Containment Leakage Rate Testing Program.

2

A.1

5.5.4 cont'd

k. Limitations on the annual and quarterly doses to a **MEMBER OF THE PUBLIC** from Iodine-131, and all radionuclides in particulate form with half-lives greater than 8 days, in gaseous effluents released to areas beyond the **SITE BOUNDARY**, to be limited:

1. During any calendar quarter: Less than or equal to 15 mrems to any organ;

2. During any calendar year: Less than or equal to 30 mrems to any organ; and

3. Less than 0.1% of the limits of ~~6.5.5~~ (5) ~~5.k~~ (4)(1) and (2) as a result of burning-contaminated oil; and

A.1

INSERT 5.5.5 - 5.5.13

INSERT 5.5.K From p. 6 & 7

l. Limitations on the annual dose or dose commitment to any **MEMBER OF THE PUBLIC** due to releases of radioactivity, and to radiation from uranium fuel cycle sources to be limited to less than or equal to 25 mrems to the total body or any organ, except the thyroid, which shall be limited to less than or equal to 75 mrems.

INSERT 5.5.15 p. 50

5.5.16 ~~6.5.6~~ Containment Leakage Rate Testing Program

A.1

5.5.16.a A program shall be established to implement the leakage testing of the containment as required by 10 CFR 50.54(o) and 10 CFR Part 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September 1995 ~~, as modified by approved exceptions~~.

A.1

5.5.16.b The peak calculated containment internal pressure for the design basis loss-of-coolant accident, P_a, is 49.4 psig. The containment design pressure is 50 psig.

5.5.16.c The maximum allowable containment leakage rate, L_a, shall be 0.20 percent of containment air weight per day at P_a.

A.1

~~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 is $< 0.75 L_a$ for Type A tests.~~

NRC 95-057

Insert 6.5.6

5.5.16.d The provisions of ~~Specification 4.0.2~~ do not apply to the test frequencies specified in the Containment Leakage Rate Testing Program.

5.5.16.e The provisions of ~~Specification 4.0.3~~ are applicable to the Containment Leakage Rate Testing Program.

INSERT 5.5.16 p. 5b

SR 3.0.2

SR 3.0.3

A.1

2

INSERT 5.5.17
p121

(M.1)

5.5.17 Battery Inspection Program

A battery inspection program to monitor the battery condition and performance shall be established. The program shall include inspection and testing requirements and acceptance criteria, at the frequencies identified in Section 4.3 of IEEE-450 (1995) for the following parameters.

a. Condition of battery terminals and connectors;

b. Condition of battery cells, cell plates, and racks;

c. Battery connection resistance;

d. Battery cell electrolyte level;

e. Battery cell float voltage; and

f. Battery cell specific gravity.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Battery Inspection Program frequencies.

(2)

This page intentionally left blank.

A.1

5.5.4 cont'd

k. Limitations on the annual and quarterly doses to a **MEMBER OF THE PUBLIC** from Iodine-131, and all radionuclides in particulate form with half-lives greater than 8 days, in gaseous effluents released to areas beyond the **SITE BOUNDARY**, to be limited:

1. During any calendar quarter: Less than or equal to 15 mrems to any organ;

2. During any calendar year: Less than or equal to 30 mrems to any organ; and

3. Less than 0.1% of the limits of ~~6.5.5~~ 5.5.4.k(1) and (2) as a result of burning contaminated oil; and

A.1

Insert 5.5.5 - 5.5.13

Insert 5.5.14 from page 6&7

Insert 5.5.15 page 46

l. Limitations on the annual dose or dose commitment to any **MEMBER OF THE PUBLIC** due to releases of radioactivity, and to radiation from uranium fuel cycle sources to be limited to less than or equal to 25 mrems to the total body or any organ, except the thyroid, which shall be limited to less than or equal to 75 mrems.

5.5.16 ~~6.5.6~~ Containment Leakage Rate Testing Program

A.1

5.5.16.a A program shall be established to implement the leakage testing of the containment as required by 10 CFR 50.54(o) and 10 CFR Part 50, Appendix J, Option B. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September 1995, (as modified by approved exemptions)

A.1

5.5.16.b The peak calculated containment internal pressure for the design basis loss-of-coolant accident, P_a, is 49.4 psig. The containment design pressure is 50 psig.

5.5.16.c The maximum allowable containment leakage rate, L_a, shall be 0.20 percent of containment air weight per day at P_a.

A.1

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 is $\leq$ 0.75 L_a for Type A tests.

Insert 6.5.6

5.5.16.d The provisions of ~~Specification 4.0.2~~ do not apply to the test frequencies specified in the Containment Leakage Rate Testing Program.

5.5.16.e The provisions of ~~Specification 4.0.3~~ are applicable to the Containment Leakage Rate Testing Program.

SR 3.0.2

SR 3.0.3

A.1

A.1

Insert 5.5.16 from page 4

2

INSERT 5.5.17
(Page 1 of 1)

m.1

5.5.17 Battery Inspection Program

A battery inspection program to monitor the battery condition and performance shall be established. The program shall include inspection and testing requirements and acceptance criteria, at the frequencies identified in Section 4.3 of IEEE-450 (1995) for the following parameters.

a. Condition of battery terminals and connectors;

b. Condition of battery cells, cell plates, and racks;

c. Battery connection resistance;

d. Battery cell electrolyte level;

e. Battery cell float voltage; and

f. Battery cell specific gravity.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Battery Inspection Program frequencies.

(2)

This page intentionally left blank.

A.30 Current Technical Specification 4.4.5.5 requires that steam generator inspection reports be submitted pursuant to 10 CFR 50.4. Improved Technical Specification 5.6.9, "Steam Generator Tube Inspection Report, "will not reference 10 CFR 50.4. Title 10 of the Code of Federal Regulations 50.4 contains general requirements on correspondence and applies whether or not it is referenced. Eliminating a reference to a regulation is considered administrative.

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 Not used.

M.2 The proposed change incorporates the following new programs into the Technical Specifications.

- Component Cyclic or Transient Limit (ITS 5.5.5) - This program is set up to provide controls to track the UFSAR-identified cyclic and transient occurrences to ensure that components are maintained within the design limits. This program currently exists at Calvert Cliffs.

- Secondary Water Chemistry Program (ITS 5.5.10) - This program provides controls for monitoring secondary water chemistry to inhibit steam generator tube degradation and low pressure turbine disc stress corrosion cracking. This type of monitoring currently exists at Calvert Cliffs.

The addition of these new requirements to Technical Specifications is considered a more restrictive change with no adverse impact on plant safety. This change is consistent with NUREG-1432.

M.3 Improved Technical Specification 5.1.1 adds requirements to CTS 6.1.1 which require the Plant Manager or his designee to approve tests, experiments, or modification to systems or equipment that affect nuclear safety prior to implementation. The proposed change also adds a requirement that the Control Room Supervisor shall be responsible for the Control Room command function; and during his absence in Modes 1, 2, 3, or 4, a Senior Reactor Operator (SRO) will be designated to assume the Control Room command function; and during Modes 5 or 6, an SRO or a Reactor Operator will be designated to assume the Control Room command function. The addition of these new requirements to the Technical Specifications constitute a more restrictive change with no adverse impact on plant safety. This change is consistent with NUREG-1432.

M.4 Current Technical Specification SR 4.8.1.1.2.b requires that a sample from the fuel oil storage tank (stored fuel oil) be verified to be within acceptable limits. The Diesel Fuel Oil Testing Program (ITS 5.5.13) will require that a representative sample of stored fuel oil be verified to be within limits. It will also require that certain parameters be within limits prior to adding fuel oil to the fuel oil storage tanks, and that the new fuel oil meet other ASTM 2D limits after adding to the fuel oil storage tanks. Although Calvert Cliffs currently samples the new fuel oil, it is not a Technical Specification requirement. Adding new requirements to the Technical Specification is considered a more restrictive change. It will ensure the fuel oil meets proper limits, ensuring high quality fuel oil is added to the storage tanks. This change is consistent with NUREG-1432.

5.5 Programs and Manuals

5.5.15 Safety Function Determination Program (continued)

b. A required system redundant to system(s) in turn supported by the inoperable supported system is also inoperable; or

c. A required system redundant to support system(s) for the supported systems (a) and (b) above is also inoperable.

The SFDP identifies where a loss of safety function exists. If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

(13)

INSERT:

5.5.16 Containment Leakage Rate Testing Program (attached)

(TSTF-52)

(2)

7

5.5.1 Battery Inspection Program

A battery inspection program to monitor the battery condition and performance shall be established. The program shall include inspection and testing requirements and acceptance criteria, at the frequencies identified in Section 4.3 of IEEE-450 (1995) for the following parameters:

1. Condition of battery terminals and connectors;
2. Condition of battery cells, cell plates, and racks;
3. Battery connection resistance;
4. Battery cell electrolyte level; and
5. Battery cell float voltage; and
6. Battery cell specific gravity.

{Reviewers Note: Item 6 is not required if Licensee uses only battery charging current to determine state of charge and includes SR 3.8.6.2.}

6

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Battery Inspection Program frequencies.

This page will be removed.

13. A statement precluding the inclusion of the occupational radiation exposure due to the Independent Spent Fuel Storage Installation in the Units 1 and 2 Occupational Radiation Exposure Report required by ITS 5.6.1 has been added to the Note of ITS 5.6.1. This restriction is consistent with CTS 6.6.1 footnote *. A new Discussion of Deviation has also been provided (Discussion of Deviation 30 to Section 5.0) to describe the addition of this statement to NUREG-1432 Specification 5.6.1 Note, as requested by the NRC in their comments to Section 5.0 (comment 22).

5.6 Reporting Requirements

The following reports shall be submitted in accordance with 10 CFR 50.4.

5.6.1 Occupational Radiation Exposure Report

----------NOTE----------
A single submittal may be made for both units, but shall not include the occupational radiation exposure from the Independent Spent Fuel Storage Installation. The submittal should combine sections common to both units at the station. 2

A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures > 100 mrem/yr and their associated man rem exposure according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). This tabulation supplements the requirements of 10 CFR 20.2206. The dose assignments to various duty functions may be estimated based on pocket dosimeter, electronic personal dosimeter, or thermoluminescent dosimeter. Small exposures totaling < 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources should be assigned to specific major work functions. The report shall be submitted by April 30 of each year.

5.6.2 Annual Radiological Environmental Operating Report

----------NOTE----------
A single submittal may be made for both units. The submittal should combine sections common to both units at the station.

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the

A.1

~~6.0 ADMINISTRATIVE CONTROLS~~

5

~~6~~.6 REPORTING REQUIREMENTS

The following reports shall be submitted in accordance with 10 CFR 50.4.

5

~~6~~.6.1 Occupational Radiation Exposure Report*

A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures > 100 mrem/yr and their associated man rem exposure according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). This tabulation supplements the requirements of 10 CFR 20.2206. The dose assignment to various duty functions may be estimates based on pocket dosimeter, electronic personal dosimeter or thermoluminescent dosimeter. Small exposures totalling < 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources should be assigned to specific major work functions. The report shall be submitted prior to ~~March 31~~ April 30 of each year.

A.18

5

~~6~~.6.2 Annual Radiological Environmental Operating Report*

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the ODCM, and in 10 CFR Part 50, Appendix I, Sections IV.B.2, IV.B.3 and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. The report shall identify the TLD results that represent collocated dosimeters in relation to the NRC TLD program, and the exposure period associated with each result. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

A.1

* A single submittal may be made for both units ~~Calvert Cliffs~~. The submittal should combine those sections that are common to both units. Occupational dose from the Independent Spent Fuel Storage Installation will be reported separately.

NOTE TO SPECIFICATIONS 5.6.1 5.6.2

Note to specifications 5.6.1

~~6.0 ADMINISTRATIVE CONTROLS~~ (A.1)

(5) ~~6~~.6 REPORTING REQUIREMENTS

The following reports shall be submitted in accordance with 10 CFR 50.4.

(5) ~~6~~.6.1 Occupational Radiation Exposure Report*

A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures > 100 mrem/yr and their associated man rem exposure according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). This tabulation supplements the requirements of 10 CFR 20.2206. The dose assignment to various duty functions may be estimates based on pocket dosimeter, electronic personal dosimeter or thermoluminescent dosimeter. Small exposures totalling < 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources should be assigned to specific major work functions. The report shall be submitted prior to ~~March 31~~ April 30 of each year. (A.18)

(5) ~~6~~.6.2 Annual Radiological Environmental Operating Report*

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the ODCM, and in 10 CFR Part 50, Appendix I, Sections IV.B.2, IV.B.3 and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. The report shall identify the TLD results that represent collocated dosimeters in relation to the NRC TLD program, and the exposure period associated with each result. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

---

* A single submittal may be made for ~~Calvert Cliffs~~ both units. The submittal should combine those sections that are common to both units. Occupational dose from the Independent Spent Fuel Storage Installation will be reported separately. (A.1)

Note To specifications 5.6.1 5.6.2

Note to specification 5.6.1

5.0 ADMINISTRATIVE CONTROLS

<CTS> 5.6 Reporting Requirements

The following reports shall be submitted in accordance with 10 CFR 50.4 but shall not include the occupational radiation exposure from the Independent Spent Fuel Storage Installation. (30) (13) (2)

5.6.1 Occupational Radiation Exposure Report

<6.6.1>

---NOTE---
A single submittal may be made for ~~a multiple unit station~~. The submittal should combine sections common to ~~all~~ both units at the station.

A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures > 100 mrem/yr and their associated man rem exposure according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). This tabulation supplements the requirements of 10 CFR 20.2206. The dose assignments to various duty functions may be estimated based on pocket dosimeter, thermoluminescent dosimeter (TLD), ~~or film badge measurements~~. Small exposures totalling < 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources should be assigned to specific major work functions. The report shall be submitted by April 30 of each year. ~~[The initial report shall be submitted by April 30 of the year following initial criticality.]~~ (both units) (electronic personal dosimeter, or) (14) (15)

5.6.2 Annual Radiological Environmental Operating Report

<6.6.2>

---NOTE---
A single submittal may be made for ~~a multiple unit station~~. The submittal should combine sections common to ~~all~~ both units at the station.

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the radiological environmental monitoring program for the reporting period. The material provided shall be consistent with the objectives outlined in the Offsite Dose Calculation Manual (both units) (13)

(continued)

This change has been proposed as a change to the ITS NUREG as TSTF-65, but has not yet been approved by the NRC.

27. The Calvert Cliffs current licensing basis requires the General Supervisor-Nuclear Plant Operations to hold a license, and also requires the operations manager (the individual the General Supervisor-Nuclear Plant Operations reports to) to hold or have held a Senior Reactor Operator license at Calvert Cliffs. This requirement is being retained in the ITS.

28. This change incorporates the current Calvert Cliffs requirements for the Iodine Removal System into the Ventilation Filter Testing Program. This requirement is consistent with the Calvert Cliffs current licensing basis.

29. The gas storage tank radioactivity limit in NUREG-1432 Specification 5.5.12.b has been changed to be consistent with the Calvert Cliffs current licensing basis. The Calvert Cliffs ITS radioactivity limit will be that in the event of an uncontrolled release of the tank's contents, the resulting total body exposure to a member of the public at the site boundary will not exceed accident guidelines.

30. The CTS state that the Occupational Radiation Exposure Report for the Independent Spent Fuel Storage Installation is reported separately from the Units 1 and 2 Occupational Radiation Exposure Report. Therefore, for clarity, the Note to ITS 5.6.1 has been modified to preclude combining the reports into a single submittal.

31. The phrase ", as modified by approved exemptions" has been added to the ITS 5.6.3 requirement that the Radioactive Effluent Release Report be submitted in accordance with 10 CFR 50.36a. Current Technical Specification 6.6.3 footnote "**" allows an exemption to 10 CFR 50.36a that allows the Sr^{89} and Sr^{90} analysis results to be submitted at a later date. The addition of the phrase ", as modified by approved exemptions" is consistent with its use in other ITS that allow exemptions (e.g., ITS 3.6.1).

32. The current Calvert Cliffs licensing basis surveillance frequencies have been provided in ITS 5.5.11. In addition, for clarity the NUREG-1432 discussion concerning the provisions of SR 3.0.2 and SR 3.0.3 have been moved to the end of this specification after the discussion of frequencies, since it applies only to the frequencies.

33. The statement in NUREG-1432 Specification 5.5.11, "at the system flowrate specified below [+-10%]" has been deleted since it is redundant. Each of the requirements in NUREG-1432 Specification 5.5.11 that require a specific flowrate have the same statement.

14. A bracketed sentence in the NUREG markup of NUREG-1432 Specification 5.6.2 has been retained. The sentence was inadvertently deleted in the original submittal; however, the sentence was correctly included in the typed Calvert Cliffs ITS and the CTS markup. The Discussion of Deviation that justified deletion of this sentence (Discussion of Deviation 16 to Section 5.0) has been modified to reflect this change, as requested by the NRC in their comments to Section 5.0 (comment 24).

<C-5>

5.6 Reporting Requirements

5.6.2 Annual Radiological Environmental Operating Report (continued)

<6.6.2>

(ODCM), and in 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements ~~[~~in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979~~]~~ [The report shall identify the TLD results that represent collocated dosimeters in relation to the NRC TLD program and the exposure period associated with each result.] In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

A (2)

5.6.3 Radioactive Effluent Release Report

<6.6.3>

both (5)

NOTE

A single submittal may be made for ~~a multiple~~ unit ~~station~~. The submittal should combine sections common to ~~all~~ units at the station~~; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit~~.

(13) (16)

The Radioactive Effluent Release Report covering the operation of the unit shall be submitted in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit (5). The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

as modified by approved exemptions (13)

A (2)

5.6.4 Monthly Operating Reports

<6.6.4>

Routine reports of operating statistics and shutdown experience~~[, including documentation of all challenges to the pressurizer~~

(17)

(continued)

12. NUREG-1432 Diesel Fuel Oil Testing Program (5.5.13) requires a clear and bright test of new fuel oil, and requires the total particulates of stored fuel oil to be determined every 31 days. The Calvert Cliffs ITS 5.5.13 will require a water and sediment test be performed in lieu of the clear and bright test. Calvert Cliffs will not utilize a clear and bright test because the diesel fuel oil is dyed. The Calvert Cliffs ITS 5.5.0 will also require the total particulates of stored fuel oil to be determined every 92 days. Calvert Cliffs contains a CTS Surveillance Requirement which allows the interval for testing fuel oil in the stored diesel generator fuel oil tank to be 92 days. The current test, which checks for viscosity, water, and sediment, was replaced with the total particulate test, as described in Discussion of Change L.3 to Section 5.0. The change from 31 days required by the STS to the 92 days provided in the ITS is based on the current licensing basis time provided in the CTS and is justified since the sediment portion of the current 92 day test is testing for the same basic purpose as the proposed total particulate test; both are evaluating the quality of the fuel oil by looking at fuel breakdown (the fuel breaks down into solids, which then precipitate out as sediment).

13. This change was made to make an editorial correction (including renumbering) to be in compliance with the Writers Guide, or reword a requirement from being general to being specific to Calvert Cliffs.

14. This change to NUREG-1432 Section 5.6.1, Occupational Radiation Exposure Report, was made to reflect the actual mechanisms used at Calvert Cliffs to measure dose rates.

15. The bracketed information in NUREG-1432 Section 5.6.1, Occupational Radiation Exposure Report, is being deleted because Calvert Cliffs has already submitted their initial Occupational Radiation Exposure Report.

16. The bracketed information in NUREG-1432 Section 5.6.3 is being deleted because the information is not consistent with Calvert Cliffs design or current licensing basis.

17. The bracketed information in NUREG 1432 Section 5.6.4, Monthly Operating Report, discuses the inclusion of documentation of all challenges to the pressurizer power-operated relief valves or pressurizer safety valves, with the monthly operating report. This information is being deleted because Calvert Cliffs currently has (CTS 6.6.6) a requirement to report on an annual basis the challenges to the pressurizer power-operated relief valves and the safety valves. Calvert Cliffs will add the requirements for this report into the ITS. These changes are consistent with Calvert Cliffs current licensing basis.

18. NUREG-1432 Section 5.6.6, RCS Pressure and Temperature Limits Report (PTLR), will be deleted. Calvert Cliffs does not anticipate the temperature/pressure values to change from cycle to cycle, which would negate the benefits of the Pressure and Temperature Limits Report. Therefore, Calvert Cliffs will retain the specific pressure/temperature limits in the Technical Specifications.

19 NUREG-1432 Section 5.6.7, EDG Failures Report, will be deleted because Calvert Cliffs does not currently have a Technical Specification requirement to submit diesel generator failures. This change is consistent with the Calvert Cliffs current licensing basis. This change is also consistent with NUREG-1432, Generic Change TSTF-37.

15. Discussion of Change LA.8 to Section 5.0 has been revised to state that the Offsite Dose Calculation Manual (ODCM) will be the location of the relocated details. (One of the details is duplicative of 10 CFR 50.36a and will not be included in the ODCM). This change was requested by the NRC in their comments to Section 5.0 (comments 25 and 30). In addition, the phrase ", as modified by approved exemptions" has been added to the Calvert Cliffs ITS for clarity, since one of the relocated details is an exemption to 10 CFR 50.36a. A new Discussion of Deviation has also been provided (Discussion of Deviation 31 to Section 5.0) to describe the addition of this phrase.

5.6 Reporting Requirements

reporting period. The material provided shall be consistent with the objectives outlined in the ODCM, and in 10 CFR Part 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. The report shall identify the TLD results that represent collocated dosimeters in relation to the NRC TLD program, and the exposure period associated with each result. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

5.6.3 Radioactive Effluent Release Report

----------NOTE----------
A single submittal may be made for both units. The submittal should combine sections common to both units at the station.

The Radioactive Effluent Release Report covering the operation of the unit shall be submitted in accordance with 10 CFR 50.36a, as modified by approved exemptions. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the units. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I, Section IV.B.1. | 2

~~6.0 ADMINISTRATIVE CONTROLS~~

A.1

5 ~~6~~.6.3 Radioactive Effluent Release Report*

as modified by approved exemptions 2

The Radioactive Effluent Release Report covering the operation of the unit shall be submitted in accordance with 10 CFR 50.36a (i.e., time between submittal of the reports must be no longer than 12 months)**. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the units. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I, Section IV.B.1.

LA.8

Licensee initiated major changes to the Radioactive Waste Systems (liquid, gaseous and solid) shall be reported to the Commission in the Radioactive Effluent Release Report for the period in which the modification to the waste system is completed. The discussion of each change shall contain:

a. A description of the equipment, components and processes involved; and

b. Documentation of the fact that the change, including the safety analysis, was reviewed and found acceptable by the onsite review function.

The report shall also include changes to the ODCM, in accordance with Specification 6.5.1.c.

5 ~~6~~.6.4 Monthly Operating Report

Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis, no later than the 15th of each month following the calendar month covered by the report.

for both units. The submittal should combine these sections that are common to both units.

A.1

NOTE 5.6.3

* A single submittal may be made for Calvert Cliffs, since the Radwaste Systems are common to both units.

** In lieu of submission with the Radioactive Effluent Release Report, Sr^{89} and Sr^{90} analyses results may be submitted in a supplementary report within 120 days after submittal of the Radioactive Effluent Release Report.

LA.8

~~6.0 ADMINISTRATIVE CONTROLS~~

A.1

5

6.6.3 Radioactive Effluent Release Report*

as modified by approved exemptions

2

The Radioactive Effluent Release Report covering the operation of the unit shall be submitted in accordance with 10 CFR 50.36a (i.e., time between submittal of the reports must be no longer than 12 months)**. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the units. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I, Section IV.B.1.

LA.8

Licensee initiated major changes to the Radioactive Waste Systems (liquid, gaseous and solid) shall be reported to the Commission in the Radioactive Effluent Release Report for the period in which the modification to the waste system is completed. The discussion of each change shall contain:

a. A description of the equipment, components and processes involved; and

b. Documentation of the fact that the change, including the safety analysis, was reviewed and found acceptable by the onsite review function.

The report shall also include changes to the ODCM, in accordance with Specification 6.5.1.c

5

6.6.4 Monthly Operating Report

Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis, no later than the 15th of each month following the calendar month covered by the report.

A.1

For both units, The submittal should combine those sections that are common to both units.

note to 5.6.3

* A single submittal may be made for Calvert Cliffs, since the Radwaste Systems are common to both units.

** In lieu of submission with the Radioactive Effluent Release Report, Sr^{89} and Sr^{90} analyses results may be submitted in a supplementary report within 120 days after submittal of the Radioactive Effluent Release Report.

LA.8

gas storage tanks and the explosive gas mixtures in the Waste Gas Holdup System are maintained within limits. Improved Technical Specification 5.5.12 provides regulatory control over the limitations and surveillances proposed to be relocated. As a result, the requirements proposed to be relocated are not required to be included in the ITS to ensure the quantity of radioactivity in gas storage tanks and the explosive gas mixtures in the Waste Gas Holdup System are maintained within limits. The TRM will be incorporated by reference into the UFSAR at ITS implementation. Any changes to the relocated requirements will be controlled by the provisions of 10 CFR 50.59. This change is consistent with NUREG-1432.

LA.6 Not used.

LA.7 Not used.

LA.8 The parenthetical statement in CTS 6.6.3, which emphasizes the information from 10 CFR 50.36a that time between submittal of the Radioactive Effluent Release Reports must be no longer than 12 months, is being removed. This detail is duplicative of 10 CFR 50.36 and does not need to be repeated in ITS. Also, the last paragraph specifically describing the contents of the .eport, in footnote **, which provides an exception for the Sr^{89} and Sr^{90} analysis results, is also being moved from the Technical Specifications. To provide clarification that an exemption exists, the phase "as modified by approved exemptions" has been added to the CTS 6.6.3 markup. These details are not necessary for the ITS. They are related to ODCM requirements, and are adequately controlled by the ODCM requirements in ITS 5.5.1. Changes to the relocated requirements will be controlled by the ODCM change control process in ITS 5.5.1 or 10 CFR 50.36, as appropriate.

TECHNICAL CHANGES - LESS RESTRICTIVE

L.1 Current Technical Specification 6.2.2.d requires an individual qualified in radiation protection procedures to be onsite when fuel is in the reactor. Improved Technical Specification 5.5.2.d will allow the position to be vacant for not more than two hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position. This change is reasonable because it allows time to restore a required staffing position for unexpected absences without violating the Technical Specifications Administrative Controls section, while ensuring the position is filled in a timely manner. This change is consistent with NUREG-1432.

L.2 Current Technical Specification 4.0.5 lists requirements of the Inservice Testing Program. Improved Technical Specification 5.5.8 adds a requirement which allows the provisions of ITS SR 3.0.3 to be applicable to inservice testing activities. This requirement will allow 24 hours or up to the limit of the Frequency, whichever is less, to perform Inservice Testing if discovered that Inservice Testing requirements were not performed, instead of declaring the component inoperable. This allowance is based on consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillance, and the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements. This change is consistent with NUREG-1432.

<CTS>

5.6 Reporting Requirements

5.6.2 Annual Radiological Environmental Operating Report (continued)

<6.6.2>

(ODCM), and in 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements [in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979~~]~~ [The report shall identify the TLD results that represent collocated dosimeters in relation to the NRC TLD program and the exposure period associated with each result.] In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

A 2

5.6.3 Radioactive Effluent Release Report

<6.6.3>

NOTE

A single submittal may be made for ~~a multiple unit station~~. The submittal should combine sections common to all units at the station~~; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit~~.

both, 5, 13, 16

The Radioactive Effluent Release Report covering the operation of the unit shall be submitted in accordance with 10 CFR 50.36a~~.~~ The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit(s). The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

{as modified by approved exemptions}, 13

A 2

5.6.4 Monthly Operating Reports

<6.6.4>

Routine reports of operating statistics and shutdown experience~~, including documentation of all challenges to the pressurizer~~

17

(continued)

This change has been proposed as a change to the ITS NUREG as TSTF-65, but has not yet been approved by the NRC.

27. The Calvert Cliffs current licensing basis requires the General Supervisor-Nuclear Plant Operations to hold a license, and also requires the operations manager (the individual the General Supervisor-Nuclear Plant Operations reports to) to hold or have held a Senior Reactor Operator license at Calvert Cliffs. This requirement is being retained in the ITS.

28. This change incorporates the current Calvert Cliffs requirements for the Iodine Removal System into the Ventilation Filter Testing Program. This requirement is consistent with the Calvert Cliffs current licensing basis.

29. The gas storage tank radioactivity limit in NUREG-1432 Specification 5.5.12.b has been changed to be consistent with the Calvert Cliffs current licensing basis. The Calvert Cliffs ITS radioactivity limit will be that in the event of an uncontrolled release of the tank's contents, the resulting total body exposure to a member of the public at the site boundary will not exceed accident guidelines.

30. The CTS state that the Occupational Radiation Exposure Report for the Independent Spent Fuel Storage Installation is reported separately from the Units 1 and 2 Occupational Radiation Exposure Report. Therefore, for clarity, the Note to ITS 5.6.1 has been modified to preclude combining the reports into a single submittal.

31. The phrase ", as modified by approved exemptions" has been added to the ITS 5.6.3 requirement that the Radioactive Effluent Release Report be submitted in accordance with 10 CFR 50.36a. Current Technical Specification 6.6.3 footnote "**" allows an exemption to 10 CFR 50.36a that allows the Sr^{89} and Sr^{90} analysis results to be submitted at a later date. The addition of the phrase ", as modified by approved exemptions" is consistent with its use in other ITS that allow exemptions (e.g., ITS 3.6.1).

32. The current Calvert Cliffs licensing basis surveillance frequencies have been provided in ITS 5.5.11. In addition, for clarity the NUREG-1432 discussion concerning the provisions of SR 3.0.2 and SR 3.0.3 have been moved to the end of this specification after the discussion of frequencies, since it applies only to the frequencies.

33. The statement in NUREG-1432 Specification 5.5.11, "at the system flowrate specified below [+-10%]" has been deleted since it is redundant. Each of the requirements in NUREG-1432 Specification 5.5.11 that require a specific flowrate have the same statement.

16. Discussion of Change A.17 to Section 5.0 has been revised to clearly state why the addition of the Post Accident Monitoring (PAM) Instrumentation Report to Section 5.0 is administrative. In addition, new Discussion of Changes M.7 and L.5 to Section 5.0 have been provided to justify changes to the PAM Instrumentation Report required by CTS 3/4.3.3.1 Action 30, 3/4.3.3.6 Actions 34 and 35, and 3/4.6.5.1 Action a.1. An associated No Significant Hazards Consideration has also been provided. These changes respond to the NRC comments to Section 5.0 (comment 28).

~~6.0 ADMINISTRATIVE CONTROLS~~ (A.1)

c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.

d. The COLR, including any mid-cycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

(5) ~~6~~.6.6 Pressurizer PORV and Safety Valve Report (A.1)

A report shall be submitted prior to March 1 of each year documenting all failures and challenges to the pressurizer PORVs or safety valves.

INSERT 5.6.7 PAM Report

Add 5.6.8 TENDON SURVEILLANCE REPORT (See INSERT 5.5.6 page 12)

Add 5.6.9 STEAM GENERATOR TUBE INSPECTION REPORT (See INSERT 5.5.9 page 26)

INSERT 5.6.7 PAM Report (page 1 of 4)

See Discussion of Changes for Specification 3.3.10, "PAM Instrumentation," in Section 3.3

3/4.3 INSTRUMENTATION

TABLE 3.3-6 (Continued)

TABLE NOTATION

* Alarm setpoint to be specified in a controlled document (e.g., setpoint control manual).

ACTION STATEMENTS

ACTION 14 - 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 16 - 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 30 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, initiate the preplanned alternate method of monitoring the appropriate parameter(s), within 72 hours, and:

1) either restore the inoperable channel(s) to OPERABLE status within 7 days of the event, or

2) prepare and submit a Special Report to the Commission pursuant to 10 CFR 50.4 within 30 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.

5.6.7

14 days after Condition B or G of LCO 3.3.10 is entered.

L.5 Unrecovered inoperable

M.7 two channels inoperable

INSERT 5.6.7 (AM Report (page 2 of 4)) Specification 5.0

See Discussion of Changes for Specification 3.3.10, "PAM Instrumentation," in Section 3.3.

TABLE 3.3-10 (Continued)

ACTION STATEMENTS

ACTION 31 - With the number of OPERABLE post-accident monitoring channels less than required by Table 3.3-10, either restore the inoperable channel to OPERABLE status within 30 days or be in HOT SHUTDOWN within the next 12 hours.

ACTION 32 - With the number of OPERABLE post-accident monitoring channels one less than the Minimum Channels OPERABLE requirement in Table 3.3-10, operation may proceed provided the inoperable channel is restored to OPERABLE status at the next outage of sufficient duration.

(2)

ACTION 33 - With the number of OPERABLE post-accident monitoring channels two less than required by Table 3.3-10, either restore one inoperable channel to OPERABLE status within 30 days or be in HOT SHUTDOWN within the next 12 hours.

ACTION 34 - With the number of OPERABLE post-accident monitoring channels one less than the Minimum Channels OPERABLE requirement in Table 3.3-10, either restore the system to OPERABLE status within 7 days if repairs are feasible without shutting down or prepare and submit a Special Report to the Commission pursuant to 10 CFR 50.4 within 30 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.

5.6.7

(L.5)

ACTION 35 - With the number of OPERABLE channels two less than required by Table 3.3-10, either restore the inoperable channel(s) to OPERABLE status within 48 hours if repairs are feasible without shutting down or:

1. Initiate an alternate method of monitoring for core and Reactor Coolant System voiding;

5.6.7

2. Prepare and submit a Special Report to the Commission pursuant to 10 CFR 50.4 within 30 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; and

(M.7)

3. Restore the system to OPERABLE status at the next scheduled refueling.

14 days after Condition B or G of LCO 3.3.10 is entered

Insert 5.6.7 PAM Report (Page 3 of 4 Specification 5.0

See Discussion of changes for Specification 3.3.10, "PAM Instrumentation," in Section 3.3.

3/4.6 **CONTAINMENT SYSTEMS**

3/4.6.5 COMBUSTIBLE GAS CONTROL

Hydrogen Analyzers

LIMITING CONDITION FOR OPERATION

3.6.5.1 Two independent containment hydrogen analyzers shall be **OPERABLE**.

APPLICABILITY: **MODES** 1 and 2.

ACTION:

a. With one hydrogen analyzer inoperable, restore the inoperable analyzer to **OPERABLE** status within 30 days or:

1. Verify containment atmosphere grab sampling capability and prepare and submit a special report to the Commission pursuant to 10 CFR 50.4 within the following 30 days, outlining the **ACTION** taken, the cause for the inoperability, and the plans and schedule for restoring the system to **OPERABLE** status, or

5.6.7

14

M.7

2

2. Be in at least **HOT STANDBY** within the next 6 hours.

b. With both hydrogen analyzers inoperable, restore at least one inoperable analyzer to **OPERABLE** status within 72 hours or be in at least **HOT STANDBY** within the next 6 hours.

c. Specification 3.0.4 is not applicable to this requirement.

SURVEILLANCE REQUIREMENTS

4.6.5.1.1 Each hydrogen analyzer shall be demonstrated **OPERABLE** at least bi-weekly on a **STAGGERED TEST BASIS** by drawing a sample from the Waste Gas System through the hydrogen analyzer.

4.6.5.1.2 Each hydrogen analyzer shall be demonstrated **OPERABLE** at least once per 92 days on a **STAGGERED TEST BASIS** by performing a **CHANNEL CALIBRATION** using sample gases in accordance with manufacturers' recommendations.

INSERT 5.6.7

A.15

A.17 | A

5.6.7 Post-Accident Monitoring Report

When a report is required by Condition B or G of LCO 3.3.10, "Post Accident Monitoring Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

1 D

specification 5.0

~~6.0 ADMINISTRATIVE CONTROLS~~

A.1

c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.

d. The COLR, including any mid-cycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5

~~6~~.6 Pressurizer PORV and Safety Valve Report

A.1

A report shall be submitted prior to March 1 of each year documenting all failures and challenges to the pressurizer PORVs or safety valves.

Insert 5.6.7 PAM Report

Add 5.6.8 Tendon Surveillance Report (see insert 5.5.6 page 14)

Add 5.6.9 Steam Generator Tube Inspection Report (see Insert 5.5.9 page 22)

Insert 5.6.7 PAM Report (Page 1 of 4) Specification 5.0

(See Discussion of Changes for Specification 3.3.10, "PAM Instrumentation," in Section 3.3.)

3/4.3 INSTRUMENTATION

TABLE 3.3-6 (Continued)

TABLE NOTATION

* Alarm setpoint to be specified in a controlled document (e.g., setpoint control manual).

ACTION STATEMENTS

ACTION 14 - 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 16 - 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 30 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, initiate the preplanned alternate method of monitoring the appropriate parameter(s), within 72 hours, and:

1) either restore the inoperable channel(s) to OPERABLE status within 7 days of the event, or

2) prepare and submit a Special Report to the Commission pursuant to 10 CFR 50.4 within 30 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.

5.6.7

(2)

14 days after Condition B or G of LCO 3.3.10 is entered

L.5 one channel inoperable

M.7 two channels inoperable

Insert 5.6.7 ITM Report (Page 2 of 4)

Specification 5.0

(See Discussion of Changes for Specification 3.3.10, "PAM Instrumentation," in Section 3.3.)

TABLE 3.3-10 (Continued)

ACTION STATEMENTS

ACTION 31 - With the number of OPERABLE post-accident monitoring channels less than required by Table 3.3-10, either restore the inoperable channel to OPERABLE status within 30 days or be in HOT SHUTDOWN within the next 12 hours.

ACTION 32 - With the number of OPERABLE post-accident monitoring channels one less than the Minimum Channels OPERABLE requirement in Table 3.3-10, operation may proceed provided the inoperable channel is restored to OPERABLE status at the next outage of sufficient duration.

ACTION 33 - With the number of OPERABLE post-accident monitoring channels two less than required by Table 3.3-10, either restore one inoperable channel to OPERABLE status within 30 days or be in HOT SHUTDOWN within the next 12 hours.

(2)

ACTION 34 - With the number of OPERABLE post-accident monitoring channels one less than the Minimum Channels OPERABLE requirement in Table 3.3-10, either restore the system to OPERABLE status within 7 days if repairs are feasible without shutting down or prepare and submit a Special Report to the Commission pursuant to 10 CFR 50.4 within 30 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.

5.6.7 | (1.5)

ACTION 35 - With the number of OPERABLE channels two less than required by Table 3.3-10, either restore the inoperable channel(s) to OPERABLE status within 48 hours if repairs are feasible without shutting down or:

1. Initiate an alternate method of monitoring for core and Reactor Coolant System voiding;

2. Prepare and submit a Special Report to the Commission pursuant to 10 CFR 50.4 within 30 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; and | (M.7)

3. Restore the system to OPERABLE status at the next scheduled refueling.

14 days after Condition B or G of LCO 3.3.10 is entered

Insert 5.6.7 PAM Report (Page 3 of 4)

Specification 5.0

See Discussion of Changes for Specification 3.3.10, "PAM Instrumentation," in Section 3.3

3/4.6 CONTAINMENT SYSTEMS

3/4.6.5 COMBUSTIBLE GAS CONTROL

Hydrogen Analyzers

LIMITING CONDITION FOR OPERATION

3.6.5.1 Two independent containment hydrogen analyzers shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

a. With one hydrogen analyzer inoperable, restore the inoperable analyzer to OPERABLE status within 30 days or:

1. Verify containment atmosphere grab sampling capability and prepare and submit a special report to the Commission pursuant to Specification 6.9.2 within the following ~~30~~ 14 days, outlining the action taken, the cause for the inoperability, and the plans and schedule for restoring the system to OPERABLE status, or (M-7)

5.6.7

2. Be in at least HOT STANDBY within the next 6 hours.

b. With both hydrogen analyzers inoperable, restore at least one inoperable analyzer to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours.

c. Specification 3.0.4 is not applicable to this requirement.

SURVEILLANCE REQUIREMENTS

4.6.5.1.1 Each hydrogen analyzer shall be demonstrated OPERABLE at least bi-weekly on a STAGGERED TEST BASIS by drawing a sample from the Waste Gas System through the hydrogen analyzer.

4.6.5.1.2 Each hydrogen analyzer shall be demonstrated OPERABLE at least once per 92 days on a STAGGERED TEST BASIS by performing a CHANNEL CALIBRATION using sample gases in accordance with manufacturers' recommendations.

INSERT 5.6.7

A.15

A.17

1A

5.6.7 Post-Accident Monitoring Report

1A

When a report is required by Condition B or G of LCO 3.3.10, "Post Accident Monitoring Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

A.17 The proposed change will add a requirement to submit a Post-Accident Monitoring Report (ITS 5.6.7) if the post-accident monitoring instrumentation cannot be restored within a certain amount of time. This addition applies to those post-accident monitoring instruments where a report is not currently required. The Discussion of Changes justifying the more or less restrictive changes regarding this report, are provided in the Discussion of Changes for ITS 3.3.10. Therefore, this change is administrative and consistent with NUREG-1432. For those post-accident monitoring instruments that currently require a report, justifications for changes in the report are provided in Discussion of Changes M.7 and L.5 below.

A.18 Current Technical Specification 6.6.1 requires the Occupational Radiation Exposure Report to be submitted to the NRC prior to March 31 of each year. Improved Technical Specification 5.6.1 will revise the date from March 31 to April 30. This change is administrative because the Frequency of the report is unchanged; it is still required annually. This change is consistent with NUREG-1432.

A.19 Unit 2 CTS 4.4.5.3.a contains a footnote that modifies the steam generator inspection frequency for Unit 2, Cycle 9. This footnote will not be in the ITS. Cycle 9 has been completed. Removing a footnote which is no longer applicable is an administrative change.

A.20 Current Technical Specifications 3.11.1.1 and 3.11.1.2 are being incorporated into the Explosive Gas and Storage Tank Radioactivity Monitoring Program. Improved Technical Specification 5.5.12 adds the descriptive information which describes the requirements of the program. Surveillance Requirements 3.0.2 and 3.0.3 will be applicable to the Surveillance frequencies in the program, as they are to the CTS requirements. Since this change does not technically change any of the current requirements, it is considered administrative. The relocation of these requirements is described in a movement of information discussion of change. This change is consistent with NUREG-1432.

A.21 Current Technical Specification 4.0.5.a lists specific information concerning the requirements for Section XI of the ASME Boiler and Pressure Vessel Code, and references to the 10 CFR Part 50 Code requirements related to inservice testing. The proposed change will delete this information. This is acceptable because restating the Code of Federal Regulation requirements in Technical Specifications is redundant and unnecessary. This change is consistent with NUREG-1432.

A.22 The change proposes to add a requirement for the Safety Function Determination Program to the Administrative Controls section of the Technical Specifications (ITS 5.5.15). This program will ensure a loss of safety function is detected and appropriate actions taken. This program is required by ITS LCO 3.0.6, which allows supported system Actions to not be entered immediately when support system Actions are entered. This is allowed because the Safety Function Determination Program will evaluate any loss of safety function and require appropriate actions to be taken. The addition of ITS LCO 3.0.6 is described in a less restrictive discussion of change in Specification 3.0 (Discussion of Change L.2). This change in Section 5.0 is considered administrative because the Safety Function Determination Program, required by ITS LCO 3.0.6 is described in the Discussion of Changes for ITS LCO 3.0.6. This change is consistent with NUREG-1432.

A.23 The CTS 3.6.3, 3.6.3.1, 3.6.7, 3.7.7, and 3.9.12 requirements for charcoal absorber and high efficiency particulate air filter bank testing requires each bank to remove 99% of the test gas

M.5 Not used.

M.6 Current Technical Specifications SR 4.6.3.1.d.1, 4.6.6.1.d.1, 4.7.6.1.e.1, 4.7.7.1.d, and 4.9.1.2.d.1 require a pressure drop test across the combined HEPA filters and charcoal adsorber banks every 18 months be within specified limits. Improved Technical Specification 5.5.11.d requires the test to be performed across the prefilters, in addition to the HEPA filters and charcoal adsorber banks, with no change to the current acceptance limit. This change is more restrictive on plant operations and will ensure that the filter trains are operating as designed to reduce the concentration of fission products as assumed in the accident analysis.

M.7 Current Technical Specification 3/4.6.5.1 Action a.1 requires a special report to be submitted to the NRC when one containment hydrogen analyzer is inoperable and not restored to operable status within the allowed restoration time. Improved Technical Specification 5.6.7 will require the special report to be submitted within 14 days, instead of the current 30 days, after the restoration time for one inoperable hydrogen analyzer has expired. In addition, CTS 3/4.3.3.1 Action 30 and CTS 3/4.3.3.6 Action 35 require that, if two containment area high range monitors or reactor vessel water level post-accident monitoring (PAM) instruments are inoperable and not restored to Operable status within the allowed restoration time, a special report be submitted to the NRC within 30 days after the event (i.e., after the instruments become inoperable). Improved Technical Specification 5.6.7 will require the special report to be submitted 14 days after the restoration time has expired. In CTS 3/4.3.3.1 Action 30 and ITS 3.3.10 Action C, the time provided to restore a containment area high range monitor when both are inoperable is 7 days. Thus, ITS 5.6.7 effectively changes the due date of the special report when both containment high range monitors are inoperable from 30 days after the event to 21 days after the event. In ITS 3.3.10, the restoration time of two inoperable reactor vessel water level instruments has been extended from 48 hours to 7 days. Thus, ITS 5.6.7 also effectively changes the due date of the special report when both reactor vessel water level instruments are inoperable from 30 days after the event to 21 days after the event. These changes will ensure the NRC is properly notified in a timely manner when PAM instrumentation is not restored within the Technical Specification allowed restoration time, and of the actions being taken to restore or compensate for the inoperability. This change is a more restrictive change and is consistent with NUREG-1432.

TECHNICAL CHANGES - RELOCATIONS

None

L.3 Current Technical Specification 4.8.1.1.2.b requires a sample of diesel fuel oil to be taken every 92 days, and that the sample be within the limits specified in Table 1 of ASTM D975-81 when checked for viscosity, water, and sediment. Improved Technical Specification 5.5.13 replaces the parameters to be tested (viscosity, water, and sediment) with a total particulate concentration requirement. The ITS requires the total particulate concentration to be ≤ 10 mg/l, when determined by gravimetric analysis. Calvert Cliffs plant history has shown that the viscosity does not change over time and no additional water appears in the fuel oil storage tank over time. Additionally, ITS SR 3.8.3.3 continues to ensure that accumulated water that does appear in the tank is removed every 92 days. The current requirement to check for sediment is unnecessary with the addition of the requirement to check for particulate, since as fuel breaks down, it forms solids, which can be measured by either particulate or sediment analysis. Thus, the particulate check will determine a problem with the quality of the fuel oil at a time sooner than the sediment check.

L.4 Current Technical Specifications 4.6.1.1.c and 4.6.1.1.d require the equipment hatch to be verified closed and sealed and the containment purge blind flanges to be installed and sealed prior to entering Mode 4 (i.e., prior to the time containment integrity is required by the CTS and ITS) following a shutdown where the equipment hatch was opened or a blind flange was removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. These requirements have been deleted from the ITS since they are duplicative of requirements already contained in the CTS (and maintained in the ITS). Current Technical Specification 6.5.6 (ITS 5.5.16) requires a Containment Leakage Rate Testing Program be implemented as required by 10 CFR Part 50, Appendix J, Option B, and requires the program to be in accordance with the guidelines contained in Regulatory Guide 1.163, dated September 1995. Regulatory Guide 1.163, states that NEI 94-01, Revision 0, provides methods acceptable to the NRC for complying with 10 CFR Part 50, Appendix J, Option B. Section 10.2.1.3 of NEI 94-01 requires a Type B test to be performed prior to the time containment integrity is required, if a containment penetration is opened. Since the containment equipment hatch and the containment purge blind flanges are containment penetrations, ITS 5.5.16 already requires these penetrations to be type B tested after closure. Therefore, CTS 4.6.1.1.c and 4.6.1.1.d have been deleted because there is no need to repeat the specific requirements as separate surveillances.

L.5 Current Technical Specification 3/4.3.3.1 Action 30 and CTS 3/4.3.3.6 Action 34 require that if a containment area high range monitor or reactor vessel water level PAM instrumentation channel is inoperable and not restored to Operable status within the allowed restoration time, a special report be submitted to the NRC within 30 days after the event (i.e., after the instrument becomes inoperable). Improved Technical Specification 5.6.7 will require the special report to be submitted within 14 days after the restoration time has expired. In ITS 3.3.10, the restoration time of an inoperable instrument has been extended from 7 days to 30 days when one channel is inoperable. Thus, ITS 5.6.7 effectively changes the due date of the special report when one containment high range monitor or reactor vessel water level instrument is inoperable from 30 days after the event to 44 days after the event. This change will provide sufficient time to submit the report after the restoration time has expired. Given that the report is still required to be provided to the NRC, and actions are still required to be taken to restore the inoperable channel and compensate for the inoperability after the expiration of the restoration time, report submittal within 30 days after the event is not necessary to assure operation in a safe manner for the interval from 30 days to 44 days after the event. Additionally, there is no requirement for the NRC to approve the report.

Therefore, this change has no impact on the safe operation of the plant. This change is consistent with NUREG-1432.

L.6 Current Technical Specification 4.6.3.1.g, 4.6.6.1.g, 4.7.7.1.g, and 4.9.12.g require a flow distribution test to be performed in accordance with ANSI N510-1975, if maintenance is performed on the Iodine Removal System, Emergency Core Cooling System (ECCS) Pump Room Emergency Air Filtration System (EAFS), Penetration Room EAFS, or Spent Fuel Pool Ventilation System that affects flow distribution. Any time the operability of a system or component has been affected by repair, maintenance, or replacement of a component, post-maintenance testing is required to demonstrate operability of the system or component. After restoration of a component that caused a required SR to be failed, or after maintenance is performed that could affect a component, ITS SR 3.0.1 requires the appropriate SRs and post-maintenance tests to be performed to demonstrate the operability of the affected components. In addition, the definition of operability and ITS LCO 3.0.1 will also ensure the affected component is properly tested prior to declaring it operable. Therefore, explicit post-maintenance SRs are not required and are deleted from the Technical Specifications.

perform leakage testing in accordance with the guidelines of Regulatory Guide 1.163, already requires these tests to be performed. This change does not affect the probability of an accident. The performance of a Type B test is not an initiator of any analyzed event. The consequences of an accident will not be affected since the requirement to perform the tests is not changed. The change will not alter assumptions relative to the mitigation of an accident or transient. Therefore, this change will not involve a significant increase in the probability or consequence of an accident previously evaluated.

2. **Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed change deletes the duplicative requirements that the equipment hatch be verified closed and sealed and the containment purge blind flanges be installed and sealed prior to entering Mode 4 (i.e., prior to the time containment integrity is required by the CTS and ITS) following a shutdown where the equipment hatch was opened or a blind flange was removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. The ITS, through the requirement to perform leakage testing in accordance with the guidelines of Regulatory Guide 1.163, already requires these tests to be performed. This change will not physically alter the plant (no new or different type of equipment will be installed). The change will not introduce any new accident initiators. Therefore, the change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. **Does this change involve a significant reduction in a margin of safety?**

The proposed change deletes the duplicative requirements that the equipment hatch be verified closed and sealed and the containment purge blind flanges be installed and sealed prior to entering Mode 4 (i.e., prior to the time containment integrity is required by the CTS and ITS) following a shutdown where the equipment hatch was opened or a blind flange was removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. The ITS, through the requirement to perform leakage testing in accordance with the guidelines of Regulatory Guide 1.163, already requires these tests to be performed. Therefore, the margin of safety is not affected by this change.

Change L.5

1. **Does the change involve a significant increase in the probability or consequence of an accident previously evaluated?**

The proposed change will increase the time from 30 to 44 days to submit a post-accident monitoring special report, after a required indication channel of the containment area high range monitor or reactor vessel water level instrument becomes inoperable. This increases the amount of time allowed before submitting a report by 14 days. This change will not affect the probability of an accident. The report submittal requirement is not an initiator of any analyzed event. The report is still required to be provided to the NRC, and actions are still required to be taken to restore the inoperable channel to operable status. The submittal date of the special report is not required for the mitigation of an accident. The proposed change does not significantly affect initiators or mitigation of analyzed events, and therefore, does not involve a significant increase in the probability or consequences of an accident.

2. **Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed change will increase the time from 30 to 44 days to submit a post-accident monitoring special report, after a required indication channel of the containment area high range monitor or reactor vessel water level instrument becomes inoperable. No hardware is being added as part of the proposed change. The proposed change will not introduce any new accident initiators. Therefore, the change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. **Does this change involve a significant reduction in a margin of safety?**

The proposed change will increase the time from 30 to 44 days to submit a post-accident monitoring special report, after a required indication channel of the containment area high range monitor or reactor vessel water level instrument becomes inoperable. This increases the amount of time allowed before submitting a report by 14 days. This change does not affect the safety analysis assumptions. Therefore, the change does not involve a significant reduction in a margin of safety.

Change L.6

1. **Does the change involve a significant increase in the probability or consequence of an accident previously evaluated?**

The proposed change will delete explicit post-maintenance surveillance requirements for flow distribution tests of ventilation systems. The ITS 3.0.1 Bases state that upon completion of maintenance, appropriate post-maintenance testing is required to declare equipment Operable, to include ensuring applicable Surveillances are not failed, and their most recent performance is in accordance with ITS SR 3.0.2. Some exceptions are specified for cases where plant conditions would not allow the tests to be performed. The post-maintenance tests are still required. The other Surveillance Requirements are also still required. The proposed deletion of this explicit requirement is appropriate since ITS SR 3.0.1 requires the appropriate Surveillance Requirements or post-maintenance tests to be performed to demonstrate Operability, but the explicit post-maintenance tests are not required in the Technical Specifications. Explicit post-maintenance surveillance requirements are not initiators of any analyzed event. Including the explicit post-maintenance tests for the ventilation systems is not required for the mitigation of an accident. The proposed change does not significantly affect initiators or mitigation of analyzed events, and therefore, does not involve a significant increase in the probability or consequences of an accident.

2. **Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed change will delete explicit post-maintenance surveillance requirements for flow distribution tests of ventilation systems. No hardware is being added as part of the proposed change. The proposed change will not introduce any new accident initiators. Therefore, the change does not create the possibility of a new or different kind of accident from any previously evaluated.

17. Discussion of Change A.22 to Section 5.0 has been revised to clarify why the associated change (the addition of a Safety Function Determination Program) is administrative and to cross-reference the less restrictive Discussion of Change in Section 3.0. This change responds to the NRC comments to Section 5.0 (comment 29).

A.17 The proposed change will add a requirement to submit a Post-Accident Monitoring Report (ITS 5.6.7) if the post-accident monitoring instrumentation cannot be restored within a certain amount of time. This addition applies to those post-accident monitoring instruments where a report is not currently required. The Discussion of Changes justifying the more or less restrictive changes regarding this report, are provided in the Discussion of Changes for ITS 3.3.10. Therefore, this change is administrative and consistent with NUREG-1432. For those post-accident monitoring instruments that currently require a report, justifications for changes in the report are provided in Discussion of Changes M.7 and L.5 below.

A.18 Current Technical Specification 6.6.1 requires the Occupational Radiation Exposure Report to be submitted to the NRC prior to March 31 of each year. Improved Technical Specification 5.6.1 will revise the date from March 31 to April 30. This change is administrative because the Frequency of the report is unchanged; it is still required annually. This change is consistent with NUREG-1432.

A.19 Unit 2 CTS 4.4.5.3.a contains a footnote that modifies the steam generator inspection frequency for Unit 2, Cycle 9. This footnote will not be in the ITS. Cycle 9 has been completed. Removing a footnote which is no longer applicable is an administrative change.

A.20 Current Technical Specifications 3.11.1.1 and 3.11.1.2 are being incorporated into the Explosive Gas and Storage Tank Radioactivity Monitoring Program. Improved Technical Specification 5.5.12 adds the descriptive information which describes the requirements of the program. Surveillance Requirements 3.0.2 and 3.0.3 will be applicable to the Surveillance frequencies in the program, as they are to the CTS requirements. Since this change does not technically change any of the current requirements, it is considered administrative. The relocation of these requirements is described in a movement of information discussion of change. This change is consistent with NUREG-1432.

A.21 Current Technical Specification 4.0.5.a lists specific information concerning the requirements for Section XI of the ASME Boiler and Pressure Vessel Code, and references to the 10 CFR Part 50 Code requirements related to inservice testing. The proposed change will delete this information. This is acceptable because restating the Code of Federal Regulation requirements in Technical Specifications is redundant and unnecessary. This change is consistent with NUREG-1432.

A.22 The change proposes to add a requirement for the Safety Function Determination Program to the Administrative Controls section of the Technical Specifications (ITS 5.5.15). This program will ensure a loss of safety function is detected and appropriate actions taken. This program is required by ITS LCO 3.0.6, which allows supported system Actions to not be entered immediately when support system Actions are entered. This is allowed because the Safety Function Determination Program will evaluate any loss of safety function and require appropriate actions to be taken. The addition of ITS LCO 3.0.6 is described in a less restrictive discussion of change in Specification 3.0 (Discussion of Change L.2). This change in Section 5.0 is considered administrative because the Safety Function Determination Program, required by ITS LCO 3.0.6 is described in the Discussion of Changes for ITS LCO 3.0.6. This change is consistent with NUREG-1432.

A.23 The CTS 3.6.3, 3.6.3.1, 3.6.7, 3.7.7, and 3.9.12 requirements for charcoal absorber and high efficiency particulate air filter bank testing requires each bank to remove 99% of the test gas

18. Discussion of Change LA.5 to Section 5.0 has been revised to state that the Technical Requirements Manual will be the location of the relocated requirements. This change was requested by the NRC in their comments to Section 5.0 (comment 30).

TECHNICAL CHANGES - MOVEMENT OF INFORMATION TO LICENSEE-CONTROLLED DOCUMENTS

LA.1 Current Technical Specification 6.2.2.e, which specifies the requirements of the fire brigade, is being moved to the Fire Protection Program. All fire protection-related Technical Specifications are being relocated from the Technical Specifications into the Fire Protection Program which is incorporated by a reference into the UFSAR, as allowed in Generic Letter 88-12. These requirements can be adequately controlled in the Fire Protection Program. Any changes to the Fire Protection Program will require a 10 CFR 50.59 evaluation. This change is consistent with NUREG-1432.

LA.2 Current Technical Specification 6.2.2.f requires the operations manager to hold or have held an SRO license at Calvert Cliffs, and that the General Supervisor, Shift Supervisor, and Control Room Supervisor hold an SRO license. The proposed change will remove the requirements for the Shift Supervisor and Control Room Supervisor to hold an SRO license as this requirement is stated in the regulations. The requirement for the General Supervisor-Nuclear Plant Operations to hold an SRO license will remain in the Technical Specifications. This change is consistent with NUREG-1432.

LA.3 Current Technical Specification 6.5.1.c.2 requires changes to the Offsite Dose Calculation Manual (ODCM) become effective upon review by the onsite review function and approval by the Plant Manager. The proposed change will move the requirement that changes to the ODCM be reviewed by the onsite review committee to the QA Policy. The requirement that changes to the ODCM be subject to the onsite review function is not required to be in the Technical Specifications because changes to the ODCM are currently subject to the onsite review function per the QA Policy, which describes the duties of the onsite review committee. Therefore, any changes to the functions of the onsite review committee will require a 10 CFR 50.54(a) evaluation. These evaluations ensure that any changes to these requirements will be appropriately reviewed. This change is consistent with NUREG-1432.

LA.4 Current Technical Specification 3.6.1.6, "Containment Structural Integrity," SRs, and figures are being relocated to the Technical Requirements Manual (TRM). Note that the Unit 1 and Unit 2 requirements differ. The Unit 1 and Unit 2 containments are identical and were constructed at the same time. Testing on the Unit 1 containment is representative of the condition of the Unit 2 containment. Therefore, the CTS contains the majority of the testing requirements in the Unit 1 Technical Specifications. What testing will be performed on each containment will be described in the TRM. The description of the program is being incorporated into Chapter 5.0. The requirements of ITS 5.5.6 are adequate to ensure the containment structural integrity is maintained. Improved Technical Specification 5.5.6 provides regulatory control over the containment tendons, end anchorages, and adjacent concrete surfaces, and containment surface limitations and surveillances proposed to be relocated. As a result, the requirements proposed to be relocated are not required to be included in the ITS to ensure the containment structural integrity is maintained. The TRM will be incorporated by reference into the UFSAR at ITS implementation. Any changes to these relocated requirements will be controlled by the provisions of 10 CFR 50.59. This change is consistent with NUREG-1432.

LA.5 Current Technical Specification 3.11.1.1 and 3.11.1.2 requirements are being relocated to the TRM. The requirements of ITS 5.5.12 are adequate to ensure the quantity of radioactivity in

gas storage tanks and the explosive gas mixtures in the Waste Gas Holdup System are maintained within limits. Improved Technical Specification 5.5.12 provides regulatory control over the limitations and surveillances proposed to be relocated. As a result, the requirements proposed to be relocated are not required to be included in the ITS to ensure the quantity of radioactivity in gas storage tanks and the explosive gas mixtures in the Waste Gas Holdup System are maintained within limits. The TRM will be incorporated by reference into the UFSAR at ITS implementation. Any changes to the relocated requirements will be controlled by the provisions of 10 CFR 50.59. This change is consistent with NUREG-1432.

LA.6 Not used.

LA.7 Not used.

LA.8 The parenthetical statement in CTS 6.6.3, which emphasizes the information from 10 CFR 50.36a that time between submittal of the Radioactive Effluent Release Reports must be no longer than 12 months, is being removed. This detail is duplicative of 10 CFR 50.36 and does not need to be repeated in ITS. Also, the last paragraph specifically describing the contents of the report, in footnote **, which provides an exception for the Sr^{89} and Sr^{90} analysis results, is also being moved from the Technical Specifications. To provide clarification that an exemption exists, the phase "as modified by approved exemptions" has been added to the CTS 6.6.3 markup. These details are not necessary for the ITS. They are related to ODCM requirements, and are adequately controlled by the ODCM requirements in ITS 5.5.1. Changes to the relocated requirements will be controlled by the ODCM change control process in ITS 5.5.1 or 10 CFR 50.36, as appropriate.

TECHNICAL CHANGES - LESS RESTRICTIVE

L.1 Current Technical Specification 6.2.2.d requires an individual qualified in radiation protection procedures to be onsite when fuel is in the reactor. Improved Technical Specification 5.5.2.d will allow the position to be vacant for not more than two hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position. This change is reasonable because it allows time to restore a required staffing position for unexpected absences without violating the Technical Specifications Administrative Controls section, while ensuring the position is filled in a timely manner. This change is consistent with NUREG-1432.

L.2 Current Technical Specification 4.0.5 lists requirements of the Inservice Testing Program. Improved Technical Specification 5.5.8 adds a requirement which allows the provisions of ITS SR 3.0.3 to be applicable to inservice testing activities. This requirement will allow 24 hours or up to the limit of the Frequency, whichever is less, to perform Inservice Testing if discovered that Inservice Testing requirements were not performed, instead of declaring the component inoperable. This allowance is based on consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillance, and the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements. This change is consistent with NUREG-1432.

19. Discussion of Change LA.7 to Section 5.0 has been deleted. Most of the CTS details relocated by LA.7 have been incorporated into the ITS. These details affect the frequencies of the tests required by the Ventilation Filter Test Program. In addition, due to maintaining the CTS frequencies, new Discussion of Deviation 32 to Section 5.0 has been provided justifying these changes to NUREG-1432. The remainder of the details are either deleted with new Discussion of Change L.6, or with modified Discussion of Change A.23. An associated No Significant Hazards Consideration has also been provided. This change responds to the NRC comments to Section 5.0 (comment 30). Also, new Discussion of Deviation 33 to Section 5.0 has been provided justifying deleting the phase "at the system flowrate specification below [± 10%]" in NUREG-1432 Specification 5.5.11 since it is redundant to each of the subsequent requirements that require a specific flowrate.

5.5 Programs and Manuals

5.5.10 Secondary Water Chemistry Program

This program provides controls for monitoring secondary water chemistry to inhibit steam generator tube degradation and low pressure turbine disc stress corrosion cracking. The program shall include:

a. Identification of a sampling schedule for the critical variables and control points for these variables;

b. Identification of the procedures used to measure the values of the critical variables;

c. Identification of process sampling points which shall include monitoring the discharge of the condensate pumps for evidence of condenser in leakage;

d. Procedures for the recording and management of data;

e. Procedures defining corrective actions for all off control point chemistry conditions; and

f. A procedure identifying the authority responsible for the interpretation of the data and the sequence and timing of administrative events, which is required to initiate corrective action.

5.5.11 Ventilation Filter Testing Program

A program shall be established to implement the following required testing of Engineered Safety Feature (ESF) filter ventilation systems. Tests described in Specification 5.5.11.a and 5.5.11.b shall be performed once per 18 months for ventilation systems other than the IRS and 24 months for the IRS; after each complete or partial replacement of the HEPA filter bank or charcoal adsorber bank; after any structural maintenance on the HEPA filter or charcoal adsorber housing; and, following painting, fire, or chemical release in any ventilation zone communicating with the system. 2

5.5 Programs and Manuals

Tests described in Specification 5.5.11.c shall be performed once per 18 months for ventilation systems other than the IRS and 24 months for the IRS; after 720 hours of system operation; after any structural maintenance on the HEPA filter or charcoal adsorber housing; and, following painting, fire, or chemical release in any ventilation zone communicating with the system. 2

Tests described in Specification 5.5.11.d shall be performed once per 18 months for ventilation systems other than the IRS and 24 months for the IRS.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Ventilation Filter Testing Program test frequencies.

a. 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 ≤ 1.0% when tested in accordance with Regulatory Guide 1.52, Revision 2, at the system flowrate specified as follows ± 10%:

ESF Ventilation System	Flowrate
CREVS	2,000 cfm
ECCS Pump Room EAFS	3,000 cfm
Penetration Room EAFS	2,000 cfm
SFP Ventilation System	32,000 cfm
IRS	20,000 cfm

b. Demonstrate for each of the ESF systems that an inplace test of the charcoal adsorber shows a penetration and system bypass ≤ 1.0% when tested in accordance with Regulatory Guide 1.52, Revision 2, at the system flowrate specified as follows ± 10%:

ESF Ventilation System	Flowrate
CREVS	2,000 cfm
ECCS Pump Room EAFS	3,000 cfm
Penetration Room EAFS	2,000 cfm

5.5 Programs and Manuals

SFP Ventilation System	32,000 cfm
IRS	20,000 cfm

c. Demonstrate for each of the ESF systems, within 31 days after removal, 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 (elemental iodine for the IRS) penetration less than or equal to the value specified below when tested in accordance with ANSI N510-1975 at a temperature of ≤ 30°C (130°C for the IRS) and greater than or equal to the relative humidity specified as follows: | 2

ESF Ventilation System	Penetrations	RH
CREVS	10%	95%
ECCS Pump Room EAFS	10%	95%
Penetration Room EAFS	10%	95%
SFP Ventilation System	10%	95%
IRS	5%	95%

d. For each of the ESF systems, demonstrate the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers is less than the value specified below when tested in accordance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1975 at the system flowrate specified as follows ± 10%:

ESF Ventilation System	Delta P	Flowrate
CREVS	4 inwg	2,000 cfm
ECCS Pump Room EAFS	4 inwg	3,000 cfm
Penetration Room EAFS	6 inwg	2,000 cfm
SFP Ventilation System	4 inwg	32,000 cfm
IRS	6 inwg	20,000 cfm

| 2

CREVS PORTION OF VFTP

INSERT 5.5.11
(page 1 of 15)

A.1

A.16

5.5.11 Ventilation Filter Testing Program (VFTP)

A.16

ADD: VFTP Description

~~3/4.7 PLANT SYSTEMS~~

~~LIMITING CONDITION FOR OPERATION (Continued)~~

d. With one common exhaust to atmosphere duct isolation valve inoperable, restore the inoperable valve 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.

e. With the toilet area exhaust duct isolation valve inoperable, restore the inoperable valve 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.

~~SURVEILLANCE REQUIREMENTS~~

~~4.7.6.1 The Control Room Emergency Ventilation System shall be demonstrated OPERABLE:~~

a. At least once per 62 days, on a **STAGGERED TEST BASIS**, by deenergizing the backup Control Room air conditioner and verifying that the emergency Control Room air conditioners maintain the air temperature ≤ 104°F for at least 12 hours when in the recirculation mode.

b. At least once per 31 days by initiation flow through each HEPA filter and charcoal adsorber train and verifying that each train operates for at least 15 minutes.

See Discussion of changes for Specification 3.7.11, "CREVS"

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:

2

5.5.11.b 1. Verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

shows a penetration and system bypass ≤ 1.0%

5.5.11.a 2. Verifying that the HEPA filter banks ~~remove ≥ 99% of the DOP~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

A.23

2

INSERT - VFTP Description
(page 2 of 15)

(A-16)

5.5.11 Ventilation Filter Testing Program (VFTP) (2)

A program shall be established to implement the following required testing of Engineered Safety Feature (ESF) filter ventilation systems.~~at the frequencies specified in and in accordance with Regulatory Guide 1.52, Revision 1, ANSI N510-1975, or the Ventilation Filter Testing Program, at the system flowrate specified below ± 10%~~. (2)

CREVS PORTION OF VFTP

INSERT 5.5.11
(page 3 of 15)

A.16

5.5.11 VFTP

A.1

~~3/4.7 PLANT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11.c ~~f.~~ Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). — A.23 — 2

5.5.11.d ~~g.~~ Verifying a system flow rate of 2000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975. — 2

5.5.11 ~~h.~~ After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). — A.13 — 2

5.5.11 Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers remove ~~≥ 99%~~ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow of 2000 cfm ± 10%. — 5.5.11.b — 2

shows a penetration and system bypass ≤ 1.0% — A.23

5.5.11 ~~i.~~ At least once per 18 months by:

5.5.11.d ~~1.~~ Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the ventilation system at a flow rate of 2000 cfm ± 10%. — prefilters — M.6 — E

2. Verifying that on a Control Room high radiation test signal, the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks and that both of the isolation valves in each inlet duct and common exhaust duct, and the isolation valve in the toilet area exhaust duct, close. — See Discussion of Changes for specification 3.7.8 "CREVS"

Specification 5.0

CREVS PORTION OF VFTP

INSERT 5.5.11
(page 4 of 15)

5.5.11 VFTP (A-16) (A.1)

3/4.7 PLANT SYSTEMS

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11 g. 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter system at a flow rate of 2000 cfm ± 10%.

5.5.11.a

shows a penetration and system bypass ≤ 1.0 %

(A.23)

5.5.11.b 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter system at a flow rate of 2000 cfm ± 10%.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies. (A.25)

ECCS PREAFS PORTION OF VFTP

INSERT 5.5.11
(page 5 of 15)

5.5.11 VFTP (A.16)

~~3/4.7 PLANT SYSTEMS~~

~~3/4.7.7 ECCS PUMP ROOM EXHAUST AIR FILTRATION SYSTEM~~

~~LIMITING CONDITION FOR OPERATION~~

3.7.7.1 The ECCS Pump Room Exhaust Ventilation System shall be **OPERABLE** with one HEPA filter and charcoal adsorber train and two exhaust fans.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

a. With one ECCS pump room exhaust 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 the ECCS exhaust 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.

See Discussion of Changes FOR Specification 3.7.10 ECCS PREAFS

~~SURVEILLANCE REQUIREMENTS~~

~~4.7.7.1~~ The ECCS ~~Pump Room Exhaust Ventilation System~~ shall be demonstrated ~~OPERABLE~~: (A.1)

a. At least once per 31 days by initiating, from the Control Room, flow through the HEPA filter and charcoal adsorber train and verifying that each exhaust fan operates for at least 15 minutes.

~~b.~~ 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:

5.5.11

5.5.11.b ~~1.~~ Verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%.

(2)

shows a penetration and system bypass ≤ 1.0%

(A.23)

ECCS PREAFS PORTION OF VFTP

INSERT 5.5.11
(page 6 of 15)

A.16

5.5.11 VFTP

~~3/4.7 PLANT SYSTEMS~~ A-1

~~SURVEILLANCE REQUIREMENTS (Continued)~~

A.23

5.5.11.a ~~2.~~ Verifying that the HEPA filter banks ~~remove > 99% of the DOP when they are tested in-place in accordance~~ with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%. — shows a penetration and system bypass ≤ 1.0%

5.5.11.c ~~3.~~ Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). — A.23 — 2

5.5.11.d ~~4.~~ Verifying a system flow rate of 3000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975.

5.5.11 ~~b.~~ After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). — A.23

A.23
shows a penetration and system bypass ≤ 1%

5.5.11 Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 3000 cfm ± 10%.

5.5.11.b

5.5.11 ~~d.~~ At least once per 18 months by verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the filter train at a flow rate of 3000 cfm ± 10%. — 2

5.5.11.d

> prefilters, — M.6 — 2

ECCS PREAFS PORTION OF VFTP

Specification 5.0

INSERT 5.5.11
(page 7 of 15)

A.16

5.5.11 VFTP

A.1

~~3/4.7 PLANT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11.e. 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%.

5.6.11.a

A.23

shows a penetration and system bypass ≤ 1.0 %

5.5.11.f. 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978 while operating the filter train at a flow rate of 3000 cfm ± 10%.

5.5.11.b

2

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510-1975.

L.6

The provisions of SR 3.0 and SR 3.0.3 are applicable to the VFTP test frequencies.

A.25

INSERT 5.5.11
(page 8 of 15)

Penetration Room EAFs
Portion of VFTP

A.16

5.5.11 VFTP

~~3/4.6 CONTAINMENT SYSTEMS~~

~~3/4.6.6 PENETRATION ROOM EXHAUST AIR FILTRATION SYSTEM~~ A.1 2

LIMITING CONDITION FOR OPERATION

3.6.6.1 Two independent containment penetration room exhaust air filter trains shall be **OPERABLE**.

APPLICABILITY: **MODES 1, 2, and 3.**

ACTION: With one containment penetration room exhaust air filter train inoperable, restore the inoperable train 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.

See Discussion of changes for Specification 3.7.12, "Penetration Room Exhaust Air Filtration"

SURVEILLANCE REQUIREMENTS

~~4.6.6.1 Each containment penetration room exhaust air filter train shall be demonstrated OPERABLE:~~ A.1

a. At least once per 31 days on **STAGGERED TEST BASIS** by initiating, from the control room, flow through the HEPA filter and charcoal adsorber train and verifying that the train operates for at least 15 minutes.

5.5.11

b. 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: 2

5.5.11.b

1. Verifying that the charcoal adsorbers ~~remove~~ > 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

shows a penetration and system bypass ≤ 1%

A.23

INSERT 5.5.11
(page 9 of 15)

A.1

PREFS POSITION OF VFTP

5.5.11 VFTP

3/4.6 CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

A.16 A.23 shows a penetration and system bypass ≤ 1.0%

5.5.11.a

2. Verifying that the HEPA filter banks remove ≥ 99% of the DOP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

5.5.11.c

3. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained from an adsorber tray or from an adsorber test tray, in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). A.23

4. Verifying a system flow rate of 2000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975. 2

5.5.11.d

c. After every 720 hours of charcoal adsorber operation by:

5.5.11 5.5.11.c

Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained from an adsorber tray or from an adsorber test tray in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). A.23

A.1

5.5.11 5.5.11.b

Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by verifying that the charcoal adsorbers remove ≥ 99% of the halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

shows a penetration and system bypass ≤ 1.0% A.23

INSERT 5.5.11
(page 10 of 15)

Specification 5.0

PREFS PORTION OF VFTP (A.16)

5.5.11 VFTP

~~3/4.6 CONTAINMENT SYSTEMS~~ (A.1)

SURVEILLANCE REQUIREMENTS (Continued)

5.5.11

~~d.~~ At least once per 18 months by:

5.5.11.d ~~1.~~ Verifying that the pressure drop across the combined HEPA filters, prefilters and charcoal adsorber banks is < 6 inches Water Gauge while operating the filter train at a flow rate of 2000 cfm ± 10%. (M.6)

~~2.~~ Verifying that the filter train starts on Containment Isolation Test Signal. (See Discussion of change in specification 5.7.12 "PREFS")

5.5.11.a 5.5.11 ~~e.~~ 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%. (2)

5.5.11.b 5.5.11 ~~f.~~ 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

~~g.~~ After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510 1975. (L.6)

shows a penetration or system bypass ≤ 1.0% (A.23)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies. (A.25)

SFP Ventilation System Portion of VFTP

INSERT 5.5.11
(page 11 of 15)

A.16 5.5.11 Ventilation Filter Testing Program (VFTP)

~~3/4.9 REFUELING OPERATIONS~~

A.1

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11 ~~b.~~ 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:

A.23

5.5.11.b ~~1.~~ Verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1 52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

shows a penetration and system bypass ≤ 1.0%

5.5.11.a ~~2.~~ Verifying that the HEPA filter banks ~~remove ≥ 99% of the DOP~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 [illegible]978 while operating the ventilation system at a flow [illegible]32,000 cfm ± 10%.

A.2

5.5.11.c ~~3.~~ Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.).

A.23

5.5.11.d ~~4.~~ Verifying a system flow rate of 32,000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975.

5.5.11 ~~c.~~ After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.).

A.23

Specification 5.0

SFP Ventilation System Portion of VFTP

INSERT 5.5.11
(page 12 of 15)

5.5.11 VFTP (A.16)

(A.1)

3/4.9 REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

5.5.11.b Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers remove ~~≥ 99%~~ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%. *

(A.23) shows a penetration or system bypass ≤ 1.0%.

(2)

5.5.11 d. At least once per 18 months by:

5.5.11.d 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

prefilters (M.6)

2. Verifying that each exhaust fan maintains the spent fuel storage pool area at a measurable negative pressure relative to the outside atmosphere during system operation.

See Discussion of changes for Specification 3.7.11, SFP Ventilation System

5.5.11 e. 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

5.5.11.a

(A.23) shows a penetration or system bypass ≤ 1.0%

f. 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

5.5.11.b

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510-1975.

(L.6)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

(A.25)

IRS Portion of VFTP

INSERT 5.5.11
(page 13 of 15)

A.16

5.5.11 Ventilation Filter Testing Program (VFTP)

A.16

Add VFTP Description

~~3/4.6 CONTAINMENT SYSTEMS~~

~~3/4.6.3 IODINE REMOVAL SYSTEM~~

A.1

~~LIMITING CONDITION FOR OPERATION~~

3.6.3.1 Three independent containment iodine filter trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION: With one iodine filter train inoperable, restore the inoperable train 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.

See Discussion of Changes for Specification 3.6.3, "IRS"

~~SURVEILLANCE REQUIREMENTS~~

~~4.6.3.1 Each iodine filter train shall be demonstrated OPERABLE:~~

a. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filter and charcoal adsorber train and verifying that the train operates for at least 15 minutes.

5.5.11 ~~b.~~ At least once per ~~REFUELING INTERVAL~~ (24 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:

5.5.11.5 ~~1.~~ Verifying that the charcoal adsorbers ~~remove ≥ 99%~~ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%.

A.1

5.5.11.a ~~2.~~ Verifying that the HEPA filter banks ~~remove ≥ 99% of the DOP~~ when they are tested in-place in accordance with Regulatory Positions ~~C.5.a and C.5.c of Regulatory~~ Guide 1.52 Revision 2 March ~~1978~~ while operating the filter train at a flow rate of 20,000 cfm ± 10%.

shows a penetration and system bypass ≤ 1.0%

A.23

Specification 5.0

IRS Portion of VFTP

(A.16)

INSERT 5.5.11
(page 14 of 15)

5.5.11 VFTP

(A.1)

~~3/4.6 CONTAINMENT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11.c ~~a.~~ Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 95% for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.). (A.23)

5.5.11.d ~~b.~~ Verifying a filter train flow rate of 20,000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975. (A.2)

5.5.11 c. After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 95% for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.). (A.23)

5.5.11.b Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%. (24 months)

Shows a penetration and system bypass ≤ 1.0% (A.23)

5.5.11.d ~~d.~~ At least once per ~~REFUELING INTERVAL~~ by:

1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 6 inches Water Gauge while operating the filter train at a flow rate of 20,000 cfm ± 10%.

(prefilters) (M.6)

IRS Portion of VFTP (A.16)

INSERT 3.5.11 (page 15 of 15)

5.5.11 VFTP (A.1)

~~3/4.6 CONTAINMENT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

2. Verifying that the filter train starts on the appropriate ESFAS test signal.

(See Discussion of Change for Specification 3.6.8 "IRS")

5.5.11 f. / 5.5.11.a — 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%.

shows a penetration and bypass ≤ 1.0%

5.5.11 f. / 5.5.11.b — 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%.

(A.23)

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510-1975.

(L.6)

(2)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP Test Frequencies.

(A.25)

CREVS Portion of VFTP

Specification 5.0

A.16

Insert 5.5.11
(page 1 of 15)

5.5.11 Ventilation Filter Testing Program (VFTP) A.16

A.1

~~3/4.7 PLANT SYSTEMS~~

~~LIMITING CONDITION FOR OPERATION (Continued)~~

Add VFTP Description

e. With the toilet area exhaust duct isolation valve inoperable, restore the inoperable valve 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.

SURVEILLANCE REQUIREMENTS

~~4.7.6.1 The Control Room Emergency Ventilation System shall be demonstrated OPERABLE:~~

See Discussions of Change for specification 3.7.11, "CREVS"

a. At least once per 62 days, on a STAGGERED TEST BASIS, by deenergizing the backup Control Room air conditioner and verifying that the emergency Control Room air conditioners maintain the air temperature ≤ 104°F for at least 12 hours when in the recirculation mode.

b. At least once per 31 days by initiation flow through each HEPA filter and charcoal adsorber train and verifying that each train operates for at least 15 minutes.

5.5.11 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:

5.5.11.b 1. Verifying that the charcoal adsorbers remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

Shows a penetration and system bypass ≤ 1.0%

5.5.11.a 2. Verifying that the HEPA filter banks remove ≥ 99% of the DOP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

A.23

5.5.11.c 3. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained from an adsorber tray or from an adsorber test tray in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). — A.23

2

INSERT - VFTP Description
(page 2 of 15)

5.5.11 Ventilation Filter Testing Program (VFTP) (A.16)

A program shall be established to implement the following required testing of Engineered Safety Feature (ESF) filter ventilation systems ~~at the frequencies specified in and~~ in ~~accordance with Regulatory Guide 1.52, Revision 1, ANSI N510-1975, or the Ventilation Filter Testing Program, at the system flowrate specified below ± 10%~~. (2)

CREVS Portion of VFTP

Specification 5.0

Insert 5.5.11
(page 3 of 15)

A.16

5.5.11 VFTP

A.1

~~3/4.7 PLANT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

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

5.5.11 ~~g~~. After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.).

A.23

2

5.5.11 Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow of 2000 cfm ± 10%.

5.5.11.b

shows penetration and system bypass of ≤ 1.0%

A.23

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

5.5.11.d 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

"pre filters"

M.6

2

2. Verifying that on a control room high radiation test signal, the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks and that both of the isolation valves in each inlet duct and common exhaust duct, and the isolation valve in the toilet area exhaust duct, close.

see Discussion of Changes for Specification 3.7.8, "CREVS"

CREVS Portion of VFTP

Specification 5.0

A.16

Insert 5.5.11
(pg 4 of 15)

5.5.11 VFTP

A.1

3/4.7 ~~PLANT SYSTEMS~~

SURVEILLANCE REQUIREMENTS (Continued)

5.5.11. X. 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 ~~Regulatory~~ Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter system at a flow rate of 2000 cfm ± 10%.

5.5.11.a

shows a penetration and system bypass of ≤ 1.0%

A.23

5.5.11.b X. 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 Regulatory Positions C.5.a and C.5.d~~ of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter system at a flowrate of 2000 cfm ± 10%.

A.2

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

A.25

ECCS portion of VFTP

Specification 5.0

Insert 5.5.11
(page 5 of 15)

5.5.11 VFTP (A.16)

~~3/4.7 PLANT SYSTEMS~~

(A.1) ~~3/4.7.7 ECCS PUMP ROOM EXHAUST AIR FILTRATION SYSTEM~~

~~LIMITING CONDITION FOR OPERATION~~

3.7.7.1 The ECCS Pump Room Exhaust Ventilation System shall be **OPERABLE** with one HEPA filter and charcoal adsorber train and two exhaust fans.

APPLICABILITY: ~~MODES~~ 1, 2, 3 and 4.

ACTION:

a. With one ECCS pump room exhaust 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 the ECCS exhaust 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.

see Discussion of change for specification 3.7.10 "ECCS PREAFS"

(A.1)

~~SURVEILLANCE REQUIREMENTS~~

~~4.7.7.1 The ECCS Pump Room Exhaust Ventilation System shall be demonstrated OPERABLE:~~

a. At least once per 31 days by initiating, from the Control Room, flow through the HEPA filter and charcoal adsorber train and verifying that each exhaust fan operates for at least 15 minutes.

(5.5.11) b. 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:

(5.5.11.b) 1. Verifying that the charcoal adsorbers ~~remove > 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%.

(2)

shows a penetration and system bypass ≤ 1.0%

(A.23)

Pg 30 of 57

ECCS PREAFs Portion of VFTP

specification 5.0

Insert 5.5.11
(Pg 6 of 15)

5.5.11 VFTP (A.16)

~~3/4.7 PLANT SYSTEMS~~

SURVEILLANCE REQUIREMENTS (Continued)

(A.23)

5.5.11.a e. Verifying that the HEPA filter banks ~~remove ≥ 99% of the DOP when they are tested in place in accordance~~ with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%. (shows a penetration and system bypass ≤ 1.0 %)

5.5.11.b g. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.).

5.5.11.d f. Verifying a system flow rate of 3000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975. (2)

5.5.11 After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). (A.23)

(A.23)

5.5.11 Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 3000 cfm ± 10%. (shows a penetration and system bypass ≤ 1.0 %)

5.5.11.b

5.5.11 h. At least once per 18 months by verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the filter train at a flow rate of 3000 cfm ± 10%. (2)

5.5.11.d

(> prefilters, M.6)

ECCS portion of VFTP

specification 5.0

Insert 5.5.11
(page 7 of 15)

5.5.11 VFTP (A.16) (A.1)

~~3/4.7 PLANT SYSTEMS~~

SURVEILLANCE REQUIREMENTS (Continued)

5.5.11 e. 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%.

5.5.11.a

shows a penetration and system bypass ≤ 1.0% (A.23)

5.5.11 f. 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 tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%.

5.5.11.b

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510-1975. (L.6)

(2)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

(A.25)

Penetration Room EAFS
Portion of VFTP

Specification 5.0

Insert 5.5.11
(PAGE 8 of 15)

A.16

5.5.11 VFTP

A.1

~~3/4 6 CONTAINMENT SYSTEMS~~

~~3/4.6.6 PENETRATION ROOM EXHAUST AIR FILTRATION SYSTEM~~

LIMITING CONDITION FOR OPERATION

3.6.6.1 Two independent containment penetration room exhaust air filter trains shall be **OPERABLE**.

APPLICABILITY: **MODES 1, 2, and 3.**

ACTION: With one containment penetration room exhaust air filter train inoperable, restore the inoperable train 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.

see Discussion of change for specification 3.7.12, "Penetration Room Exhaust Air Filtration"

SURVEILLANCE REQUIREMENTS

~~4.6.6.1 Each containment penetration room exhaust air filter train shall be demonstrated OPERABLE:~~

a. At least once per 31 days on **STAGGERED TEST BASIS** by initiating, from the control room, flow through the HEPA filter and charcoal adsorber train and verifying that the train operates for at least 15 minutes.

5.5.11 b. 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:

2

5.5.11.b I. Verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

show a penetration and system bypass of ≤1%.

A.23

Page 33 of 57

PREFS Portion of VFTP

specification 5.0

Insert 5.5.11
(page 9 of 15)

5.5.11 VFTP (A.1)

(A.16) shows a penetration and system bypass ≤ 1.0%

3/4.6 CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

5.5.11.a 2. Verifying that the HEPA filter banks remove ≥ 99% of the DOP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

5.5.11.c 3. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained from an adsorber tray or from an adsorber test tray in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). (A.23) (2)

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

5.5.11 ~~5.~~ After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained from an adsorber tray or from an adsorber test tray in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). (A.23)

PREFS Portion of VFTP

Insert 5.5.11
(page 10 of 15)

specification 5.0

5.5.11 VFTP

A.1

A.16

~~3/4.6 CONTAINMENT SYSTEMS~~

SURVEILLANCE REQUIREMENTS (Continued)

5.5.1 Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated

5.5.11.b ~~OPERABLE by verifying that the charcoal adsorbers remove ≥ 99% of the halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 2000 cfm ± 10%.~~

M.6

shows a penetration and system bypass ≤ 1.0%.

A.23

5.5.11.a At least once per 18 months by:

prefilters

5.5.11.d 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 6 inches Water Gauge while operating the filter train at a flow rate of 2000 cfm ± 10%.

2. Verifying that the filter train starts on Containment Isolation Test Signal.

see Discussion of Change for Spec 3.7.12, "PREFS"

5.5.11.c 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

shows a penetration and system bypass ≤ 1.0%.

A.23

5.5.11.a 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

5.5.11.b

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510 1975.

L.6

2

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

A.25

SFP Ventilation Portion of VFTP

Specification 5.0

Insert 5.5.11
(page 11 of 15)

A.16

5.5.11 Ventilation Filter Testing Program (VFTP)

3/4.9 REFUELING OPERATIONS

A.1

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11 ~~b.~~ 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:

A.23

5.5.11.b ~~c.~~ Verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place ~~in accordance with~~ Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

shows a penetration and System bypass ≤ 1.0%

5.5.11.a ~~a.~~ Verifying that the HEPA filter banks ~~remove > 99% of the DOP~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

2

5.5.11.c ~~b.~~ Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.).

5.5.11.d ~~d.~~ Verifying a system flow rate of 32,000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975.

SFP Ventilation System portion of VFTP

Specification 5.0

Insert 5.5.11
(Page 12a of 15)

5.5.11 VFTP (A.16) (A.1)

~~3/4.9 REFUELING OPERATIONS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

shows a penetration or system bypass ≤ 1.0% (A.23)

5.5.11 ~~f.~~ 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%. (5.5.11.b) (1)

~~g.~~ After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510-1975. (L.6)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies. (2)

(A.25)

IRS portion of VFTP

Specification 5.0

Insert 5.5.11
(page 13 of 15)

5.5.11 Ventilation Filter Testing Program (VFTP) (A.16)

~~3/4.6 CONTAINMENT SYSTEMS~~

~~3/4.6.3 IODINE REMOVAL SYSTEM~~ (A.1)

Add VFTP Description

~~LIMITING CONDITION FOR OPERATION~~

3.6.3.1 Three independent containment iodine filter trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION: With one iodine filter train inoperable, restore the inoperable train 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.

see Discussion of Change for specification 3.6.8, "IRS"

~~SURVEILLANCE REQUIREMENTS~~

~~4.6.3.1 Each iodine filter train shall be demonstrated OPERABLE:~~

a. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filter and charcoal adsorber train and verifying that the train operates for at least 15 minutes.

5.5.11 b. At least once per ~~REFUELING INTERVAL~~ 24 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:

5.5.11.b (1.) Verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%.

5.5.11.a (2.) Verifying that the HEPA filter banks remove ≥ 99% of the DOP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%.

shows a penetration and system bypass ≤ 1.0%

(A.23)

IRS Portion of VFTP

specification 5.0

Insert 5.5.11
(page 14 of 15)

5.5.11 VFTP

~~3/4.6 CONTAINMENT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

A.1

5.5.11.c ~~3.~~ Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 95% for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.). — A.23

4. Verifying a filter train flow rate of 20,000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975.

5.5.11 ~~c~~. After every 720 hours of charcoal adsorber operation by:

Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 95% for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.). — A.23 — A

5.5.11.c

5.5.11 Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by ~~also~~ verifying that the charcoal adsorbers ~~remove~~ ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%.

5.5.11.b — A.23

shows a penetration and system bypass ≤ 1.0%

IRS Portion of VFTP

Insert 5.5.11
(page 15 of 15)

specification 5.0

5.5.11 VFTP

A.1

~~3/4.6 CONTAINMENT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11 d. At least once per ~~REFUELING INTERVAL~~ 24 months by:

5.5.11.d 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 6 inches Water Gauge while operating the filter train at a flow rate of 20,000 cfm ± 10%. — prefilters, M.6 — A.2

2. Verifying that the filter train starts on the appropriate ESFAS test signal. — see Discussion of Change for specification 3.6.8, "IRS"

5.5.11 e. 5.5.11.a 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%. — A.2

5.5.11 f. 5.5.11.b 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%. — shows a penetration and system bypass ≤ 1.0% — A.23

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510-1975. — L.6 — A.2

The provisions of SR 3.0.2 and 3.0.3 are applicable to the VFTP Test Frequencies

A.2.5 — A.2

gas storage tanks and the explosive gas mixtures in the Waste Gas Holdup System are maintained within limits. Improved Technical Specification 5.5.12 provides regulatory control over the limitations and surveillances proposed to be relocated. As a result, the requirements proposed to be relocated are not required to be included in the ITS to ensure the quantity of radioactivity in gas storage tanks and the explosive gas mixtures in the Waste Gas Holdup System are maintained within limits. The TRM will be incorporated by reference into the UFSAR at ITS implementation. Any changes to the relocated requirements will be controlled by the provisions of 10 CFR 50.59. This change is consistent with NUREG-1432.

LA.6 Not used.

LA.7 Not used.

LA.8 The parenthetical statement in CTS 6.6.3, which emphasizes the information from 10 CFR 50.36a that time between submittal of the Radioactive Effluent Release Reports must be no longer than 12 months, is being removed. This detail is duplicative of 10 CFR 50.36 and does not need to be repeated in ITS. Also, the last paragraph specifically describing the contents of the report, in footnote **, which provides an exception for the Sr^{89} and Sr^{90} analysis results, is also being moved from the Technical Specifications. To provide clarification that an exemption exists, the phase "as modified by approved exemptions" has been added to the CTS 6.6.3 markup. These details are not necessary for the ITS. They are related to ODCM requirements, and are adequately controlled by the ODCM requirements in ITS 5.5.1. Changes to the relocated requirements will be controlled by the ODCM change control process in ITS 5.5.1 or 10 CFR 50.36, as appropriate.

TECHNICAL CHANGES - LESS RESTRICTIVE

L.1 Current Technical Specification 6.2.2.d requires an individual qualified in radiation protection procedures to be onsite when fuel is in the reactor. Improved Technical Specification 5.5.2.d will allow the position to be vacant for not more than two hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position. This change is reasonable because it allows time to restore a required staffing position for unexpected absences without violating the Technical Specifications Administrative Controls section, while ensuring the position is filled in a timely manner. This change is consistent with NUREG-1432.

L.2 Current Technical Specification 4.0.5 lists requirements of the Inservice Testing Program. Improved Technical Specification 5.5.8 adds a requirement which allows the provisions of ITS SR 3.0.3 to be applicable to inservice testing activities. This requirement will allow 24 hours or up to the limit of the Frequency, whichever is less, to perform Inservice Testing if discovered that Inservice Testing requirements were not performed, instead of declaring the component inoperable. This allowance is based on consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillance, and the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements. This change is consistent with NUREG-1432.

Therefore, this change has no impact on the safe operation of the plant. This change is consistent with NUREG-1432.

L.6 Current Technical Specification 4.6.3.1.g, 4.6.6.1.g, 4.7.7.1.g, and 4.9.12.g require a flow distribution test to be performed in accordance with ANSI N510-1975, if maintenance is performed on the Iodine Removal System, Emergency Core Cooling System (ECCS) Pump Room Emergency Air Filtration System (EAFS), Penetration Room EAFS, or Spent Fuel Pool Ventilation System that affects flow distribution. Any time the operability of a system or component has been affected by repair, maintenance, or replacement of a component, post-maintenance testing is required to demonstrate operability of the system or component. After restoration of a component that caused a required SR to be failed, or after maintenance is performed that could affect a component, ITS SR 3.0.1 requires the appropriate SRs and post-maintenance tests to be performed to demonstrate the operability of the affected components. In addition, the definition of operability and ITS LCO 3.0.1 will also ensure the affected component is properly tested prior to declaring it operable. Therefore, explicit post-maintenance SRs are not required and are deleted from the Technical Specifications.

2. **Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed change will increase the time from 30 to 44 days to submit a post-accident monitoring special report, after a required indication channel of the containment area high range monitor or reactor vessel water level instrument becomes inoperable. No hardware is being added as part of the proposed change. The proposed change will not introduce any new accident initiators. Therefore, the change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. **Does this change involve a significant reduction in a margin of safety?**

The proposed change will increase the time from 30 to 44 days to submit a post-accident monitoring special report, after a required indication channel of the containment area high range monitor or reactor vessel water level instrument becomes inoperable. This increases the amount of time allowed before submitting a report by 14 days. This change does not affect the safety analysis assumptions. Therefore, the change does not involve a significant reduction in a margin of safety.

Change L.6

1. **Does the change involve a significant increase in the probability or consequence of an accident previously evaluated?**

The proposed change will delete explicit post-maintenance surveillance requirements for flow distribution tests of ventilation systems. The ITS 3.0.1 Bases state that upon completion of maintenance, appropriate post-maintenance testing is required to declare equipment Operable, to include ensuring applicable Surveillances are not failed, and their most recent performance is in accordance with ITS SR 3.0.2. Some exceptions are specified for cases where plant conditions would not allow the tests to be performed. The post-maintenance tests are still required. The other Surveillance Requirements are also still required. The proposed deletion of this explicit requirement is appropriate since ITS SR 3.0.1 requires the appropriate Surveillance Requirements or post-maintenance tests to be performed to demonstrate Operability, but the explicit post-maintenance tests are not required in the Technical Specifications. Explicit post-maintenance surveillance requirements are not initiators of any analyzed event. Including the explicit post-maintenance tests for the ventilation systems is not required for the mitigation of an accident. The proposed change does not significantly affect initiators or mitigation of analyzed events, and therefore, does not involve a significant increase in the probability or consequences of an accident.

2. **Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed change will delete explicit post-maintenance surveillance requirements for flow distribution tests of ventilation systems. No hardware is being added as part of the proposed change. The proposed change will not introduce any new accident initiators. Therefore, the change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change will delete explicit post-maintenance surveillance requirements for flow distribution tests of ventilation systems. The ITS 3.0.1 Bases state that upon completion of maintenance, appropriate post-maintenance testing is required to declare equipment Operable, to include ensuring applicable Surveillances are not failed, and their most recent performance is in accordance with ITS SR 3.0.2. Some exceptions are specified for cases where plant conditions would not allow the tests to be performed. The post-maintenance tests are still required. The other Surveillance Requirements are also still required. This change does not affect the safety analysis assumptions. Therefore, the change does not involve a significance reduction in a margin of safety.

ENVIRONMENTAL ASSESSMENT

This proposed Technical Specification Changes have been evaluated against the criteria for and identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21. It has been determined that the proposed changes meet the criteria for categorical exclusion as provided for under 10 CFR 51.22(c)(9). The following is a discussion of how the proposed Technical Specification Changes meet the criteria for categorical exclusion.

10 CFR 51.22(c)(9): Although the proposed changes involve changes to requirements with respect to inspection or SRs;

(i) proposed changes involve no Significant Hazards Consideration (refer to the No Significant Hazards Considerations section of this Technical Specification Change Request),

(ii) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite since the proposed changes do not affect the generation of any radioactive effluents nor do they affect any of the permitted release paths, and

(iii) there is no significant increase in individual or cumulative occupational radiation exposure.

Accordingly, the proposed changes meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Based on the aforementioned and pursuant to 10 CFR 51.22 (b), no environmental assessment or environmental impact statement need be prepared in connection with issuance of an amendment to the Technical Specifications incorporating the proposed changes of this request.

<CTS> 5.5 Programs and Manuals (continued)

5.5.10 Secondary Water Chemistry Program

<NEW> Spec 5.0 Doc M.2

This program provides controls for monitoring secondary water chemistry to inhibit SG tube degradation and low pressure turbine disc stress corrosion cracking. The program shall include:

a. Identification of a sampling schedule for the critical variables and control points for these variables;

b. Identification of the procedures used to measure the values of the critical variables;

c. Identification of process sampling points which shall include monitoring the discharge of the condensate pumps for evidence of condenser in leakage;

d. Procedures for the recording and management of data;

e. Procedures defining corrective actions for all off control point chemistry conditions; and

f. A procedure identifying the authority responsible for the interpretation of the data and the sequence and timing of administrative events, which is required to initiate corrective action.

5.5.11 Ventilation Filter Testing Program (VFTP)

<NEW> Spec 5.0 Doc A.16

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 ~~]~~ and in accordance with ~~[~~Regulatory Guide 1.52, Revision 2~~]~~, ASME N510-1989, ~~and AG-1~~, at the system flowrate specified below ~~[± 10%]~~:

Insert 5.5.11-A (32)

32 33 1 2

Insert 5.5.11-B From page 5.0-14. (32)

a. 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 ~~[~~Regulatory Guide 1.52, ~~]~~Revision 2, and ~~ASME~~ ANSI

≤ 1.0 1

(continued)

INSERT 5.5.11-A

Tests described in Specification 5.5.11.a and 5.5.11.b shall be performed once per 18 months for ventilation systems other than the IRS and 24 months for the IRS; after each complete or partial replacement of the HEPA filter bank or charcoal adsorber bank; after any structural maintenance on the HEPA filter or charcoal adsorber housing; and, following painting, fire, or chemical release in any ventilation zone communicating with the system.

Tests described in Specification 5.5.11.c shall be performed once per 18 months for ventilation systems other than the IRS and 24 months for the IRS; after 720 hours of system operation; after any structural maintenance on the HEPA filter or charcoal adsorber housing; and, following painting, fire, or chemical release in any ventilation zone communicating with the system.

Tests described in Specification 5.5.11.d shall be performed once per 18 months for ventilation systems other than the IRS and 24 months for the IRS.

<CTS>

5.5 Programs and Manuals

5.5.11 Ventilation Filter Testing Program (VFTP) (continued)

Reviewer's Note: Allowable penetration = [100% - methyl iodide efficiency for charcoal credited in staff safety evaluation]/ (safety factor).

Safety factor = [5] for systems with heaters.
= [7] for systems without heaters.

(6)

d. For each of the ESF systems, demonstrate the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers is less than the value specified below when tested in accordance with [Regulatory Guide 1.52, Revision 2, and ASME N510-1989] at the system flowrate specified as follows: [± 10%]. (75)

<4.7.6.1.e.1>
<4.7.7.1.d>
<4.6.6.1.d>
<4.9.12.d>
<4.6.3.1.d1>

ESF Ventilation System	Delta P	Flowrate
CREVS	4 in wg	2,000 cfm
ECCS Pump Room EAFS	4 in wg	3,000 cfm
Penetration Room EAFS	6 in wg	2,000 cfm
SFP Ventilation System	4 in wg	32,400 cfm
IRS	6 in wg	20,000 cfm

(1)

e. Demonstrate that the heaters for each of the ESF systems dissipate the following specified value [± 10%] when tested in accordance with [ASME N510-1989].

(10)

ESF Ventilation System	Wattage

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

Move to Insert 5.5.7-B Page 5.0-12

(2)

5.5.12 Explosive Gas and Storage Tank Radioactivity Monitoring Program

(and)

This program provides control for potentially explosive gas mixtures contained in the [Waste Gas Holdup System], [the quantity of radioactivity contained in gas storage tanks ~~or fed into the offgas treatment system, and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks~~]. The

(New)
Spec 5.0
DOC A.20

(7)
(11)

(2)

(continued)

This change has been proposed as a change to the ITS NUREG as TSTF-65, but has not yet been approved by the NRC.

27. The Calvert Cliffs current licensing basis requires the General Supervisor-Nuclear Plant Operations to hold a license, and also requires the operations manager (the individual the General Supervisor-Nuclear Plant Operations reports to) to hold or have held a Senior Reactor Operator license at Calvert Cliffs. This requirement is being retained in the ITS.

28. This change incorporates the current Calvert Cliffs requirements for the Iodine Removal System into the Ventilation Filter Testing Program. This requirement is consistent with the Calvert Cliffs current licensing basis.

29. The gas storage tank radioactivity limit in NUREG-1432 Specification 5.5.12.b has been changed to be consistent with the Calvert Cliffs current licensing basis. The Calvert Cliffs ITS radioactivity limit will be that in the event of an uncontrolled release of the tank's contents, the resulting total body exposure to a member of the public at the site boundary will not exceed accident guidelines.

30. The CTS state that the Occupational Radiation Exposure Report for the Independent Spent Fuel Storage Installation is reported separately from the Units 1 and 2 Occupational Radiation Exposure Report. Therefore, for clarity, the Note to ITS 5.6.1 has been modified to preclude combining the reports into a single submittal.

31. The phrase ", as modified by approved exemptions" has been added to the ITS 5.6.3 requirement that the Radioactive Effluent Release Report be submitted in accordance with 10 CFR 50.36a. Current Technical Specification 6.6.3 footnote "**" allows an exemption to 10 CFR 50.36a that allows the Sr^{89} and Sr^{90} analysis results to be submitted at a later date. The addition of the phrase ", as modified by approved exemptions" is consistent with its use in other ITS that allow exemptions (e.g., ITS 3.6.1).

32. The current Calvert Cliffs licensing basis surveillance frequencies have been provided in ITS 5.5.11. In addition, for clarity the NUREG-1432 discussion concerning the provisions of SR 3.0.2 and SR 3.0.3 have been moved to the end of this specification after the discussion of frequencies, since it applies only to the frequencies.

33. The statement in NUREG-1432 Specification 5.5.11, "at the system flowrate specified below [+-10%]" has been deleted since it is redundant. Each of the requirements in NUREG-1432 Specification 5.5.11 that require a specific flowrate have the same statement.

20. Discussion of Change LA.4 to Section 5.0 has been revised to state that the Technical Requirements Manual will be the location of the relocated requirements. This change was requested by the NRC in their comments to Section 5.0 (comment 34).

TECHNICAL CHANGES - MOVEMENT OF INFORMATION TO LICENSEE-CONTROLLED DOCUMENTS

LA.1 Current Technical Specification 6.2.2.e, which specifies the requirements of the fire brigade, is being moved to the Fire Protection Program. All fire protection-related Technical Specifications are being relocated from the Technical Specifications into the Fire Protection Program which is incorporated by a reference into the UFSAR, as allowed in Generic Letter 88-12. These requirements can be adequately controlled in the Fire Protection Program. Any changes to the Fire Protection Program will require a 10 CFR 50.59 evaluation. This change is consistent with NUREG-1432.

LA.2 Current Technical Specification 6.2.2.f requires the operations manager to hold or have held an SRO license at Calvert Cliffs, and that the General Supervisor, Shift Supervisor, and Control Room Supervisor hold an SRO license. The proposed change will remove the requirements for the Shift Supervisor and Control Room Supervisor to hold an SRO license as this requirement is stated in the regulations. The requirement for the General Supervisor-Nuclear Plant Operations to hold an SRO license will remain in the Technical Specifications. This change is consistent with NUREG-1432.

LA.3 Current Technical Specification 6.5.1.c.2 requires changes to the Offsite Dose Calculation Manual (ODCM) become effective upon review by the onsite review function and approval by the Plant Manager. The proposed change will move the requirement that changes to the ODCM be reviewed by the onsite review committee to the QA Policy. The requirement that changes to the ODCM be subject to the onsite review function is not required to be in the Technical Specifications because changes to the ODCM are currently subject to the onsite review function per the QA Policy, which describes the duties of the onsite review committee. Therefore, any changes to the functions of the onsite review committee will require a 10 CFR 50.54(a) evaluation. These evaluations ensure that any changes to these requirements will be appropriately reviewed. This change is consistent with NUREG-1432.

LA.4 Current Technical Specification 3.6.1.6, "Containment Structural Integrity," SRs, and figures are being relocated to the Technical Requirements Manual (TRM). Note that the Unit 1 and Unit 2 requirements differ. The Unit 1 and Unit 2 containments are identical and were constructed at the same time. Testing on the Unit 1 containment is representative of the condition of the Unit 2 containment. Therefore, the CTS contains the majority of the testing requirements in the Unit 1 Technical Specifications. What testing will be performed on each containment will be described in the TRM. The description of the program is being incorporated into Chapter 5.0. The requirements of ITS 5.5.6 are adequate to ensure the containment structural integrity is maintained. Improved Technical Specification 5.5.6 provides regulatory control over the containment tendons, end anchorages, and adjacent concrete surfaces, and containment surface limitations and surveillances proposed to be relocated. As a result, the requirements proposed to be relocated are not required to be included in the ITS to ensure the containment structural integrity is maintained. The TRM will be incorporated by reference into the UFSAR at ITS implementation. Any changes to these relocated requirements will be controlled by the provisions of 10 CFR 50.59. This change is consistent with NUREG-1432.

LA.5 Current Technical Specification 3.11.1.1 and 3.11.1.2 requirements are being relocated to the TRM. The requirements of ITS 5.5.12 are adequate to ensure the quantity of radioactivity in

21. Discussion of Change A.7 to Section 5.0 has been revised to spell out the acronym "NRC."

A.6 Current Technical Specifications 6.5.2 and 6.5.3 contain a footnote which allows the details of the Primary Coolant Sources Outside Containment Program to be maintained in plant operation manuals (e.g., chemistry procedures, training instructions, maintenance procedures, Emergency Response Plan Implementation Procedures, etc.). Improved Technical Specifications 5.5.2 and 5.5.3 will not contain this footnote. It is not required that the program description in the Administrative Controls section contain this information. This information, if desired, can be listed in the specific program. The program can reference procedures, instructions, etc., to provide a complete description of the provisions establishing the requirements of the program. This change is consistent with NUREG-1432.

A.7 Current Technical Specification 6.5.4.d requires proposed changes to the Technical Specifications incorporated in the license, or proposed changes to the UFSAR or Bases that involve an unreviewed safety question, to be approved by the Nuclear Regulatory Commission (NRC) prior to implementation. Improved Technical Specification 5.5.14.d replaces the above situations that would require NRC pre-approval prior to implementation with reference to Specification 5.5.14.b. Specification 5.5.14.b essentially repeats this information. Therefore, referencing other sections that contain duplicate information is considered an administrative change. This change is consistent with NUREG-1432.

A.8 The proposed change adds a description of the Concrete Containment Tendon Surveillance Program to the Technical Specifications (ITS 5.5.6). Adding a description of requirements which are located in CTS constitute an administrative change. This program will contain controls for monitoring tendon degradation and will essentially consist of the Surveillance Requirements (SRs) from CTS 3.6.1.6. Changes to these requirements are described in a movement of details discussion of change. This change is administrative and is consistent with NUREG-1432.

A.9 Current Technical Specification SR 4.6.1.6.4 requires a report to be sent to the NRC describing any abnormal degradation of the containment structure detected during the performances of the Tendon Surveillances. The proposed change will relocate this requirement to Chapter 5.0 (ITS 5.6.9) as the Tendon Surveillance Report. The change also references the tests in the Pre-Stressed Concrete Containment Tendon Surveillance Program, rather than referencing CTS 3.6.1.6 Surveillances. The movement of requirements within the Technical Specifications and providing proper references constitute an administrative change. This change is consistent with NUREG-1432.

A10 Current Technical Specification 4.0.5 provides for inservice inspection and testing of American Society of Mechanical Engineers (ASME) Code Class 1, 2, and 3 components. The proposed change will move these requirements to a program in the Administrative Controls section of the Technical Specifications (ITS 5.5.8). Any changes to the requirements will be discussed in other discussion of changes. This movement of requirements within the Technical Specifications constitutes an administrative change. This change is consistent with NUREG-1431.

A.11 Current Technical Specification 4.0.5.d requires the performance of the inservice inspection and testing activities be in addition to other specified SRs. The proposed change will delete this requirement. Specifically stating that the requirements of ASME Section XI are in addition to the Technical Specifications is not required. The plant is required by regulation to comply with the ASME Codes as well as the Technical Specifications. The areas in the

ATTACHMENT (3)

IMPROVED TECHNICAL SPECIFICATIONS, REVISION 2

AMENDMENT REVISION BY ITS SECTION

Baltimore Gas and Electric Company
Calvert Cliffs Nuclear Power Plant
July 21, 1997

Page Replacement Instructions
VOLUME 10
Section 3.6

Note: Underlined Titles are tabs. Regarding CTS markups: Pages are referenced by citing the unit number as well as the specification number which is located in the upper right-hand corner of the page.

Key:
DOC = Discussion Of Changes
DOD = Disussion Of Technical Specification Deviation or Discussion Of Bases Deviation

REMOVE	INSERT
Overview of Changes	
None	
ITS	
None	
ITS Bases	
3.6.1-2	3.6.1-2
3.6.3-1	3.6.3-1
CTS Markup & Discussion of Changes	
None	
NSHC Findings	
None	
ISTS Markup & Justification	
None	
ISTS Bases Markup & Justification	
B3.6-2	B3.6-2
B3.6-19	B3.6-19

BASES

The isolation devices for the penetrations in the containment boundary are a part of the containment leak tight barrier. To maintain this leak tight barrier:

a. All penetrations required to be closed during accident conditions are either:

   1. capable of being closed by an OPERABLE automatic containment isolation system, or

   2. closed by manual valves, blind flanges, or de-activated automatic valves secured in their closed positions, except as provided in LCO 3.6.3, "Containment Isolation Valves;"

b. Each air lock is OPERABLE, except as provided in LCO 3.6.2, "Containment Air Locks;"

c. The equipment hatch is closed and sealed. |2

APPLICABLE SAFETY ANALYSES

The safety design basis for the containment is that the containment must withstand the pressures and temperatures of the limiting DBA without exceeding the design leakage rate.

The DBAs that result in a release of radioactive material within containment are a loss of coolant accident (LOCA), a main steam line break, and a control element assembly ejection accident (Ref. 2). In the analysis of each of these accidents, it is assumed that containment is OPERABLE such that release of fission products to the environment is controlled by the rate of containment leakage. The containment was designed with an allowable leakage rate of 0.20% of containment air weight per day (Ref. 3). This leakage rate is defined in 10 CFR Part 50, Appendix J, Option B (Ref. 1), as L_a: the maximum allowable containment leakage rate at the calculated maximum peak containment pressure (P_a) of 49.4 psig, which results from the limiting design basis LOCA (Ref. 2).

B 3.6 CONTAINMENT SYSTEMS

B 3.6.3 Containment Isolation Valves

BASES

BACKGROUND

The containment isolation valves form part of the containment pressure boundary and provide a means for fluid penetrations not serving accident consequence limiting systems to be provided with two isolation barriers that are closed on an automatic isolation signal. These isolation devices are either passive or active (automatic). Manual valves, de-activated automatic valves secured in their closed position (including check valves with flow through the valve secured), blind flanges, or equivalent, and closed systems are considered passive devices. Check valves, or other automatic valves designed to close without operator action following an accident, are considered active devices. Two barriers in series are provided for each penetration so that no single credible failure or malfunction of an active component can result in a loss of isolation or leakage that exceeds limits assumed in the safety analysis. One of these barriers may be a closed system.

A blind flange is installed and sealed on the Containment Purge and Exhaust System in Modes 1, 2, 3, and 4 on Unit 2. Similar equipment will be used on Unit 1 after a modification is installed. Until the modification to Unit 1 is completed, the Containment Purge and Exhaust Isolation Valves will be required for Containment Penetration Operability. Containment Purge and Exhaust Isolation Valves are not required for Containment Penetration Operability when the blind flanges are installed. | 2 | 1

Containment isolation occurs upon receipt of a high containment pressure signal. The containment isolation signal (CIS) closes automatic containment isolation valves in fluid penetrations not required for operation of Engineered Safety Feature systems in order to prevent leakage of radioactive material. Upon actuation of safety

BASES

BACKGROUND (continued)

2. closed by manual valves, blind flanges, or de-activated automatic valves secured in their closed positions, except as provided in LCO 3.6.3, "Containment Isolation Valves";

b. Each air lock is OPERABLE, except as provided in LCO 3.6.2, "Containment Air Locks";

c. ~~All~~ equipment hatches ~~are~~ closed; and

d. ~~The~~ pressurized sealing mechanism associated with a penetration, except as provided in LCO 3.6.[ ], is OPERABLE.

APPLICABLE SAFETY ANALYSES

The safety design basis for the containment is that the containment must withstand the pressures and temperatures of the limiting DBA without exceeding the design leakage rate.

The DBAs that result in a release of radioactive material within containment are a loss of coolant accident, a main steam line break (MSLB), and a control element assembly ejection accident (Ref. 2). In the analysis of each of these accidents, it is assumed that containment is OPERABLE such that release of fission products to the environment is controlled by the rate of containment leakage. The containment was designed with an allowable leakage rate of ~~[0.10]~~% of containment air weight per day (Ref. 3). This leakage rate is defined in 10 CFR 50, Appendix J, (Ref. 1), as L_a: the maximum allowable containment leakage rate at the calculated maximum peak containment pressure (P_a) of ~~[55.7]~~ psig, which results from the limiting ~~DBA, which is a~~ design basis ~~MSLB~~ (Ref. 2).

Satisfactory leakage rate test results are a requirement for the establishment of containment OPERABILITY.

The containment satisfies Criterion 3 of the NRC Policy Statement.

LCO

Containment OPERABILITY is maintained by limiting leakage to ≤ 1.0 L_a, ~~except prior to the first startup after performing a required 10 CFR 50, Appendix J, leakage test. At this~~

Containment Leakage Rate Testing Program

(continued)

B 3.6 CONTAINMENT SYSTEMS

B 3.6.3 Containment Isolation Valves ~~(Atmospheric and Dual)~~

BASES

BACKGROUND

The containment isolation valves form part of the containment pressure boundary and provide a means for fluid penetrations not serving accident consequence limiting systems to be provided with two isolation barriers that are closed on an automatic isolation signal. These isolation devices are either passive or active (automatic). Manual valves, de-activated automatic valves secured in their closed position (including check valves with flow through the valve secured), blind flanges, and closed systems are considered passive devices. Check valves, or other automatic valves designed to close without operator action following an accident, are considered active devices. Two barriers in series are provided for each penetration so that no single credible failure or malfunction of an active component can result in a loss of isolation or leakage that exceeds limits assumed in the safety analysis. One of these barriers may be a closed system.

Containment isolation occurs upon receipt of a high containment pressure signal ~~or a low Reactor Coolant System (RCS) pressure signal~~. The containment isolation signal closes automatic containment isolation valves in fluid penetrations not required for operation of Engineered Safety Feature systems in order to prevent leakage of radioactive material. Upon actuation of safety injection, automatic containment isolation valves also isolate systems not required for containment or RCS heat removal. Other penetrations are isolated by the use of valves in the closed position, or blind flanges. As a result, the containment isolation valves (and blind flanges) help ensure that the containment atmosphere will be isolated in the event of a release of radioactive material to containment atmosphere from the RCS following a Design Basis Accident (DBA).

The OPERABILITY requirements for containment isolation valves help ensure that containment is isolated within the time limits assumed in the safety analysis. Therefore, the OPERABILITY requirements provide assurance that the containment function assumed in the accident analysis will be maintained.

(continued)

and sealed

or equivalent

CE06-112

A blind flange is installed on the Containment Purge and Exhaust System in MODES 1, 2, 3 and 4 on Unit 2. Similar equipment will be used on Unit 1 after a modification is installed. Until the modification to Unit 1 is completed, the Containment Purge and Exhaust Isolation Valves will be required for Containment Penetration OPERABILITY. Containment Purge and Exhaust Isolation Valves are not required for Containment Penetration OPERABILITY when the blind flanges are installed.

or equivalent

CE06-112

or equivalent

Equivalent isolation methods must be approved in accordance with appropriate American Society of Mechanical Engineers (ASME) / American National Standards Institute (ANSI) Codes.

CE06-112

Page Replacement Instructions
VOLUME 15
Section 5.0

Note: Underlined Titles correspond to tabs. Regarding CTS markups: Pages are referenced by citing the unit number as well as the specification number which is located in the upper right-hand corner of the page.

Key:
DOC = Discussion Of Changes
DOD = Disussion Of Technical Specification Deviation or Discussion Of Bases Deviation

REMOVE	INSERT
Overview of Changes	
None	
ITS	
5.0-3	5.0-3
5.0-22 thru 5.0-31	5.0-22 thru 5.0-31
ITS Bases	
None	
CTS Markup & Discussion of Changes	
U-1 Spec 5.0 pg 9 of 61	U-1 Spec 5.0 pg 9 of 61
U-1 Spec 5.0 pg 30 of 61 thru 44 of 61	U-1 Spec 5.0 pg 30 of 61 thru 44 of 61
U-1 Spec 5.0 pg 48 of 61	U-1 Spec 5.0 pg 48 of 61
U-1 Spec 5.0 pg 51 of 61 thru 55 of 61	U-1 Spec 5.0 pg 51 of 61 thru 55 of 61
-----	U-1 Spec 5.0 pg 60a of 61
-----	U-1 Spec 5.0 pg 60b of 61
-----	U-1 Spec 5.0 pg 60c of 61
U-1 Spec 5.0 pg 61 of 61	U-1 Spec 5.0 pg 61 of 61
U-2 Spec 5.0 pg 9 of 57	U-2 Spec 5.0 pg 9 of 57
U-2 Spec 5.0 pg 26 of 57 thru 40 of 57	U-2 Spec 5.0 pg 26 of 57 thru 40 of 57
U-2 Spec 5.0 pg 44 of 57	U-2 Spec 5.0 pg 44 of 57
U-2 Spec 5.0 pg 47 of 57 thru 51 of 57	U-2 Spec 5.0 pg 47 of 57 thru 51 of 57
------	U-2 Spec 5.0 pg 56a of 57
------	U-2 Spec 5.0 pg 56b of 57
------	U-2 Spec 5.0 pg 56c of 57
U-2 Spec 5.0 pg 57 of 57	U-2 Spec 5.0 pg 57 of 57
DOC 5.0-2	DOC 5.0-2
DOC 5.0-4 thru 5.0-9	DOC 5.0-4 thru 5.0-11

Page Replacement Instructions
VOLUME 15
Section 5.0

NSHC Findings

5.0-6	5.0-6 thru 5.0-9

ISTS Markup & Justification

5.0-4	5.0-4
5.0-12	5.0-12
------	Insert 5.5.11-A (after new pg 5.0-12)
5.0-13 thru 5.0-15	5.0-13 thru 5.0-15
5.0-18	5.0-18
Insert 5.5.17 after 5.0-18	------
5.0-19 thru 5.0-20	5.0-19 thru 5.0-20
DOD 5.0-1 thru 5.0-3	DOD 5.0-1 thru 5.0-4

ISTS Bases Markup & Justification

None

5.2 Organization

5.2.2 Unit Staff

The unit staff organization shall include the following:

a. A total of three non-licensed operators shall be assigned to the Units 1 and 2 shift crews.

b. Those licensed operators counted toward minimum shift crew composition required by 10 CFR 50.54(m)(2)(i) shall be licensed for both units.

c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.

d. A radiation protection technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

e. The amount of overtime worked by unit staff members performing safety related functions shall be limited and controlled in accordance with the Nuclear Regulatory Commission Policy Statement on working hours (Generic Letter 82-12).

f. The General Supervisor-Nuclear Plant Operations shall hold a Senior Reactor Operator (SRO) license. The operations manager shall hold or have held a SRO license for Calvert Cliffs. | 2

5.5 Programs and Manuals

5.5.10 Secondary Water Chemistry Program

This program provides controls for monitoring secondary water chemistry to inhibit steam generator tube degradation and low pressure turbine disc stress corrosion cracking. The program shall include:

a. Identification of a sampling schedule for the critical variables and control points for these variables;

b. Identification of the procedures used to measure the values of the critical variables;

c. Identification of process sampling points which shall include monitoring the discharge of the condensate pumps for evidence of condenser in leakage;

d. Procedures for the recording and management of data;

e. Procedures defining corrective actions for all off control point chemistry conditions; and

f. A procedure identifying the authority responsible for the interpretation of the data and the sequence and timing of administrative events, which is required to initiate corrective action.

5.5.11 Ventilation Filter Testing Program

A program shall be established to implement the following required testing of Engineered Safety Feature (ESF) filter ventilation systems. Tests described in Specification 5.5.11.a and 5.5.11.b shall be performed once per 18 months for ventilation systems other than the IRS and 24 months for the IRS; after each complete or partial replacement of the HEPA filter bank or charcoal adsorber bank; after any structural maintenance on the HEPA filter or charcoal adsorber housing; and, following painting, fire, or chemical release in any ventilation zone communicating with the system. 2

5.5 Programs and Manuals

Tests described in Specification 5.5.11.c shall be performed once per 18 months for ventilation systems other than the IRS and 24 months for the IRS; after 720 hours of system operation; after any structural maintenance on the HEPA filter or charcoal adsorber housing; and, following painting, fire, or chemical release in any ventilation zone communicating with the system. 2

Tests described in Specification 5.5.11.d shall be performed once per 18 months for ventilation systems other than the IRS and 24 months for the IRS.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Ventilation Filter Testing Program test frequencies.

a. 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 ≤ 1.0% when tested in accordance with Regulatory Guide 1.52, Revision 2, at the system flowrate specified as follows ± 10%:

ESF Ventilation System	Flowrate
CREVS	2,000 cfm
ECCS Pump Room EAFS	3,000 cfm
Penetration Room EAFS	2,000 cfm
SFP Ventilation System	32,000 cfm
IRS	20,000 cfm

b. Demonstrate for each of the ESF systems that an inplace test of the charcoal adsorber shows a penetration and system bypass ≤ 1.0% when tested in accordance with Regulatory Guide 1.52, Revision 2, at the system flowrate specified as follows ± 10%:

ESF Ventilation System	Flowrate
CREVS	2,000 cfm
ECCS Pump Room EAFS	3,000 cfm
Penetration Room EAFS	2,000 cfm

5.5 Programs and Manuals

SFP Ventilation System	32,000 cfm
IRS	20,000 cfm

c. Demonstrate for each of the ESF systems, within 31 days after removal, 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 (elemental iodine for the IRS) penetration less than or equal to the value specified below when tested in accordance with ANSI N510-1975 at a temperature of ≤ 30°C (130°C for the IRS) and greater than or equal to the relative humidity specified as follows: | 2

ESF Ventilation System	Penetrations	RH
CREVS	10%	95%
ECCS Pump Room EAFS	10%	95%
Penetration Room EAFS	10%	95%
SFP Ventilation System	10%	95%
IRS	5%	95%

d. For each of the ESF systems, demonstrate the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers is less than the value specified below when tested in accordance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1975 at the system flowrate specified as follows ± 10%:

ESF Ventilation System	Delta P	Flowrate
CREVS	4 inwg	2,000 cfm
ECCS Pump Room EAFS	4 inwg	3,000 cfm
Penetration Room EAFS	6 inwg	2,000 cfm
SFP Ventilation System	4 inwg	32,000 cfm
IRS	6 inwg	20,000 cfm

| 2

5.5 Programs and Manuals

5.5.12 Explosive Gas and Storage Tank Radioactivity Monitoring Program

This program provides control for potentially explosive gas mixtures contained in the Waste Gas Holdup System and the quantity of radioactivity contained in gas storage tanks. The gaseous radioactivity quantities shall be determined following the methodology in the ODCM.

The program shall include:

a. The limits for concentrations of hydrogen and oxygen in the Waste Gas Holdup System and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria (i.e., whether or not the system is designed to withstand a hydrogen explosion); and

b. A surveillance program to ensure that the quantity of radioactivity contained in each gas storage tank is less than or equal to 58,500 curies noble gases (considered as Xe-133).

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

5.5.13 Diesel Fuel Oil Testing Program

A diesel fuel oil testing program to implement required testing of both new fuel oil and stored fuel oil shall be established. The program shall include sampling and testing requirements, and acceptance criteria, all in accordance with applicable American Society for Testing Materials (ASTM) Standards. The purpose of the program is to establish the following:

a. Acceptability of new fuel oil for use prior to addition to storage tanks by determining that the fuel oil has:

   1. An American Petroleum Institute (API) gravity or an absolute specific gravity within limits,

2. A flash point and kinematic viscosity within limits for ASTM 2D fuel oil, and

3. Water and sediment ≤ 0.05%.

b. Within 31 days following addition of new fuel oil to the storage tanks, verify that the properties of the new fuel oil, other than those addressed in a., above, are within limits for ASTM 2D fuel oil; and

c. Total particulate concentration of the stored fuel oil, determined by gravimetric analysis, is ≤ 10 mg/l when tested every 92 days.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Diesel Fuel Oil Testing Frequencies.

5.5.14 Technical Specifications Bases Control Program

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

a. Changes to the Bases of the Technical Specification shall be made under appropriate administrative controls and reviews.

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

1. A change in the Technical Specification incorporated in the license; or

2. A change to the UFSAR or Bases that involves an unreviewed safety question as defined in 10 CFR 50.59.

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

d. Proposed changes that meet the criteria of Specification 5.5.14b 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).

5.5.15 Safety Function Determination Program

This program ensures loss of safety function is detected and appropriate actions taken. Upon entry into Limiting Condition of Operation (LCO) 3.0.6, an evaluation shall be made to determine if loss of safety function exists. Additionally, other appropriate limitations and remedial or compensatory actions may be identified to be taken as a result of the support system inoperability and corresponding exception to entering supported system Condition and Required Actions. This program implements the requirements of LCO 3.0.6. The Safety Function Determination Program shall contain the following:

a. Provisions for cross train checks to ensure a loss of the capability to perform the safety function assumed in the accident analysis does not go undetected;

b. Provisions for ensuring the plant is maintained in a safe condition if a loss of function condition exists;

c. Provisions to ensure that an inoperable supported system's Completion Time is not inappropriately extended as a result of multiple support system inoperabilities; and

d. Other appropriate limitations and remedial or compensatory actions.

A loss of safety function exists when, assuming no concurrent single failure, a safety function assumed in the accident analysis cannot be performed. For the purpose of this program, a loss of

safety function may exist when a support system is inoperable, and:

a. A required system redundant to system(s) supported by the inoperable support system is also inoperable; or

b. A required system redundant to system(s) in turn supported by the inoperable supported system is also inoperable; or

c. A required system redundant to support system(s) for the supported systems (a) and (b) above is also inoperable.

The Safety Function Determination Program identifies where a loss of safety function exists. If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

5.5.16 Containment Leakage Rate Testing Program

A program shall be established to implement the leakage testing of the containment as required by 10 CFR 50.54(0) and 10 CFR Part 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September 1995. | 2

The peak calculated containment internal pressure for the design basis loss of coolant accident, P_a, is 49.4 psig. The containment design pressure is 50 psig.

The maximum allowable containment leakage rate, L_a, at P_a, shall be 0.20% of containment air weight per day.

Leakage Rate acceptance criteria are:

a. Containment leakage rate acceptance criterion is < 1.0 La. During the first unit startup following testing in accordance with this program, the leakage rate acceptance are ≤ 0.60 L_a for the Type B and C tests and ≤ 0.75 L_a for Type A tests.

5.5 Programs and Manuals

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 each door, leakage rate is $\leq 0.0002\ L_a$ when pressurized to ≥ 15 psig.

The provisions of SR 3.0.2 do not apply to the test frequencies specified in the Containment Leakage Rate Testing Program.

The provisions of SR 3.0.3 are applicable to the Containment Leakage Rate Testing Program.

2

5.6 Reporting Requirements

The following reports shall be submitted in accordance with 10 CFR 50.4.

5.6.1 Occupational Radiation Exposure Report

---NOTE---
A single submittal may be made for both units, but shall not include the occupational radiation exposure from the Independent Spent Fuel Storage Installation. The submittal should combine sections common to both units at the station. | 2

A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures > 100 mrem/yr and their associated man rem exposure according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). This tabulation supplements the requirements of 10 CFR 20.2206. The dose assignments to various duty functions may be estimated based on pocket dosimeter, electronic personal dosimeter, or thermoluminescent dosimeter. Small exposures totaling < 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources should be assigned to specific major work functions. The report shall be submitted by April 30 of each year.

5.6.2 Annual Radiological Environmental Operating Report

---NOTE---
A single submittal may be made for both units. The submittal should combine sections common to both units at the station.

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the

5.6 Reporting Requirements

reporting period. The material provided shall be consistent with the objectives outlined in the ODCM, and in 10 CFR Part 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. The report shall identify the TLD results that represent collocated dosimeters in relation to the NRC TLD program, and the exposure period associated with each result. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

5.6.3 Radioactive Effluent Release Report

---NOTE---
A single submittal may be made for both units. The submittal should combine sections common to both units at the station.

The Radioactive Effluent Release Report covering the operation of the unit shall be submitted in accordance with 10 CFR 50.36a, as modified by approved exemptions. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the units. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I, Section IV.B.1. | 2

A.1

5.5.4 contd

k. Limitations on the annual and quarterly doses to a **MEMBER OF THE PUBLIC** from Iodine-131, and all radionuclides in particulate form with half-lives greater than 8 days, in gaseous effluents released to areas beyond the **SITE BOUNDARY**, to be limited:

1. During any calendar quarter: Less than or equal to 15 mrems to any organ;

2. During any calendar year: Less than or equal to 30 mrems to any organ; and

3. Less than 0.1% of the limits of ~~6.5.5~~ (5) (4) .k(1) and (2) as a result of burning contaminated oil; and

A.1

INSERT 5.5.5 - 5.5.13

INSERT 5.5.14 From P. 6 & 7

INSERT 5.5.15 P. 50

l. Limitations on the annual dose or dose commitment to any **MEMBER OF THE PUBLIC** due to releases of radioactivity, and to radiation from uranium fuel cycle sources to be limited to less than or equal to 25 mrems to the total body or any organ, except the thyroid, which shall be limited to less than or equal to 75 mrems.

5.5.16

~~6.5.6~~ Containment Leakage Rate Testing Program

A.1

5.5.16.a A program shall be established to implement the leakage testing of the containment as required by 10 CFR 50.54(o) and 10 CFR Part 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September 1995, ~~as~~ modified by approved exceptions.

A.1

5.5.16.b The peak calculated containment internal pressure for the design basis loss-of-coolant accident, P_a, is 49.4 psig. The containment design pressure is 50 psig.

5.5.16.c The maximum allowable containment leakage rate, L_a, shall be 0.20 percent of containment air weight per day at P_a.

A.1

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 is $< 0.75 L_a$ for Type A tests.

NRC 95-057

Insert 6.5.6

5.5.16.d The provisions of ~~Specification 4.0.2~~ do not apply to the test frequencies specified in the Containment Leakage Rate Testing Program.

5.5.16.e The provisions of ~~Specification 4.0.3~~ are applicable to the Containment Leakage Rate Testing Program.

INSERT 5.5.16 P. 51

SR 3.0.2

SR 3.0.3

A.1

2

CREVS PORTION OF VFTP

INSERT 5.5.11
(Page 1 of 15)

A.1

A.16

5.5.11 Ventilation Filter Testing Program (VFTP)

A.16

ADD VFTP Description

~~3/4.7 PLANT SYSTEMS~~

~~LIMITING CONDITION FOR OPERATION (Continued)~~

d. With one common exhaust to atmosphere duct isolation valve inoperable, restore the inoperable valve 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.

e. With the toilet area exhaust duct isolation valve inoperable, restore the inoperable valve 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.

~~SURVEILLANCE REQUIREMENTS~~

~~4.7.6.1 The Control Room Emergency Ventilation System shall be demonstrated OPERABLE:~~

a. At least once per 62 days, on a **STAGGERED TEST BASIS**, by deenergizing the backup Control Room air conditioner and verifying that the emergency Control Room air conditioners maintain the air temperature ≤ 104°F for at least 12 hours when in the recirculation mode.

b. At least once per 31 days by initiation flow through each HEPA filter and charcoal adsorber train and verifying that each train operates for at least 15 minutes.

See Discussion of changes for Specification 3.7.11, "CREVS"

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:

2

5.5.11.b 1. Verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

shows a penetration and system bypass ≤ 1.0%

5.5.11.a 2. Verifying that the HEPA filter banks ~~remove ≥ 99% of the DOP~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

A.23

2

INSERT - VFTP Description

(page 2 of 15)

A-16

5.5.11 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 and in accordance with Regulatory Guide 1.52, Revision [ ], ANSI N510-1975, or the Ventilation Filter Testing Program, at the system flowrate specified below ± 10%~~.

CREVS PORTION OF VFTP

INSERT 5.5.11
(page 3 of 15)

A.16

5.5.11 VFTP

A.1

~~3/4.7 PLANT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11.c ~~3.~~ Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). — A.23 — 2

5.5.11.d ~~4.~~ Verifying a system flow rate of 2000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975. — 2

5.5.11 ~~d.~~ After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). — A.23

5.5.11 Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers remove ~~≥ 99%~~ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow of 2000 cfm ± 10%. — 2

5.5.11.b shows a penetration and system bypass ≤ 1.0 % — A.23

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

5.5.11.d ~~1.~~ Verifying that the pressure drop across the combined HEPA filters ~~and charcoal adsorber banks~~ is < 4 inches Water Gauge while operating the ventilation system at a flow rate of 2000 cfm ± 10%. — prefilters — 1.1.6 — 2

~~2.~~ Verifying that on a Control Room high radiation test signal, the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks and that both of the isolation valves in each inlet duct and common exhaust duct, and the isolation valve in the toilet area exhaust duct, close. — See Discussion of Change for specification 3.7.8 CREVS

CREVS portion of VFTP

INSERT 5.5.11
(page 4 of 15)

5.5.11 VFTP (A-16) (A.1)

3/4.7 PLANT SYSTEMS

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter system at a flow rate of 2000 cfm ± 10%.

5.5.11.a

5.5.11.b 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter system at a flow rate of 2000 cfm ± 10%.

(A.2) shows a penetration and system bypass ≤ 1.0 % (A.23)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies. (A.25)

Specification 5.0

ECCS PREAFS PORTION OF VFTP

INSERT 5.5.11
(page 5 of 15)

5.5.11 VFTP (A.16)

~~3/4.7 PLANT SYSTEMS~~

~~3/4.7.7 ECCS PUMP ROOM EXHAUST AIR FILTRATION SYSTEM~~

~~LIMITING CONDITION FOR OPERATION~~

3.7.7.1 The ECCS Pump Room Exhaust Ventilation System shall be **OPERABLE** with one HEPA filter and charcoal adsorber train and two exhaust fans.

APPLICABILITY: **MODES** 1, 2, 3 and 4.

ACTION:

a. With one ECCS pump room exhaust 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 the ECCS exhaust 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.

See Discussion of Changes For Specification 3.7.10 ECCS PREAFS

~~SURVEILLANCE REQUIREMENTS~~

~~4.7.7.1~~ The ECCS Pump Room Exhaust Ventilation System shall be demonstrated ~~OPERABLE~~: (A.1)

a. At least once per 31 days by initiating, from the Control Room, flow through the HEPA filter and charcoal adsorber train and verifying that each exhaust fan operates for at least 15 minutes.

~~b.~~ 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:

5.5.11

5.5.11.b

~~1.~~ Verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%.

2

shows a penetration and system bypass ≤ 1.0%

(A.23)

pay 34 of 61

ECCS PREAFS PORTION OF VFTP

INSERT 5.5.11
(page 6 of 15)

A.16

5.5.11 VFTP

~~3/4.7 PLANT SYSTEMS~~ (A-1)

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11.a 2. Verifying that the HEPA filter banks ~~remove > 99% of the DOP when they are tested inplace in accordance~~ with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%. (A.23) shows a penetration and system bypass ≤ 1.0%

5.5.11.c 3. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from a adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). (A.23) 2

5.5.11.c 4. Verifying a system flow rate of 3000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975.

5.5.11 c. After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). (A.23)

(A.23) shows a penetration and system bypass ≤ 1%

5.5.11 Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers remove ≥ 99% of a halogenated ~~hydrocarbon refrigerant test~~ gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 3000 cfm ± 10%.

5.5.11.b

5.5.11 d. At least once per 18 months by verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the filter train at a flow rate of 3000 cfm ± 10%.

5.5.11.d

> prefilters, (M.6) 2

ECCS PREAFS PORTION OF VFTP

Specification 5.0

INSERT 5.5.11
(page 7 of 15)

A.16

5.5.11 VFTP

A.1

~~3/4.7 PLANT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11.e. 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%.

5.5.11.a

A.23

shows a penetration and system bypass ≤ 1.0 %

5.5.11.f. 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978 while operating the filter train at a flow rate of 3000 cfm ± 10%.

5.5.11.b

2

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510-1975.

L.6

The provisions of SR 3.0 and SR 3.0.3 are applicable to the VFTP test frequencies.

A.25

INSERT 5.5.11
(page 8 of 15)

Specification 5.0

Penetration Room EAFs
Portion of VFTP

A.16

5.5.11 VFTP

~~3/4.6 CONTAINMENT SYSTEMS~~

~~3/4.6.6 PENETRATION ROOM EXHAUST AIR FILTRATION SYSTEM~~ A.1 2

LIMITING CONDITION FOR OPERATION

3.6.6.1 Two independent containment penetration room exhaust air filter trains shall be **OPERABLE**.

APPLICABILITY: **MODES** 1, 2, and 3.

ACTION: With one containment penetration room exhaust air filter train inoperable, restore the inoperable train 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.

See Discussion of change for Specification 3.7.12, "Penetration Room Exhaust Air Filtration"

SURVEILLANCE REQUIREMENTS

A.1

~~4.6.6.1 Each containment penetration room exhaust air filter train shall be demonstrated **OPERABLE**~~:

a. At least once per 31 days on **STAGGERED TEST BASIS** by initiating, from the control room, flow through the HEPA filter and charcoal adsorber train and verifying that the train operates for at least 15 minutes.

5.5.11

b. 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: 2

5.5.11.b

1. Verifying that the charcoal adsorbers ~~remove ≥ 99%~~ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

A.23

shows a penetration and system bypass ≤ 1%

INSERT 5.5.11
(page 9 of 15)

A.1

PREFS POSITION OF VFTP

5.5.11 VFTP

~~3/4.6 CONTAINMENT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS~~ (Continued)

A.16 A.23

shows a penetration and system bypass ≤ 1.0%

5.5.11.a

2. Verifying that the HEPA filter banks remove ≥ 99% of the DOP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

5.5.11.c

3. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). A.23

2

5.5.11.d

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

c. After every 720 hours of charcoal adsorber operation by:

5.5.11

5.5.11.c

Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). A.23

A.1

5.5.11

5.5.11.b

Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated **OPERABLE** by verifying that the charcoal adsorbers remove ≥ 99% of the halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

shows a penetration and system bypass ≤ 1.0%

A.23

INSERT 5.5.11
(page 10 of 15)

Specification 5.0

PREFS PORTION OF VFTP (A.16)

5.5.11 VFTP

~~3/4.6 CONTAINMENT SYSTEMS~~ (A.1)

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11

~~d.~~ At least once per 18 months by:

5.5.11.d ~~1.~~ Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 6 inches Water Gauge while operating the filter train at a flow rate of 2000 cfm ± 10%. (prefilters, M.6)

~~2.~~ Verifying that the filter train starts on Containment Isolation Test Signal. (See Discussion of change to specification 3.7.12 "PREFS")

5.5.11.a 5.5.11 ~~c.~~ 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%. (2)

5.5.11.b 5.5.11 ~~e.~~ 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510 1975. (L.6)

shows a penetration or system bypass ≤ 1.0% (A.23)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies. (A.25)

SFP Ventilation System Portion of VFTP

INSERT 5.5.11
(page 11 of 15)

A.16 5.5.11 Ventilation Filter Testing Program (VFTP)

~~3/4.9 REFUELING OPERATIONS~~ (A.1)

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11 ~~b.~~ 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:

A.23

5.5.11.b ~~1.~~ Verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%. — shows a penetration and system bypass ≤ 1.0%

5.5.11.a ~~2.~~ Verifying that the HEPA filter banks ~~remove ≥ 99% of the DOP~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%. (A.2)

5.5.11.c ~~3.~~ Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). (A.23)

5.5.11.d ~~4.~~ Verifying a system flow rate of 32,000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975.

5.5.11 ~~5.~~ After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). (A.23)

SFP Ventilation System Portion of VFTP

INSERT 5.5.11
(page 12 of 15)

5.5.11 VFTP (A.16)

(A.1)

3/4.9 REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

(A.23) shows a penetration or system bypass ≤ 1.0 %.

5.5.11.b Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%. *

(2)

5.5.11.d At least once per 18 months by:

5.5.11.d 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the ventilation system at a flow rate of 32,000 cfm ± 10%. (prefilters) (M.6)

2. Verifying that each exhaust fan maintains the spent fuel storage pool area at a measurable negative pressure relative to the outside atmosphere during system operation.

See Discussion of changes for Specification 3.7.11, SFP Ventilation System

5.5.11.c 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

5.5.11.a

(A.23) shows a penetration or system bypass ≤ 1.0 %

5.5.11.b 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510-1975. (L.6)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

(A.25)

IRS Portion of VFTP

INSERT 5.5.11
(page 13 of 15)

A.16

5.5.11 Ventilation Filter Testing Program (VFTP)

A.16

Add VFTP Description

~~3/4.6 CONTAINMENT SYSTEMS~~

~~3/4.6.3 IODINE REMOVAL SYSTEM~~

A.1

~~LIMITING CONDITION FOR OPERATION~~

3.6.3.1 Three independent containment iodine filter trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION: With one iodine filter train inoperable, restore the inoperable train 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.

See Discussion of changes for Specification 3.6.3, "IRS"

~~SURVEILLANCE REQUIREMENTS~~

~~4.6.3.1 Each iodine filter train shall be demonstrated OPERABLE:~~

a. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filter and charcoal adsorber train and verifying that the train operates for at least 15 minutes.

5.5.11 ~~d.~~ At least once per ~~REFUELING INTERVAL~~ (24 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:

5.5.11.b ~~1.~~ Verifying that the charcoal adsorbers ~~remove ≥ 99%~~ of a ~~halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%.

A.1

5.5.11.a ~~2.~~ Verifying that the HEPA filter banks ~~remove ≥ 99% of the DOP~~ when they are tested in-place in accordance with Regulatory Positions ~~C.5.a and C.5.c of Regulatory~~ Guide 1.52 Revision 2 ~~March 1978~~ while operating the filter train at a flow rate of 20,000 cfm ± 10%.

shows a penetration and system bypass ≤ 1.0%

A.23

Specification 5.0

IRS Portion of VFTP

(A.16)

INSERT 5.5.11
(page 14 of 15)

5.5.11 VFTP

(A.1)

~~3/4.6 CONTAINMENT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11.c ~~b.~~ Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 95% for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.). (A.23)

5.5.11.d ~~c.~~ Verifying a filter train flow rate of 20,000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975. (1)

5.5.11 c. After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 95% for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.). (A.23)

5.5.11.b Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%. Show a penetration and system bypass ≤ 1.0% (A.23)

24 months

5.5.11 ~~d.~~ At least once per ~~REFUELING INTERVAL~~ by:

5.5.11.d 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 6 inches Water Gauge while operating the filter train at a flow rate of 20,000 cfm ± 10%. prefilters (M.6)

IRS Portion of VFTP (A.16)

INSERT 3.5.11 (page 15 of 15)

5.5.11 VFTP (A.1)

~~3/4.6 CONTAINMENT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

2. Verifying that the filter train starts on the appropriate ESFAS test signal.

See Discussion of Change for Specification 3.6.8 "IRs"

5.5.11 e. / 5.5.11.a 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%.

shows a penetration and bypass ≤ 1.0%

5.5.11 f. / 5.5.11.b 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%.

(A.23)

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510-1975.

(L.6)

(2)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP Test Frequencies.

(A.25)

INSERT 5.5.13
p 1 of 2

5.5.13 Diesel Fuel Oil Testing Program

~~3/4.8 ELECTRICAL POWER SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

A.1

4.8.1.1.2 (cont'd.)

~~b. At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank is within the acceptable limits specified in Table 1 of ASTM D975-81 when checked for viscosity, water and sediment.~~

INSERT 5.5.13

M.4

L.3

A

c. At least once per 184 days by verifying the diesel starts from ambient condition and accelerates to at least 60 Hz in ≤ 10 seconds.

d. At least once per **REFUELING INTERVAL** by:

1. Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service.

2. Verifying the generator capability to reject a load of ≥ 500 hp without tripping.

3. Simulating a loss of offsite power in conjunction with a safety injection actuation test signal, and:

   a) Verifying de-energization of the emergency busses and load shedding from the emergency busses.

   b) Verifying the diesel starts from ambient condition on the auto-start signal, energizes the emergency busses with permanently connected loads, energizes the auto-connected emergency loads through the load sequencer and operates for ≥ 5 minutes while its generator is loaded with the emergency loads.

   c) Verifying that automatically bypassed diesel trips are automatically bypassed on a Safety Injection Actuation Signal.

4. Verifying the diesel generator operates for ≥ 60 minutes while loaded to ≥ 4000 kW for No. 1A Emergency Diesel Generator or ≥ 2700 kW for No. 1B Emergency Diesel Generator.

5. Verifying that the auto-connected loads to each diesel generator do not exceed 4000 kW for No. 1A Emergency Diesel Generator or 2700 kW for No. 1B Emergency Diesel Generator.

* All engine starts for the purpose of this Surveillance Requirement may be preceded by an engine pre-lube period recommended by the manufacturer so that mechanical wear and stress on the diesel engine is minimized.

See Discussion of changes for Specification 3.8.1, "AC Sources - Operating"

Containment Leakage Rate Testing Program

INSERT 5.5.16
(page 1 of 2)

3/4.6 CONTAINMENT SYSTEMS

3/4.6.1 PRIMARY CONTAINMENT

CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 Primary CONTAINMENT INTEGRITY shall be maintained.* #

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION: Without primary CONTAINMENT INTEGRITY, restore CONTAINMENT INTEGRITY within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

a. At least once per 31 days by verifying that all penetrations** not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions, except for valves that are open under administrative control as permitted by Specification 3.6.4.1.

b. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3.

c. By verifying that the equipment hatch is closed and sealed, prior to entering MODE 4 following a shutdown where the equipment hatch was opened, by conducting a Type B test per 10 CFR Part 50, Appendix J.

d. Insert A

L.4 | 2

See Discussion of Change for Specification 3.6.3, "Containment Isolation Valves"

See Discussion of Change for Specification 3.6.1, "Containment"

* Hydrogen purge containment vent isolation valves shall be opened for containment pressure control, airborne radioactivity control, and surveillance testing purposes only.

\# The shutdown cooling isolation valves may be opened when the RCS temperature is below 300°F to establish shutdown cooling flow.

** Except valves, blind flanges, and deactivated automatic valves which are located inside the containment and are locked, sealed, or otherwise secured in the closed position. These penetrations shall be verified closed during each COLD SHUTDOWN except that such verification need not be performed more often then once per 92 days.

NRC 96-042

Containment Leakage Rate Testing Program

Specification 5.0

INSERT 5.5.16
(P. 212)

Insert A

By verifying that the containment purge blind flanges are installed and sealed prior to entering Mode 4 following a shutdown where the blind flanges were removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. If only one blind flange was removed, only that blind flange must be tested unless testing is required by Technical Specification 4.6.1.2.

L.4 | 2

NRC 96-042

This page intentionally left blank. | 2

A.1

~~6.0 ADMINISTRATIVE CONTROLS~~

5

~~6~~.6 REPORTING REQUIREMENTS

The following reports shall be submitted in accordance with 10 CFR 50.4.

5

~~6~~.6.1 Occupational Radiation Exposure Report*

A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures > 100 mrem/yr and their associated man rem exposure according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). This tabulation supplements the requirements of 10 CFR 20.2206. The dose assignment to various duty functions may be estimates based on pocket dosimeter, electronic personal dosimeter or thermoluminescent dosimeter. Small exposures totalling < 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources should be assigned to specific major work functions. The report shall be submitted prior to ~~March 31~~ April 30 of each year.

A.18

5

~~6~~.6.2 Annual Radiological Environmental Operating Report*

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the **ODCM**, and in 10 CFR Part 50, Appendix I, Sections IV.B.2, IV.B.3 and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the **ODCM**, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. The report shall identify the TLD results that represent collocated dosimeters in relation to the NRC TLD program, and the exposure period associated with each result. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

A.1

* A single submittal may be made for both units ~~Calvert Cliffs~~. The submittal should combine those sections that are common to both units. Occupational dose from the Independent Spent Fuel Storage Installation will be reported separately.

NOTE TO SPECIFICATIONS 5.6.1 5.6.2

2

Note to specifications 5.6.1

~~6.0 ADMINISTRATIVE CONTROLS~~

A.1

5 ~~6~~.6.3 Radioactive Effluent Release Report*

as modified by approved exemptions 2.

The Radioactive Effluent Release Report covering the operation of the unit shall be submitted in accordance with 10 CFR 50.36a (i.e., time between submittal of the reports must be no longer than 12 months)**. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the units. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I, Section IV.B.1.

LA.3

Licensee initiated major changes to the Radioactive Waste Systems (liquid, gaseous and solid) shall be reported to the Commission in the Radioactive Effluent Release Report for the period in which the modification to the waste system is completed. The discussion of each change shall contain:

a. A description of the equipment, components and processes involved; and

b. Documentation of the fact that the change, including the safety analysis, was reviewed and found acceptable by the onsite review function.

The report shall also include changes to the ODCM, in accordance with Specification 6.5.1.c.

5 ~~6~~.6.4 Monthly Operating Report

Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis, no later than the 15th of each month following the calendar month covered by the report.

for both units. The submittal should combine this sections that are common to both units.

A.1

NOTE 5.6.3

* A single submittal may be made for Calvert Cliffs, since the Radwaste Systems are common to both units.

** In lieu of submission with the Radioactive Effluent Release Report, Sr^{89} and Sr^{90} analyses results may be submitted in a supplementary report within 120 days after submittal of the Radioactive Effluent Release Report.

LA.3

INSERT 5.6.7 PAM Report (Page 1 of 4)

Specification 5.0

See Discussion of Changes for Specification 3.3.10, "PAM Instrumentation," in Section 3.3

TABLE 3.3-6 (Continued)

TABLE NOTATION

* Alarm setpoint to be specified in a controlled document (e.g., setpoint control manual).

ACTION STATEMENTS

ACTION 14 - 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 16 - 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 30 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, initiate the preplanned alternate method of monitoring the appropriate parameter(s), within 72 hours, and:

1) either restore the inoperable channel(s) to OPERABLE status within 7 days of the event, or

2) prepare and submit a Special Report to the Commission pursuant to 10 CFR 50.4 within ~~30 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.

5.6.7

14 days after Condition B or G of LCO 3.3.10 is entered.

L.5 Unscheduled inoperable

M.7 two channels inoperable

INSERT 5.6.7 (Am Report (Page 264) Specification 5.0

See Discussion of Changes for Specification 3.3.10, "PAM Instrumentation," in Section 3.3.

TABLE 3.3-10 (Continued)

ACTION STATEMENTS

ACTION 31 - With the number of **OPERABLE** post-accident monitoring channels less than required by Table 3.3-10, either restore the inoperable channel to **OPERABLE** status within 30 days or be in **HOT SHUTDOWN** within the next 12 hours.

ACTION 32 - With the number of **OPERABLE** post-accident monitoring channels one less than the Minimum Channels **OPERABLE** requirement in Table 3.3-10, operation may proceed provided the inoperable channel is restored to **OPERABLE** status at the next outage of sufficient duration. (2)

ACTION 33 - With the number of **OPERABLE** post-accident monitoring channels two less than required by Table 3.3-10, either restore one inoperable channel to **OPERABLE** status within 30 days or be in **HOT SHUTDOWN** within the next 12 hours.

ACTION 34 - With the number of **OPERABLE** post-accident monitoring channels one less than the Minimum Channels **OPERABLE** requirement in Table 3.3-10, either restore the system to **OPERABLE** status within 7 days if repairs are feasible without shutting down or prepare and submit a Special Report to the Commission pursuant to 10 CFR 50.4 within 30 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. (L.5)

5.6.7

ACTION 35 - With the number of **OPERABLE** channels two less than required by Table 3.3-10, either restore the inoperable channel(s) to **OPERABLE** status within 48 hours if repairs are feasible without shutting down or:

1. Initiate an alternate method of monitoring for core and Reactor Coolant System voiding;

5.6.7

2. Prepare and submit a Special Report to the Commission pursuant to 10 CFR 50.4 within 30 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; and (M.7)

3. Restore the system to **OPERABLE** status at the next scheduled refueling.

14 days after Condition B or G of LCO 3.3.10 is entered

Insert 5.6.7 PAM Report (Page 3 of 4 Specification 5.0

See Discussion of changes for Specification 3.3.10, "PAM Instrumentation," in Section 3.3.

3/4.6 CONTAINMENT SYSTEMS

3/4.6.5 COMBUSTIBLE GAS CONTROL

Hydrogen Analyzers

LIMITING CONDITION FOR OPERATION

3.6.5.1 Two independent containment hydrogen analyzers shall be **OPERABLE.**

APPLICABILITY: **MODES** 1 and 2.

ACTION:

a. With one hydrogen analyzer inoperable, restore the inoperable analyzer to **OPERABLE** status within 30 days or:

1. Verify containment atmosphere grab sampling capability and prepare and submit a special report to the Commission pursuant to 10 CFR 50.4 within the following ~~30~~ 14 days, outlining the **ACTION** taken, the cause for the inoperability, and the plans and schedule for restoring the system to **OPERABLE** status, or

5.6.7

M.7

2. Be in at least **HOT STANDBY** within the next 6 hours.

b. With both hydrogen analyzers inoperable, restore at least one inoperable analyzer to **OPERABLE** status within 72 hours or be in at least **HOT STANDBY** within the next 6 hours.

c. Specification 3.0.4 is not applicable to this requirement.

SURVEILLANCE REQUIREMENTS

4.6.5.1.1 Each hydrogen analyzer shall be demonstrated **OPERABLE** at least bi-weekly on a **STAGGERED TEST BASIS** by drawing a sample from the Waste Gas System through the hydrogen analyzer.

4.6.5.1.2 Each hydrogen analyzer shall be demonstrated **OPERABLE** at least once per 92 days on a **STAGGERED TEST BASIS** by performing a **CHANNEL CALIBRATION** using sample gases in accordance with manufacturers' recommendations.

INSERT 5.6.7

A.15

A.17 | A

5.6.7 Post-Accident Monitoring Report

When a report is required by Condition B or G of LCO 3.3.10, "Post Accident Monitoring Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status. | D

A.1

5.5.4 cont'd

k. Limitations on the annual and quarterly doses to a **MEMBER OF THE PUBLIC** from Iodine-131, and all radionuclides in particulate form with half-lives greater than 8 days, in gaseous effluents released to areas beyond the **SITE BOUNDARY**, to be limited:

1. During any calendar quarter: Less than or equal to 15 mrems to any organ;

2. During any calendar year: Less than or equal to 30 mrems to any organ; and

3. Less than 0.1% of the limits of ~~6.5.3~~ (5) (4) .k(1) and (2) as a result of burning contaminated oil; and

A.1

Insert 5.5.5 - 5.5.13

Insert 5.5.14 from page 6-7

Insert 5.5.15 page 46

l. Limitations on the annual dose or dose commitment to any **MEMBER OF THE PUBLIC** due to releases of radioactivity, and to radiation from uranium fuel cycle sources to be limited to less than or equal to 25 mrems to the total body or any organ, except the thyroid, which shall be limited to less than or equal to 75 mrems.

5.5.16 ~~6.5.6~~ Containment Leakage Rate Testing Program

A.1

5.5.16.a A program shall be established to implement the leakage testing of the containment as required by 10 CFR 50.54(o) and 10 CFR Part 50, Appendix J, Option B. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September 1995, as modified by approved exemptions.

A.1

5.5.16.b The peak calculated containment internal pressure for the design basis loss-of-coolant accident, P_a, is 49.4 psig. The containment design pressure is 50 psig.

5.5.16.c The maximum allowable containment leakage rate, L_a, shall be 0.20 percent of containment air weight per day at P_a.

A.1

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 is $\leq 0.75\ L_a$ for Type A tests.

Insert 6.5.6

5.5.16.d The provisions of ~~Specification 4.0.2~~ SR 3.0.2 do not apply to the test frequencies specified in the Containment Leakage Rate Testing Program.

5.5.16.e The provisions of ~~Specification 4.0.3~~ SR 3.0.3 are applicable to the Containment Leakage Rate Testing Program.

A.1

A.1

Insert 5.5.16 from page 6-7

2

CREVS Portion of VFTP

Specification 5.0

A.16

Insert 5.5.11
(page 1 of 15)

5.5.11 Ventilation Filter Testing Program (VFTP) A.16

A.1

~~3/4.7 PLANT SYSTEMS~~

~~LIMITING CONDITION FOR OPERATION (Continued)~~

Add VFTP Description

e. With the toilet area exhaust duct isolation valve inoperable, restore the inoperable valve 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.

SURVEILLANCE REQUIREMENTS

4.7.6.1 ~~The~~ Control Room ~~Emergency Ventilation System~~ shall be ~~demonstrated~~ OPERABLE:

See Discussions of Change for specification 3.7.11, "CREVS"

a. At least once per 62 days, on a **STAGGERED TEST BASIS**, by deenergizing the backup Control Room air conditioner and verifying that the emergency Control Room air conditioners maintain the air temperature ≤ 104°F for at least 12 hours when in the recirculation mode.

b. At least once per 31 days by initiation flow through each HEPA filter and charcoal adsorber train and verifying that each train operates for at least 15 minutes.

5.5.11 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:

5.5.11, b) 1. Verifying that the charcoal adsorbers remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

shows a penetration and system bypass ≤ 1.0%

5.5.11.a 2. Verifying that the HEPA filter banks remove ≥ 99% of the DOP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

A.23

5.5.11.c 3. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained from an adsorber tray or from an adsorber test tray in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). A.23

2

INSERT - VFTP Description
(page 2 of 15)

5.5.11 Ventilation Filter Testing Program (VFTP) (A.16)

A program shall be established to implement the following required testing of Engineered Safety Feature (ESF) filter ventilation systems ~~at the frequencies specified in and~~ in accordance ~~with Regulatory Guide 1.52, Revision 1, ANSI N510-1975, or the Ventilation Filter Testing Program, at the system flowrate specified below ± 10%~~. (2.)

CREVS Portion of VFTP

Specification 5.0

Insert 5.5.11
(page 3 of 15)

A.16

5.5.11 VFTP

A.1

~~3/4.7 PLANT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

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

5.5.11 ~~e~~. After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained from an adsorber tray or from an adsorber test tray in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.).

A.23

2

5.5.11 Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow of 2000 cfm ± 10%.

5.5.11.b

shows penetration and system bypass of ≤ 1.0%

A.23

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

5.5.11.d ~~1~~. Verifying that the pressure drop across the combined HEPA filters (prefilters, and charcoal adsorber banks is < 4 inches Water Gauge while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

A.16

2

2. Verifying that on a control room high radiation test signal, the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks and that both of the isolation valves in each inlet duct and common exhaust duct, and the isolation valve in the toilet area exhaust duct, close.

A

see Discussion of Changes for Specification 3.7.8, "CREVS"

CREVS Portion of VFTP

Specification 5.0

A.16

Insert 5.5.11
(pg 4 of 15)

5.5.11 VFTP

A.1

3/4.7 PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

5.5.11. 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter system at a flow rate of 2000 cfm ± 10%.

5.5.11.a

shows A penetration and system bypass of ≤ 1.0%

A.23

5.5.11.b 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter system at a flowrate of 2000 cfm ± 10%.

A

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP Test frequencies

A.25

ECCS portion of VFTP

Specification 5.0

Insert 5.5.11
(page 5 of 15)

5.5.11 VFTP (A.16)

~~3/4.7 PLANT SYSTEMS~~

(A.1) ~~3/4.7.7 ECCS PUMP ROOM EXHAUST AIR FILTRATION SYSTEM~~

~~LIMITING CONDITION FOR OPERATION~~

3.7.7.1 The ECCS Pump Room Exhaust Ventilation System shall be **OPERABLE** with one HEPA filter and charcoal adsorber train and two exhaust fans.

APPLICABILITY: **MODES** 1, 2, 3 and 4.

ACTION:

a. With one ECCS pump room exhaust 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 the ECCS exhaust 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.

see Discussion of Change for specification 3.7.10 "ECCS PREAFS"

~~SURVEILLANCE REQUIREMENTS~~

~~4.7.7.1 The ECCS Pump Room Exhaust Ventilation System shall be~~ demonstrated **OPERABLE**:

(A.1)

a. At least once per 31 days by initiating, from the Control Room, flow through the HEPA filter and charcoal adsorber train and verifying that each exhaust fan operates for at least 15 minutes.

(5.5.11) b. 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:

(5.5.11.b) 1. Verifying that the charcoal adsorbers ~~remove > 99%~~ of a ~~halogenated hydrocarbon refrigerant test~~ gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%.

(2)

shows a penetration and system bypass ≤ 1.0%

(A.23)

ECCS PREAFs Portion of VFTP

specification 5.0

Insert 5.5.11
(Pg 6 of 15)

5.5.11 VFTP (A.16)

~~3/4.7 PLANT SYSTEMS~~

SURVEILLANCE REQUIREMENTS (Continued)

(A.23)

5.5.11.a ~~e.~~ Verifying that the HEPA filter banks ~~remove ≥ 99% of the DOP when they are tested in-place in accordance~~ with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%. (shows a penetration and system bypass ≤ 1.0 %)

5.5.11.b ~~g.~~ Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.).

5.5.11.d ~~f.~~ Verifying a system flow rate of 3000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975. (2)

5.5.11 ~~g.~~ After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). (A.23)

(A.23)

5.5.11 Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers remove ~~≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 3000 cfm ± 10%. (shows a penetration and system bypass ≤ 1.0 %)

5.5.11.b

5.5.11 ~~h.~~ At least once per 18 months by verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the filter train at a flow rate of 3000 cfm ± 10%. (2)

5.5.11.d

(> prefilters, M.6)

ECCS portion of VFTP

specification 5.0

Insert 5.5.11
(page 7 of 15)

5.5.11 VFTP (A.16) (A.1)

~~3/4.7 PLANT SYSTEMS~~

SURVEILLANCE REQUIREMENTS (Continued)

5.5.11 e. 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%. (5.5.11.a)

shows, a penetration and system bypass ≤ 1.0% (A.23)

5.5.11 f. 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 tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 3000 cfm ± 10%. (5.5.11.b)

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510-1975. (L.6)

(2)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies. (A.25)

Penetration Room EAFS Portion of VFTP

Specification 5.0

Insert 5.5.11 (PAGE 8 of 15)

A.16

5.5.11 VFTP

A.1

~~3/4.6 CONTAINMENT SYSTEMS~~

~~3/4.6.6 PENETRATION ROOM EXHAUST AIR FILTRATION SYSTEM~~

LIMITING CONDITION FOR OPERATION

3.6.6.1 Two independent containment penetration room exhaust air filter trains shall be **OPERABLE**.

APPLICABILITY: **MODES** 1, 2, and 3.

ACTION: With one containment penetration room exhaust air filter train inoperable, restore the inoperable train 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.

see Discussion of change for specification 3.7.12, "Penetration Room Exhaust Air Filtration"

SURVEILLANCE REQUIREMENTS

~~4.6.6.1 Each containment penetration room exhaust air filter train shall be demonstrated OPERABLE:~~

a. At least once per 31 days on **STAGGERED TEST BASIS** by initiating, from the control room, flow through the HEPA filter and charcoal adsorber train and verifying that the train operates for at least 15 minutes.

5.5.11 ~~b~~. 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:

2

5.5.11.b

1. Verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

show a penetration and system bypass of ≤1%.

A.23

PREFS Portion of VFTP

specification 5.0

Insert 5.5.11
(page 9 of 15)

5.5.11 VFTP (A.1)

(A.16) shows a penetration and system bypass ≤ 1.0%

3/4.6 CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

5.5.11.a a. Verifying that the HEPA filter banks remove > 99% of the DOP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

5.5.11.c b. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained from an adsorber tray or from an adsorber test tray in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). (A.23)

(2)

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

5.5.11 ~~e~~. After every 720 hours of charcoal adsorber operation by:

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained from an adsorber tray or from an adsorber test tray in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). (A.23)

PREFS Portion of VFTP

Insert 5.5.11
(page 10 of 15)

specification 5.0

5.5.11 VFTP

A.1

A.16

~~3/4.6 CONTAINMENT SYSTEMS~~

SURVEILLANCE REQUIREMENTS (Continued)

5.5.11

Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by verifying that the charcoal adsorbers remove ≥ 99% of the halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

5.5.11.b

M.6

shows a penetration and system bypass ≤ 1.0%

A.23

5.5.11 a. At least once per 18 months by:

prefilters

5.5.11.d

1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 6 inches Water Gauge while operating the filter train at a flow rate of 2000 cfm ± 10%.

2. Verifying that the filter train starts on Containment Isolation Test Signal.

see Discussion of Change for Spec 3.7.12, "PREFS"

5.5.11

5.5.11.a

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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

shows a penetration and system bypass ≤ 1.0%

A.23

5.5.11 c. 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the filter train at a flow rate of 2000 cfm ± 10%.

5.5.11.b

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510 1975.

L.6

2

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

A.25

SFP Ventilation Portion of VFTP

Specification 5.0

Insert 5.5.11
(page 11 of 15)

A.16

5.5.11 Ventilation Filter Testing Program (VFTP)

3/4.9 REFUELING OPERATIONS

A.1

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11 ~~f.~~ 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:

A.23

5.5.11.b ~~f.~~ Verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place ~~in accordance with~~ Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

shows a penetration and System bypass ≤ 1.0%

5.5.11.a ~~f.~~ Verifying that the HEPA filter banks ~~remove ≥ 99% of the DOP~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

2

5.5.11.c ~~f.~~ Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.).

5.5.11.d ~~f.~~ Verifying a system flow rate of 32,000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975.

SFP Ventilation System portion of VFTP

Specification 5.0

Insert 5.5.11
(Page 12 of 15)

5.5.11 VFTP (A.16) (A.1)

3/4.9 REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

5.5.11 e. After every 720 hours of charcoal adsorber operation by: (A.23)

5.5.11.c Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 90% for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.).

5.5.11 5.5.11.b Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers ~~remove~~ ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

show a penetration and system bypass ≤ 1.0%

(A.23)

5.5.11 e. At least once per 18 months by: (prefilters) (M.6)

5.5.11.d 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

2. Verifying that each exhaust fan maintains the spent fuel storage pool area at a measurable negative pressure relative to the outside atmosphere during system operation.

see Discussion of change to specification 3.7.11 "SFP Ventilation System"

5.5.11 e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks ~~remove~~ ≥ 99% of the DOP

5.5.11.a when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%.

SFP Ventilation System portion of VFTP

Specification 5.0

Insert 5.5.11
(Page 12a of 15)

5.5.11 VFTP (A.16) (A.1)

~~3/4.9 REFUELING OPERATIONS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

shows a penetration or system bypass ≤ 1.0% (A.23)

5.5.11 ~~f.~~ 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm ± 10%. (5.5.11.b)

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510-1975. (L.6)

(1)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies. (2)

(A.25)

IRS portion of VFTP

Specification 5.0

Insert 5.5.11
(page 13 of 15)

5.5.11 Ventilation Filter Testing Program (VFTP) (A.16)

~~3/4.6 CONTAINMENT SYSTEMS~~

~~3/4.6.3 IODINE REMOVAL SYSTEM~~ (A.1)

Add VFTP Description

~~LIMITING CONDITION FOR OPERATION~~

3.6.3.1 Three independent containment iodine filter trains shall be **OPERABLE**.

APPLICABILITY: **MODES 1, 2, 3 and 4.**

ACTION: With one iodine filter train inoperable, restore the inoperable train 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.

see Discussion of Change for specification 3.6.8, "IRS"

~~SURVEILLANCE REQUIREMENTS~~

~~4.6.3.1 Each iodine filter train shall be demonstrated OPERABLE:~~

a. At least once per 31 days on a **STAGGERED TEST BASIS** by initiating, from the control room, flow through the HEPA filter and charcoal adsorber train and verifying that the train operates for at least 15 minutes.

5.5.11.b b. At least once per ~~**REFUELING INTERVAL**~~ 24 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:

5.5.11.b ~~1.~~ Verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%.

2

5.5.11.a ~~2.~~ Verifying that the HEPA filter banks remove ≥ 99% of the DOP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%.

shows a penetration and system bypass ≤ 1.0%

(A.23)

IRS Portion of VFTP

specification 5.0

Insert 5.5.11
(page 14 of 15)

5.5.11 VFTP

~~3/4.6 CONTAINMENT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

A.1

5.5.11.c

c. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 95% for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.).

A.23

4. Verifying a filter train flow rate of 20,000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975.

5.5.11 d. After every 720 hours of charcoal adsorber operation by:

Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained ~~from an adsorber tray or from an adsorber test tray~~ in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of ≥ 95% for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.).

A.23

A

5.5.11.c

5.5.11

Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers ~~remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas~~ when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%.

5.5.11.b

A.23

shows a penetration and system bypass ≤ 1.0%

IRS Portion of VFTP

Insert 5.5.11
(page 15 of 15)

specification 5.0

5.5.11 VFTP

A.1

~~3/4.6 CONTAINMENT SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

5.5.11 d. At least once per ~~REFUELING INTERVAL~~ (24 months) by:

5.5.11.d 1. Verifying that the pressure drop across the combined HEPA filters, prefilters, and charcoal adsorber banks is < 6 inches Water Gauge while operating the filter train at a flow rate of 20,000 cfm ± 10%. M.6 A.2

2. Verifying that the filter train starts on the appropriate ESFAS test signal. (see Discussion of Change for specification 3.6.8, "IRS")

5.5.11 e. 5.5.11.a 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%. A.3

5.5.11 f. 5.5.11.b 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 Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm ± 10%. shows a penetration and system bypass ≤ 1.0% A.23

g. After maintenance affecting the air flow distribution by testing in-place and verifying that the air flow distribution is uniform within ± 20% of the average flow per unit when tested in accordance with the provisions of Section 9 of "Industrial Ventilation" and Section 8 of ANSI N510-1975. L.6 A.4

The provisions of SR 3.0.2 and 3.0.3 are applicable to the VFTP Test Frequencies

A.25 A.5

Insert 5.5.13
(pg 1 of 2)

5.5.13 Diesel Fuel Oil Testing Program

(A.1) See Discussion of Change for Specification 3.8.1, "A.C. Sources - Operating"

~~3/4.8 ELECTRICAL POWER SYSTEMS~~

~~SURVEILLANCE REQUIREMENTS (Continued)~~

2. For the 69 kV SMECO offsite power circuit, within one hour of substitution for a 500 kV offsite power circuit, and at least once per 8 hours thereafter during use by verifying correct breaker alignments and indicated power availability; and

b. Demonstrated **OPERABLE** at least once per **REFUELING INTERVAL** during shutdown by manually transferring unit power supply from the normal circuit to the alternate circuit.

4.8.1.1.2 Each diesel generator shall be demonstrated **OPERABLE**:

a. At least once per 31 days on a **STAGGERED TEST BASIS** by:

1. Verifying the fuel level in the day fuel tank.

2. Verifying the fuel level in the fuel storage tank.

3. Verifying the fuel transfer pump can be started and transfers fuel from the storage system to the day tank.

4. Verifying the diesel starts and achieves a generator voltage and frequency of 4160 ± 420 volts and 60 ± 1.2 Hz, respectively.

5. Verifying the generator is synchronized, loaded to ≥ 2700 kW, and operates for ≥ 60 minutes.

6. Verifying the diesel generator is aligned to provide standby power to the associated emergency busses.

7. Verifying that the automatic load sequencer timer is **OPERABLE** with the interval between each load block within ± 10% of its design interval.

b. ~~At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank is within the acceptable limits specified in Table 1 of ASTM D975-81 when checked for viscosity, water and sediment.~~

Insert 5.5.13 (M.4) (L.3) (2)

* All engine starts for the purpose of this Surveillance Requirement may be preceded by an engine prelube period and/or other warmup procedures recommended by the manufacturer so that mechanical wear and stress on the diesel engine is minimized.

specification 5.0

Containment Leak Rate Testing Program

Insert 5.5.16
page 1 of 2

3/4.6 **CONTAINMENT SYSTEMS**

3/4.6.1 PRIMARY CONTAINMENT

CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 Primary **CONTAINMENT INTEGRITY** shall be maintained.* *

APPLICABILITY: **MODES** 1, 2, 3 and 4.

ACTION: Without primary **CONTAINMENT INTEGRITY**, restore **CONTAINMENT INTEGRITY** within one hour or be in at least **HOT STANDBY** within the next 6 hours and in **COLD SHUTDOWN** within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.1 Primary **CONTAINMENT INTEGRITY** shall be demonstrated:

a. At least once per 31 days by verifying that all penetrations** not capable of being closed by **OPERABLE** containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions, except for valves that are open under administrative control as permitted by Specification 3.6.4.1. *

b. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3.

c. By verifying that the equipment hatch is closed and sealed, prior to entering **MODE** 4 following a shutdown where the equipment hatch was opened, by conducting a Type B test per 10 CFR Part 50, Appendix J.

d. INSERT A

L.4 | A

See Discussion of Change for Specification 3.6.3, "Containment Isolation Valves"

See Discussion of Change for Specification 3.6.1, "Containment"

* Hydrogen purge containment vent isolation valves shall be opened for containment pressure control, airborne radioactivity control, and surveillance testing purposes only.

The shutdown cooling isolation valves may be opened when the RCS temperature is below 300°F to establish shutdown cooling flow.

** Except valves, blind flanges, and deactivated automatic valves which are located inside the containment and are locked, sealed, or otherwise secured in the closed position. These penetrations shall be verified closed during each **COLD SHUTDOWN** except that such verification need not be performed more often then once per 92 days.

NRC 96-042

Containment Leakage Rate Testing Program

Specification 5.0

Insert 5.5.16
(page 2 of 2)

Insert A

By verifying that the containment purge blind flanges are installed and sealed prior to entering Mode 4 following a shutdown where the blind flanges were removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. If only one blind flange was removed, only that blind flange must be tested unless testing is required by Technical Specification 4.6.1.2.

L.4 | 2

NRC 96-042

This page intentionally left blank

specification 5.0

~~6.0 ADMINISTRATIVE CONTROLS~~

A.1

5

6.6 REPORTING REQUIREMENTS

The following reports shall be submitted in accordance with 10 CFR 50.4.

5

6.6.1 Occupational Radiation Exposure Report*

A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures > 100 mrem/yr and their associated man rem exposure according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). This tabulation supplements the requirements of 10 CFR 20.2206. The dose assignment to various duty functions may be estimates based on pocket dosimeter, electronic personal dosimeter or thermoluminescent dosimeter. Small exposures totalling < 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources should be assigned to specific major work functions. The report shall be submitted prior to ~~March 31~~ April 30 of each year.

A.18

5

6.6.2 Annual Radiological Environmental Operating Report*

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the ODCM, and in 10 CFR Part 50, Appendix I, Sections IV.B.2, IV.B.3 and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. The report shall identify the TLD results that represent collocated dosimeters in relation to the NRC TLD program, and the exposure period associated with each result. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

both units

A.1

* A single submittal may be made for ~~Calvert Cliffs~~. The submittal should combine those sections that are common to both units. Occupational dose from the Independent Spent Fuel Storage Installation will be reported separately.

Note to specifications 5.6.1 5.6.2

Note to specification 5.6.1

page 50 of 57

Specification 5.0

~~6.0 ADMINISTRATIVE CONTROLS~~

A.1

5

6.6.3 Radioactive Effluent Release Report*

as modified by approved exemptions

2

The Radioactive Effluent Release Report covering the operation of the unit shall be submitted in accordance with 10 CFR 50.36a (i.e., ~~time between submittal of the reports must be no longer than 12 months~~)**. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the units. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I, Section IV.B.1.

LA.8

Licensee initiated major changes to the Radioactive Waste Systems (liquid, gaseous and solid) shall be reported to the Commission in the Radioactive Effluent Release Report for the period in which the modification to the waste system is completed. The discussion of each change shall contain:

a. A description of the equipment, components and processes involved; and

b. Documentation of the fact that the change, including the safety analysis, was reviewed and found acceptable by the onsite review function.

The report shall also include changes to the ODCM, in accordance with Specification 6.5.1.c

5

6.6.4 Monthly Operating Report

Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis, no later than the 15th of each month following the calendar month covered by the report.

A.1

For both units, the submittal should combine those sections that are common to both units.

note to 5.6.3

* A single submittal may be made for Calvert Cliffs since the Radwaste systems are common to both units.

** In lieu of submission with the Radioactive Effluent Release Report, Sr^{89} and Sr^{90} analyses results may be submitted in a supplementary report within 120 days after submittal of the Radioactive Effluent Release Report.

LA.8

Insert 5.6.7 PAM Report (Page 1 of 4) Specification 5.0

(See Discussion of changes for Specification 3.3.10, "PAM Instrumentation," in Section 2.3,

3/4.3 INSTRUMENTATION

TABLE 3.3-6 (Continued)

TABLE NOTATION

* Alarm setpoint to be specified in a controlled document (e.g., setpoint control manual).

ACTION STATEMENTS

ACTION 14 - 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.

(2)

ACTION 16 - 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 30 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, initiate the preplanned alternate method of monitoring the appropriate parameter(s), within 72 hours, and:

1) either restore the inoperable channel(s) to OPERABLE status within 7 days of the event, or

5.6.7

2) prepare and submit a Special Report to the Commission pursuant to 10 CFR 50.4 within 30 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.

14 days after Condition Both of LCO 3.3.10 is entered

L.5 one channel inoperable

M.7 two channels inoperable

Insert 5.6.7 (Page 2 of 4) Specification 5.0

See Discussion of Changes for Specification 3.3.10, "PAM Instrumentation," in Section 3.3.

TABLE 3.3-10 (Continued)

ACTION STATEMENTS

ACTION 31 - With the number of OPERABLE post-accident monitoring channels less than required by Table 3.3-10, either restore the inoperable channel to OPERABLE status within 30 days or be in HOT SHUTDOWN within the next 12 hours.

ACTION 32 - With the number of OPERABLE post-accident monitoring channels one less than the Minimum Channels OPERABLE requirement in Table 3.3-10, operation may proceed provided the inoperable channel is restored to OPERABLE status at the next outage of sufficient duration.

ACTION 33 - With the number of OPERABLE post-accident monitoring channels two less than required by Table 3.3-10, either restore one inoperable channel to OPERABLE status within 30 days or be in HOT SHUTDOWN within the next 12 hours. (2)

ACTION 34 - With the number of OPERABLE post-accident monitoring channels one less than the Minimum Channels OPERABLE requirement in Table 3.3-10, either restore the system to OPERABLE status within 7 days if repairs are feasible without shutting down or prepare and submit a Special Report to the Commission pursuant to 10 CFR 50.4 within ~~30 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. 5.6.7 (1) (1.5)

ACTION 35 - With the number of OPERABLE channels two less than required by Table 3.3-10, either restore the inoperable channel(s) to OPERABLE status within 48 hours if repairs are feasible without shutting down or:

1. Initiate an alternate method of monitoring for core and Reactor Coolant System voiding;

2. Prepare and submit a Special Report to the Commission pursuant to 10 CFR 50.4 within ~~30 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; and (1) (M.7)

3. Restore the system to OPERABLE status at the next scheduled refueling.

14 days after Condition B or G of LCO 3.3.10 is entered

Insert 5.6.7 PAM Report (Page 3 of 4)

Specification 5.0

See Discussion of changes for Specification 3.3.10, "PAM Instrumentation," in Section 3.3

3/4.6 CONTAINMENT SYSTEMS

3/4.6.5 COMBUSTIBLE GAS CONTROL

Hydrogen Analyzers

LIMITING CONDITION FOR OPERATION

3.6.5.1 Two independent containment hydrogen analyzers shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

a. With one hydrogen analyzer inoperable, restore the inoperable analyzer to OPERABLE status within 30 days or:

1. Verify containment atmosphere grab sampling capability and prepare and submit a special report to the Commission pursuant to Specification 6.9.2 within the following 30 (14) (M.7) days, outlining the action taken, the cause for the inoperability, and the plans and schedule for restoring the system to OPERABLE status, or

5.6.7

2. Be in at least HOT STANDBY within the next 6 hours.

b. With both hydrogen analyzers inoperable, restore at least one inoperable analyzer to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours.

c. Specification 3.0.4 is not applicable to this requirement.

A

SURVEILLANCE REQUIREMENTS

4.6.5.1.1 Each hydrogen analyzer shall be demonstrated OPERABLE at least bi-weekly on a STAGGERED TEST BASIS by drawing a sample from the Waste Gas System through the hydrogen analyzer.

4.6.5.1.2 Each hydrogen analyzer shall be demonstrated OPERABLE at least once per 92 days on a STAGGERED TEST BASIS by performing a CHANNEL CALIBRATION using sample gases in accordance with manufacturers' recommendations.

INSERT 5.6.7

A.15

A.17

1 4

5.6.7 Post-Accident Monitoring Report

1 1

When a report is required by Condition B or G of LCO 3.3.10, "Post Accident Monitoring Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

A.6 Current Technical Specifications 6.5.2 and 6.5.3 contain a footnote which allows the details of the Primary Coolant Sources Outside Containment Program to be maintained in plant operation manuals (e.g., chemistry procedures, training instructions, maintenance procedures, Emergency Response Plan Implementation Procedures, etc.). Improved Technical Specifications 5.5.2 and 5.5.3 will not contain this footnote. It is not required that the program description in the Administrative Controls section contain this information. This information, if desired, can be listed in the specific program. The program can reference procedures, instructions, etc., to provide a complete description of the provisions establishing the requirements of the program. This change is consistent with NUREG-1432.

A.7 Current Technical Specification 6.5.4.d requires proposed changes to the Technical Specifications incorporated in the license, or proposed changes to the UFSAR or Bases that involve an unreviewed safety question, to be approved by the Nuclear Regulatory Commission (NRC) prior to implementation. Improved Technical Specification 5.5.14.d replaces the above situations that would require NRC pre-approval prior to implementation with reference to Specification 5.5.14.b. Specification 5.5.14.b essentially repeats this information. Therefore, referencing other sections that contain duplicate information is considered an administrative change. This change is consistent with NUREG-1432.

A.8 The proposed change adds a description of the Concrete Containment Tendon Surveillance Program to the Technical Specifications (ITS 5.5.6). Adding a description of requirements which are located in CTS constitute an administrative change. This program will contain controls for monitoring tendon degradation and will essentially consist of the Surveillance Requirements (SRs) from CTS 3.6.1.6. Changes to these requirements are described in a movement of details discussion of change. This change is administrative and is consistent with NUREG-1432.

A.9 Current Technical Specification SR 4.6.1.6.4 requires a report to be sent to the NRC describing any abnormal degradation of the containment structure detected during the performances of the Tendon Surveillances. The proposed change will relocate this requirement to Chapter 5.0 (ITS 5.6.9) as the Tendon Surveillance Report. The change also references the tests in the Pre-Stressed Concrete Containment Tendon Surveillance Program, rather than referencing CTS 3.6.1.6 Surveillances. The movement of requirements within the Technical Specifications and providing proper references constitute an administrative change. This change is consistent with NUREG-1432.

A10 Current Technical Specification 4.0.5 provides for inservice inspection and testing of American Society of Mechanical Engineers (ASME) Code Class 1, 2, and 3 components. The proposed change will move these requirements to a program in the Administrative Controls section of the Technical Specifications (ITS 5.5.8). Any changes to the requirements will be discussed in other discussion of changes. This movement of requirements within the Technical Specifications constitutes an administrative change. This change is consistent with NUREG-1431.

A.11 Current Technical Specification 4.0.5.d requires the performance of the inservice inspection and testing activities be in addition to other specified SRs. The proposed change will delete this requirement. Specifically stating that the requirements of ASME Section XI are in addition to the Technical Specifications is not required. The plant is required by regulation to comply with the ASME Codes as well as the Technical Specifications. The areas in the

A.17 The proposed change will add a requirement to submit a Post-Accident Monitoring Report (ITS 5.6.7) if the post-accident monitoring instrumentation cannot be restored within a certain amount of time. This addition applies to those post-accident monitoring instruments where a report is not currently required. The Discussion of Changes justifying the more or less restrictive changes regarding this report, are provided in the Discussion of Changes for ITS 3.3.10. Therefore, this change is administrative and consistent with NUREG-1432. For those post-accident monitoring instruments that currently require a report, justifications for changes in the report are provided in Discussion of Changes M.7 and L.5 below.

A.18 Current Technical Specification 6.6.1 requires the Occupational Radiation Exposure Report to be submitted to the NRC prior to March 31 of each year. Improved Technical Specification 5.6.1 will revise the date from March 31 to April 30. This change is administrative because the Frequency of the report is unchanged; it is still required annually. This change is consistent with NUREG-1432.

A.19 Unit 2 CTS 4.4.5.3.a contains a footnote that modifies the steam generator inspection frequency for Unit 2, Cycle 9. This footnote will not be in the ITS. Cycle 9 has been completed. Removing a footnote which is no longer applicable is an administrative change.

A.20 Current Technical Specifications 3.11.1.1 and 3.11.1.2 are being incorporated into the Explosive Gas and Storage Tank Radioactivity Monitoring Program. Improved Technical Specification 5.5.12 adds the descriptive information which describes the requirements of the program. Surveillance Requirements 3.0.2 and 3.0.3 will be applicable to the Surveillance frequencies in the program, as they are to the CTS requirements. Since this change does not technically change any of the current requirements, it is considered administrative. The relocation of these requirements is described in a movement of information discussion of change. This change is consistent with NUREG-1432.

A.21 Current Technical Specification 4.0.5.a lists specific information concerning the requirements for Section XI of the ASME Boiler and Pressure Vessel Code, and references to the 10 CFR Part 50 Code requirements related to inservice testing. The proposed change will delete this information. This is acceptable because restating the Code of Federal Regulation requirements in Technical Specifications is redundant and unnecessary. This change is consistent with NUREG-1432.

A.22 The change proposes to add a requirement for the Safety Function Determination Program to the Administrative Controls section of the Technical Specifications (ITS 5.5.15). This program will ensure a loss of safety function is detected and appropriate actions taken. This program is required by ITS LCO 3.0.6, which allows supported system Actions to not be entered immediately when support system Actions are entered. This is allowed because the Safety Function Determination Program will evaluate any loss of safety function and require appropriate actions to be taken. The addition of ITS LCO 3.0.6 is described in a less restrictive discussion of change in Specification 3.0 (Discussion of Change L.2). This change in Section 5.0 is considered administrative because the Safety Function Determination Program, required by ITS LCO 3.0.6 is described in the Discussion of Changes for ITS LCO 3.0.6. This change is consistent with NUREG-1432.

A.23 The CTS 3.6.3, 3.6.3.1, 3.6.7, 3.7.7, and 3.9.12 requirements for charcoal absorber and high efficiency particulate air filter bank testing requires each bank to remove 99% of the test gas

or particulates, respectively. Improved Technical Specifications 5.5.11.a and 5.5.11.b require each bank to show a penetration and system bypass of < 1.0%. The CTS requires the measurement of the amount removed, while the ITS requires the measurement of the amount that is not removed. Both these requirements can be directly correlated to one another. Therefore, this change is administrative because both requirements are essentially equivalent. In addition, CTS 3.6.3, 3.6.3.1, 3.6.7, 3.7.7, and 3.9.12 requirements for laboratory analysis requires the sample to be obtained from an adsorber tray or an adsorber test tray. Since these are the only two locations to obtain samples, it is not necessary to state this in the ITS. Therefore, the ITS does not include this detail and this change is considered administrative. These changes are consistent with NUREG-1432.

A.24 The requirement in CTS 4.4.10.1.1 requires the reactor coolant pump flywheel to be inspected per the recommendations of Regulatory Guide 1.14. The proposed change moves this requirement to the Administrative Controls section of the ITS (ITS 5.5.7). This change is considered administrative because the requirements in the CTS will remain intact. This change is consistent with NUREG-1432.

A.25 A requirement which states that the provisions of ITS SRs 3.0.2 and 3.0.3 are applicable to the VFTP Test Frequencies was added. These requirements are currently applicable to CTS 3.6.3.1, 3.6.6, 3.7.6, 3.7.7, and 3.9.12 Surveillances. Therefore, since these requirements are currently applicable to the CTS, the change is administrative in nature. This change is consistent with NUREG-1432.

A.26 Not used.

A.27 Current Technical Specifications 6.2.2.b and 6.2.2.c require at least a certain number of non-licensed Operators to be assigned to shift crews and licensed Operators to be present in the Control Room during specific plant operation. Improved Technical Specification 5.2.2 will not contain this requirement. These requirements are being deleted because they are duplicative of regulations. Title 10 of the Code of Federal Regulations 50.54(m)(2)(iii) and 10 CFR 50.54(k) provide the same requirements. The existing requirements will be met through compliance with these regulations and are not required to be reiterated in the ITS. This change is administrative because no requirements are being changed. This change is consistent with NUREG-1432, as modified by Generic Change TSTF-121.

A.28 Unit 1 Specification 6.2.2.i states, "Those licensed operators counted toward minimum shift crew composition required by 10 CFR 50.54(m)(2)(i) shall be licensed on both units." Unit 2 Specification 6.2.2.i, "Unit Staff," states, "Licensed operators shall be licensed for both units." In the ITS, the Unit 1 wording shall be used. Both the Unit 1 and Unit 2 requirements are the same, as the section of the Administrative Controls containing the requirements describes minimum crew composition. Also, all of the Calvert Cliffs licensed operators are licensed for both units. A change which is consistent with the current application of a requirement is considered administrative.

A.29 Unit 2 CTS 4.4.10.1.1 contains a footnote that allows the reactor coolant pump flywheel inspections for the first inservice inspection interval to be completed during Unit 2, refueling outage number 9. This footnote is being deleted. Unit 2, refueling outage number 9 has been completed and this note is not longer needed.

A.30 Current Technical Specification 4.4.5.5 requires that steam generator inspection reports be submitted pursuant to 10 CFR 50.4. Improved Technical Specification 5.6.9, "Steam Generator Tube Inspection Report, "will not reference 10 CFR 50.4. Title 10 of the Code of Federal Regulations 50.4 contains general requirements on correspondence and applies whether or not it is referenced. Eliminating a reference to a regulation is considered administrative.

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 Not used.

M.2 The proposed change incorporates the following new programs into the Technical Specifications.

- Component Cyclic or Transient Limit (ITS 5.5.5) - This program is set up to provide controls to track the UFSAR-identified cyclic and transient occurrences to ensure that components are maintained within the design limits. This program currently exists at Calvert Cliffs.

- Secondary Water Chemistry Program (ITS 5.5.10) - This program provides controls for monitoring secondary water chemistry to inhibit steam generator tube degradation and low pressure turbine disc stress corrosion cracking. This type of monitoring currently exists at Calvert Cliffs.

The addition of these new requirements to Technical Specifications is considered a more restrictive change with no adverse impact on plant safety. This change is consistent with NUREG-1432.

M.3 Improved Technical Specification 5.1.1 adds requirements to CTS 6.1.1 which require the Plant Manager or his designee to approve tests, experiments, or modification to systems or equipment that affect nuclear safety prior to implementation. The proposed change also adds a requirement that the Control Room Supervisor shall be responsible for the Control Room command function; and during his absence in Modes 1, 2, 3, or 4, a Senior Reactor Operator (SRO) will be designated to assume the Control Room command function; and during Modes 5 or 6, an SRO or a Reactor Operator will be designated to assume the Control Room command function. The addition of these new requirements to the Technical Specifications constitute a more restrictive change with no adverse impact on plant safety. This change is consistent with NUREG-1432.

M.4 Current Technical Specification SR 4.8.1.1.2.b requires that a sample from the fuel oil storage tank (stored fuel oil) be verified to be within acceptable limits. The Diesel Fuel Oil Testing Program (ITS 5.5.13) will require that a representative sample of stored fuel oil be verified to be within limits. It will also require that certain parameters be within limits prior to adding fuel oil to the fuel oil storage tanks, and that the new fuel oil meet other ASTM 2D limits after adding to the fuel oil storage tanks. Although Calvert Cliffs currently samples the new fuel oil, it is not a Technical Specification requirement. Adding new requirements to the Technical Specification is considered a more restrictive change. It will ensure the fuel oil meets proper limits, ensuring high quality fuel oil is added to the storage tanks. This change is consistent with NUREG-1432.

M.5 Not used.

M.6 Current Technical Specifications SR 4.6.3.1.d.1, 4.6.6.1.d.1, 4.7.6.1.e.1, 4.7.7.1.d, and 4.9.1.2.d.1 require a pressure drop test across the combined HEPA filters and charcoal adsorber banks every 18 months be within specified limits. Improved Technical Specification 5.5.11.d requires the test to be performed across the prefilters, in addition to the HEPA filters and charcoal adsorber banks, with no change to the current acceptance limit. This change is more restrictive on plant operations and will ensure that the filter trains are operating as designed to reduce the concentration of fission products as assumed in the accident analysis.

M.7 Current Technical Specification 3/4.6.5.1 Action a.1 requires a special report to be submitted to the NRC when one containment hydrogen analyzer is inoperable and not restored to operable status within the allowed restoration time. Improved Technical Specification 5.6.7 will require the special report to be submitted within 14 days, instead of the current 30 days, after the restoration time for one inoperable hydrogen analyzer has expired. In addition, CTS 3/4.3.3.1 Action 30 and CTS 3/4.3.3.6 Action 35 require that, if two containment area high range monitors or reactor vessel water level post-accident monitoring (PAM) instruments are inoperable and not restored to Operable status within the allowed restoration time, a special report be submitted to the NRC within 30 days after the event (i.e., after the instruments become inoperable). Improved Technical Specification 5.6.7 will require the special report to be submitted 14 days after the restoration time has expired. In CTS 3/4.3.3.1 Action 30 and ITS 3.3.10 Action C, the time provided to restore a containment area high range monitor when both are inoperable is 7 days. Thus, ITS 5.6.7 effectively changes the due date of the special report when both containment high range monitors are inoperable from 30 days after the event to 21 days after the event. In ITS 3.3.10, the restoration time of two inoperable reactor vessel water level instruments has been extended from 48 hours to 7 days. Thus, ITS 5.6.7 also effectively changes the due date of the special report when both reactor vessel water level instruments are inoperable from 30 days after the event to 21 days after the event. These changes will ensure the NRC is properly notified in a timely manner when PAM instrumentation is not restored within the Technical Specification allowed restoration time, and of the actions being taken to restore or compensate for the inoperability. This change is a more restrictive change and is consistent with NUREG-1432.

TECHNICAL CHANGES - RELOCATIONS

None

TECHNICAL CHANGES - MOVEMENT OF INFORMATION TO LICENSEE-CONTROLLED DOCUMENTS

LA.1 Current Technical Specification 6.2.2.e, which specifies the requirements of the fire brigade, is being moved to the Fire Protection Program. All fire protection-related Technical Specifications are being relocated from the Technical Specifications into the Fire Protection Program which is incorporated by a reference into the UFSAR, as allowed in Generic Letter 88-12. These requirements can be adequately controlled in the Fire Protection Program. Any changes to the Fire Protection Program will require a 10 CFR 50.59 evaluation. This change is consistent with NUREG-1432.

LA.2 Current Technical Specification 6.2.2.f requires the operations manager to hold or have held an SRO license at Calvert Cliffs, and that the General Supervisor, Shift Supervisor, and Control Room Supervisor hold an SRO license. The proposed change will remove the requirements for the Shift Supervisor and Control Room Supervisor to hold an SRO license as this requirement is stated in the regulations. The requirement for the General Supervisor-Nuclear Plant Operations to hold an SRO license will remain in the Technical Specifications. This change is consistent with NUREG-1432.

LA.3 Current Technical Specification 6.5.1.c.2 requires changes to the Offsite Dose Calculation Manual (ODCM) become effective upon review by the onsite review function and approval by the Plant Manager. The proposed change will move the requirement that changes to the ODCM be reviewed by the onsite review committee to the QA Policy. The requirement that changes to the ODCM be subject to the onsite review function is not required to be in the Technical Specifications because changes to the ODCM are currently subject to the onsite review function per the QA Policy, which describes the duties of the onsite review committee. Therefore, any changes to the functions of the onsite review committee will require a 10 CFR 50.54(a) evaluation. These evaluations ensure that any changes to these requirements will be appropriately reviewed. This change is consistent with NUREG-1432.

LA.4 Current Technical Specification 3.6.1.6, "Containment Structural Integrity," SRs, and figures are being relocated to the Technical Requirements Manual (TRM). Note that the Unit 1 and Unit 2 requirements differ. The Unit 1 and Unit 2 containments are identical and were constructed at the same time. Testing on the Unit 1 containment is representative of the condition of the Unit 2 containment. Therefore, the CTS contains the majority of the testing requirements in the Unit 1 Technical Specifications. What testing will be performed on each containment will be described in the TRM. The description of the program is being incorporated into Chapter 5.0. The requirements of ITS 5.5.6 are adequate to ensure the containment structural integrity is maintained. Improved Technical Specification 5.5.6 provides regulatory control over the containment tendons, end anchorages, and adjacent concrete surfaces, and containment surface limitations and surveillances proposed to be relocated. As a result, the requirements proposed to be relocated are not required to be included in the ITS to ensure the containment structural integrity is maintained. The TRM will be incorporated by reference into the UFSAR at ITS implementation. Any changes to these relocated requirements will be controlled by the provisions of 10 CFR 50.59. This change is consistent with NUREG-1432.

LA.5 Current Technical Specification 3.11.1.1 and 3.11.1.2 requirements are being relocated to the TRM. The requirements of ITS 5.5.12 are adequate to ensure the quantity of radioactivity in

gas storage tanks and the explosive gas mixtures in the Waste Gas Holdup System are maintained within limits. Improved Technical Specification 5.5.12 provides regulatory control over the limitations and surveillances proposed to be relocated. As a result, the requirements proposed to be relocated are not required to be included in the ITS to ensure the quantity of radioactivity in gas storage tanks and the explosive gas mixtures in the Waste Gas Holdup System are maintained within limits. The TRM will be incorporated by reference into the UFSAR at ITS implementation. Any changes to the relocated requirements will be controlled by the provisions of 10 CFR 50.59. This change is consistent with NUREG-1432.

LA.6 Not used.

LA.7 Not used.

LA.8 The parenthetical statement in CTS 6.6.3, which emphasizes the information from 10 CFR 50.36a that time between submittal of the Radioactive Effluent Release Reports must be no longer than 12 months, is being removed. This detail is duplicative of 10 CFR 50.36 and does not need to be repeated in ITS. Also, the last paragraph specifically describing the contents of the report, in footnote **, which provides an exception for the Sr^{89} and Sr^{90} analysis results, is also being moved from the Technical Specifications. To provide clarification that an exemption exists, the phase "as modified by approved exemptions" has been added to the CTS 6.6.3 markup. These details are not necessary for the ITS. They are related to ODCM requirements, and are adequately controlled by the ODCM requirements in ITS 5.5.1. Changes to the relocated requirements will be controlled by the ODCM change control process in ITS 5.5.1 or 10 CFR 50.36, as appropriate.

TECHNICAL CHANGES - LESS RESTRICTIVE

L.1 Current Technical Specification 6.2.2.d requires an individual qualified in radiation protection procedures to be onsite when fuel is in the reactor. Improved Technical Specification 5.5.2.d will allow the position to be vacant for not more than two hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position. This change is reasonable because it allows time to restore a required staffing position for unexpected absences without violating the Technical Specifications Administrative Controls section, while ensuring the position is filled in a timely manner. This change is consistent with NUREG-1432.

L.2 Current Technical Specification 4.0.5 lists requirements of the Inservice Testing Program. Improved Technical Specification 5.5.8 adds a requirement which allows the provisions of ITS SR 3.0.3 to be applicable to inservice testing activities. This requirement will allow 24 hours or up to the limit of the Frequency, whichever is less, to perform Inservice Testing if discovered that Inservice Testing requirements were not performed, instead of declaring the component inoperable. This allowance is based on consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillance, and the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements. This change is consistent with NUREG-1432.

L.3 Current Technical Specification 4.8.1.1.2.b requires a sample of diesel fuel oil to be taken every 92 days, and that the sample be within the limits specified in Table 1 of ASTM D975-81 when checked for viscosity, water, and sediment. Improved Technical Specification 5.5.13 replaces the parameters to be tested (viscosity, water, and sediment) with a total particulate concentration requirement. The ITS requires the total particulate concentration to be ≤ 10 mg/l, when determined by gravimetric analysis. Calvert Cliffs plant history has shown that the viscosity does not change over time and no additional water appears in the fuel oil storage tank over time. Additionally, ITS SR 3.8.3.3 continues to ensure that accumulated water that does appear in the tank is removed every 92 days. The current requirement to check for sediment is unnecessary with the addition of the requirement to check for particulate, since as fuel breaks down, it forms solids, which can be measured by either particulate or sediment analysis. Thus, the particulate check will determine a problem with the quality of the fuel oil at a time sooner than the sediment check.

L.4 Current Technical Specifications 4.6.1.1.c and 4.6.1.1.d require the equipment hatch to be verified closed and sealed and the containment purge blind flanges to be installed and sealed prior to entering Mode 4 (i.e., prior to the time containment integrity is required by the CTS and ITS) following a shutdown where the equipment hatch was opened or a blind flange was removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. These requirements have been deleted from the ITS since they are duplicative of requirements already contained in the CTS (and maintained in the ITS). Current Technical Specification 6.5.6 (ITS 5.5.16) requires a Containment Leakage Rate Testing Program be implemented as required by 10 CFR Part 50, Appendix J, Option B, and requires the program to be in accordance with the guidelines contained in Regulatory Guide 1.163, dated September 1995. Regulatory Guide 1.163, states that NEI 94-01, Revision 0, provides methods acceptable to the NRC for complying with 10 CFR Part 50, Appendix J, Option B. Section 10.2.1.3 of NEI 94-01 requires a Type B test to be performed prior to the time containment integrity is required, if a containment penetration is opened. Since the containment equipment hatch and the containment purge blind flanges are containment penetrations, ITS 5.5.16 already requires these penetrations to be type B tested after closure. Therefore, CTS 4.6.1.1.c and 4.6.1.1.d have been deleted because there is no need to repeat the specific requirements as separate surveillances.

L.5 Current Technical Specification 3/4.3.3.1 Action 30 and CTS 3/4.3.3.6 Action 34 require that if a containment area high range monitor or reactor vessel water level PAM instrumentation channel is inoperable and not restored to Operable status within the allowed restoration time, a special report be submitted to the NRC within 30 days after the event (i.e., after the instrument becomes inoperable). Improved Technical Specification 5.6.7 will require the special report to be submitted within 14 days after the restoration time has expired. In ITS 3.3.10, the restoration time of an inoperable instrument has been extended from 7 days to 30 days when one channel is inoperable. Thus, ITS 5.6.7 effectively changes the due date of the special report when one containment high range monitor or reactor vessel water level instrument is inoperable from 30 days after the event to 44 days after the event. This change will provide sufficient time to submit the report after the restoration time has expired. Given that the report is still required to be provided to the NRC, and actions are still required to be taken to restore the inoperable channel and compensate for the inoperability after the expiration of the restoration time, report submittal within 30 days after the event is not necessary to assure operation in a safe manner for the interval from 30 days to 44 days after the event. Additionally, there is no requirement for the NRC to approve the report.

Therefore, this change has no impact on the safe operation of the plant. This change is consistent with NUREG-1432.

L.6 Current Technical Specification 4.6.3.1.g, 4.6.6.1.g, 4.7.7.1.g, and 4.9.12.g require a flow distribution test to be performed in accordance with ANSI N510-1975, if maintenance is performed on the Iodine Removal System, Emergency Core Cooling System (ECCS) Pump Room Emergency Air Filtration System (EAFS), Penetration Room EAFS, or Spent Fuel Pool Ventilation System that affects flow distribution. Any time the operability of a system or component has been affected by repair, maintenance, or replacement of a component, post-maintenance testing is required to demonstrate operability of the system or component. After restoration of a component that caused a required SR to be failed, or after maintenance is performed that could affect a component, ITS SR 3.0.1 requires the appropriate SRs and post-maintenance tests to be performed to demonstrate the operability of the affected components. In addition, the definition of operability and ITS LCO 3.0.1 will also ensure the affected component is properly tested prior to declaring it operable. Therefore, explicit post-maintenance SRs are not required and are deleted from the Technical Specifications.

for Technical Specification SRs. The margin of safety is not affected by this change. The proposed allowance provides the opportunity to perform the Inservice Test instead of declaring the component inoperable, and possibly entering Actions when the probable result of any particular test being performed is the verification of conformance. Therefore, the change does not involve a significant reduction in a margin of safety.

Change L.3

1. **Does the change involve a significant increase in the probability or consequence of an accident previously evaluated?**

The proposed change will replace the stored fuel oil test for viscosity, water, and sediment for a stored fuel oil test for total particulates. Neither stored fuel oil, nor the associated diesel generators, are assumed to be initiators of an accident. While the diesel generators are assumed to mitigate the consequences of an accident, this change will not affect their capability since the fuel oil is still being tested, and total particulate concentration is a better indicator of fuel oil quality than sediment. In addition, plant history has shown that the viscosity does not change over time and no additional water appears in the fuel oil storage tank over time. Improved Technical Specification SR 3.8.3.3 continues to ensure that accumulated water that might appear in the tank is removed every 92 days. Therefore, this change will not increase the probability or consequences of an accident previously evaluated.

2. **Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed change will replace the stored fuel oil test for viscosity, water, and sediment for a stored fuel oil test for total particulates. This change will not physically alter the plant (no new or different type of equipment will be installed). This change will not introduce any new accident initiators. Therefore, the change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. **Does this change involve a significant reduction in a margin of safety?**

The proposed change will replace the stored fuel oil test for viscosity, water, and sediment for a stored fuel oil test for total particulates. This change does not delete the requirement to test the stored fuel oil; it only changes the parameters that are tested. The total particulate concentration is a better indicator of fuel oil quality than sediment. In addition, plant history has shown that the viscosity does not change over time and no additional water appears in the fuel oil storage tank over time. Improved Technical Specification SR 3.8.3.3 continues to ensure that accumulated water that might appear in the tank is removed every 92 days. Therefore, the change does not involve a significant reduction in a margin of safety.

Change L.4

1. **Does the change involve a significant increase in the probability or consequence of an accident previously evaluated?**

The proposed change deletes the duplicative requirements that the equipment hatch be verified closed and sealed and the containment purge blind flanges be installed and sealed prior to entering Mode 4 (i.e., prior to the time containment integrity is required by the CTS and ITS) following a shutdown where the equipment hatch was opened or a blind flange was removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. The ITS, through the requirement to

perform leakage testing in accordance with the guidelines of Regulatory Guide 1.163, already requires these tests to be performed. This change does not affect the probability of an accident. The performance of a Type B test is not an initiator of any analyzed event. The consequences of an accident will not be affected since the requirement to perform the tests is not changed. The change will not alter assumptions relative to the mitigation of an accident or transient. Therefore, this change will not involve a significant increase in the probability or consequence of an accident previously evaluated.

2. **Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed change deletes the duplicative requirements that the equipment hatch be verified closed and sealed and the containment purge blind flanges be installed and sealed prior to entering Mode 4 (i.e., prior to the time containment integrity is required by the CTS and ITS) following a shutdown where the equipment hatch was opened or a blind flange was removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. The ITS, through the requirement to perform leakage testing in accordance with the guidelines of Regulatory Guide 1.163, already requires these tests to be performed. This change will not physically alter the plant (no new or different type of equipment will be installed). The change will not introduce any new accident initiators. Therefore, the change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. **Does this change involve a significant reduction in a margin of safety?**

The proposed change deletes the duplicative requirements that the equipment hatch be verified closed and sealed and the containment purge blind flanges be installed and sealed prior to entering Mode 4 (i.e., prior to the time containment integrity is required by the CTS and ITS) following a shutdown where the equipment hatch was opened or a blind flange was removed, by conducting a Type B test per 10 CFR Part 50, Appendix J. The ITS, through the requirement to perform leakage testing in accordance with the guidelines of Regulatory Guide 1.163, already requires these tests to be performed. Therefore, the margin of safety is not affected by this change.

Change L.5

1. **Does the change involve a significant increase in the probability or consequence of an accident previously evaluated?**

The proposed change will increase the time from 30 to 44 days to submit a post-accident monitoring special report, after a required indication channel of the containment area high range monitor or reactor vessel water level instrument becomes inoperable. This increases the amount of time allowed before submitting a report by 14 days. This change will not affect the probability of an accident. The report submittal requirement is not an initiator of any analyzed event. The report is still required to be provided to the NRC, and actions are still required to be taken to restore the inoperable channel to operable status. The submittal date of the special report is not required for the mitigation of an accident. The proposed change does not significantly affect initiators or mitigation of analyzed events, and therefore, does not involve a significant increase in the probability or consequences of an accident.

2. **Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed change will increase the time from 30 to 44 days to submit a post-accident monitoring special report, after a required indication channel of the containment area high range monitor or reactor vessel water level instrument becomes inoperable. No hardware is being added as part of the proposed change. The proposed change will not introduce any new accident initiators. Therefore, the change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. **Does this change involve a significant reduction in a margin of safety?**

The proposed change will increase the time from 30 to 44 days to submit a post-accident monitoring special report, after a required indication channel of the containment area high range monitor or reactor vessel water level instrument becomes inoperable. This increases the amount of time allowed before submitting a report by 14 days. This change does not affect the safety analysis assumptions. Therefore, the change does not involve a significant reduction in a margin of safety.

Change L.6

1. **Does the change involve a significant increase in the probability or consequence of an accident previously evaluated?**

The proposed change will delete explicit post-maintenance surveillance requirements for flow distribution tests of ventilation systems. The ITS 3.0.1 Bases state that upon completion of maintenance, appropriate post-maintenance testing is required to declare equipment Operable, to include ensuring applicable Surveillances are not failed, and their most recent performance is in accordance with ITS SR 3.0.2. Some exceptions are specified for cases where plant conditions would not allow the tests to be performed. The post-maintenance tests are still required. The other Surveillance Requirements are also still required. The proposed deletion of this explicit requirement is appropriate since ITS SR 3.0.1 requires the appropriate Surveillance Requirements or post-maintenance tests to be performed to demonstrate Operability, but the explicit post-maintenance tests are not required in the Technical Specifications. Explicit post-maintenance surveillance requirements are not initiators of any analyzed event. Including the explicit post-maintenance tests for the ventilation systems is not required for the mitigation of an accident. The proposed change does not significantly affect initiators or mitigation of analyzed events, and therefore, does not involve a significant increase in the probability or consequences of an accident.

2. **Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed change will delete explicit post-maintenance surveillance requirements for flow distribution tests of ventilation systems. No hardware is being added as part of the proposed change. The proposed change will not introduce any new accident initiators. Therefore, the change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change will delete explicit post-maintenance surveillance requirements for flow distribution tests of ventilation systems. The ITS 3.0.1 Bases state that upon completion of maintenance, appropriate post-maintenance testing is required to declare equipment Operable, to include ensuring applicable Surveillances are not failed, and their most recent performance is in accordance with ITS SR 3.0.2. Some exceptions are specified for cases where plant conditions would not allow the tests to be performed. The post-maintenance tests are still required. The other Surveillance Requirements are also still required. This change does not affect the safety analysis assumptions. Therefore, the change does not involve a significance reduction in a margin of safety.

ENVIRONMENTAL ASSESSMENT

This proposed Technical Specification Changes have been evaluated against the criteria for and identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21. It has been determined that the proposed changes meet the criteria for categorical exclusion as provided for under 10 CFR 51.22(c)(9). The following is a discussion of how the proposed Technical Specification Changes meet the criteria for categorical exclusion.

10 CFR 51.22(c)(9): Although the proposed changes involve changes to requirements with respect to inspection or SRs;

(i) proposed changes involve no Significant Hazards Consideration (refer to the No Significant Hazards Considerations section of this Technical Specification Change Request),

(ii) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite since the proposed changes do not affect the generation of any radioactive effluents nor do they affect any of the permitted release paths, and

(iii) there is no significant increase in individual or cumulative occupational radiation exposure.

Accordingly, the proposed changes meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Based on the aforementioned and pursuant to 10 CFR 51.22 (b), no environmental assessment or environmental impact statement need be prepared in connection with issuance of an amendment to the Technical Specifications incorporating the proposed changes of this request.

<CTS> 5.2 Organization

<6.2.2> 5.2.2 Unit Staff (continued)

2. An individual should not be permitted to work more than 16 hours in any 24 hour period, nor more than 24 hours in any 48 hour period, nor more than 72 hours in any 7 day period, all excluding shift turnover time;

3. A break of at least 8 hours should be allowed between work periods, including shift turnover time;

4. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized in advance by the [Plant Superintendent] or his designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.

Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the [Plant Superintendent] or his designee to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

OR

<6.4.1.e> e. The amount of overtime worked by unit staff members performing safety related functions shall be limited and controlled in accordance with the NRC Policy Statement on working hours (Generic Letter 82-12).

<6.2.2.f> f. The [Operations Manager or Assistant Operations Manager] shall hold an SRO license.

<6.2.2.g> g. The Shift Technical Advisor (STA) shall provide advisory technical support to the Shift Supervisor (SS) in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

shall hold or have held a SRO license at Calvert Cliffs.

The General Supervisor - Nuclear Plant Operations

INSERT G

<CTS> 5.5 Programs and Manuals (continued)

5.5.10 Secondary Water Chemistry Program

<NEW> Spec 5.0 Doc M.2

This program provides controls for monitoring secondary water chemistry to inhibit SG tube degradation and low pressure turbine disc stress corrosion cracking. The program shall include:

a. Identification of a sampling schedule for the critical variables and control points for these variables;

b. Identification of the procedures used to measure the values of the critical variables;

c. Identification of process sampling points which shall include monitoring the discharge of the condensate pumps for evidence of condenser in leakage;

d. Procedures for the recording and management of data;

e. Procedures defining corrective actions for all off control point chemistry conditions; and

f. A procedure identifying the authority responsible for the interpretation of the data and the sequence and timing of administrative events, which is required to initiate corrective action.

5.5.11 Ventilation Filter Testing Program (VFTP)

<NEW> Spec 5.0 Doc A.16

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]~~ and in accordance with ~~[~~Regulatory Guide 1.52, Revision 2~~]~~, ASME N510-1989, ~~and AG-1]~~ at the system flowrate specified below ~~[± 10%]~~.

Insert 5.5.11-A (32) — 32 — 33 — 1 — 2 — 1

Insert 5.5.11-B From page 5.0-11 (32)

a. 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 ~~[~~Regulatory Guide 1.52, Revision 2, and ~~ASME~~ ANSI — 1

5 — 1.0

(continued)

INSERT 5.5.11-A

Tests described in Specification 5.5.11.a and 5.5.11.b shall be performed once per 18 months for ventilation systems other than the IRS and 24 months for the IRS; after each complete or partial replacement of the HEPA filter bank or charcoal adsorber bank; after any structural maintenance on the HEPA filter or charcoal adsorber housing; and, following painting, fire, or chemical release in any ventilation zone communicating with the system.

Tests described in Specification 5.5.11.c shall be performed once per 18 months for ventilation systems other than the IRS and 24 months for the IRS; after 720 hours of system operation; after any structural maintenance on the HEPA filter or charcoal adsorber housing; and, following painting, fire, or chemical release in any ventilation zone communicating with the system.

Tests described in Specification 5.5.11.d shall be performed once per 18 months for ventilation systems other than the IRS and 24 months for the IRS.

<CTS>

5.5 Programs and Manuals

5.5.11 Ventilation Filter Testing Program (VFTP) (continued)

N510-1989, at the system flowrate specified as follows ~~[± 10%]~~:

4.7.6.1.c.2
4.7.6.1.f
4.7.7.1.b.2
4.7.7.1.e
4.6.6.1.b.2
4.6.6.1.e
4.9.12.b.2
4.9.12.e
4.6.3.1.b.1
4.6.3.1.e

ESF Ventilation System
CREVS
ECCS Pump Room EAFS
Penetration Room EAFS
SFP Ventilation System
IRS

Flowrate
2,000 cfm
3,000 cfm
2,000 cfm
32,000 cfm
20,000 cfm

b. 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 [Regulatory Guide 1.52, Revision 2, and ASME N510-1989] at the system flowrate specified as follows ~~[± 10%]~~:

4.7.6.1.c.1
4.7.6.1.d
4.7.6.1.g
4.7.7.1.b.1
4.7.7.1.e
4.7.7.1.f
4.6.6.1.b.1
4.6.6.1.c
4.6.6.1.f
4.6.3.1.b.2
4.6.3.1.c
4.6.3.1.f
4.9.12.b.1
4.9.12.c
4.9.12.f

ESF Ventilation System
CREVS
ECCS Pump Room EAFS
Penetration Room EAFS
SFP Ventilation System
IRS

Flowrate
2,000 cfm
3,000 cfm
2,000 cfm
32,000 cfm
20,000 CFM or equal to

c. 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 greater than or equal to the relative humidity specified as follows:

4.7.6.1.c.3
4.7.6.1.d
4.7.7.1.b.3
4.7.7.1.c
4.6.6.1.b.3
4.6.6.1.c
4.9.12.b.3
4.9.12.c
4.6.3.1.b.3
4.6.3.1.c

(elemental iodine for IRS)

ESF Ventilation System
CREVS
ECCS Pump Room EAFS
Penetration Room EAFS
SFP Ventilation System
IRS

Penetration
10%
10%
10%
10%
5%

RH
95%
95%
95%
25%
95%

ANSI N510-1975

(130°C for IRS)

(1) (1) (14) (1) (1) (23) (1) (28) (1)

(continued)

<CTS>

5.5 Programs and Manuals

5.5.11 Ventilation Filter Testing Program (VFTP) (continued)

Reviewer's Note: Allowable penetration = [100% - methyl iodide efficiency for charcoal credited in staff safety evaluation]/ (safety factor).

Safety factor = [5] for systems with heaters
= [7] for systems without heaters.

(6)

d. For each of the ESF systems, demonstrate the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers is less than the value specified below when tested in accordance with [Regulatory Guide 1.52, Revision 2, and ASME N510-1989] at the system flowrate specified as follows [± 10%]. (75)

(4.7.6.1.e.1)
(4.7.7.1.d)
(4.6.6.1.d)
(4.9.12.d)
(4.6.3.1.d.1)

(1)

ESF Ventilation System	Delta P	Flowrate
CREVS	4 in wg	2,000 cfm
ECCS Pump Room EAFS	4 in wg	3,000 cfm
Penetration Room EAFS	6 in wg	2,000 cfm
SFP Ventilation System	4 in wg	32,000 cfm
IRS	6 in wg	20,000 cfm

(1)

e. Demonstrate that the heaters for each of the ESF systems dissipate the following specified value [± 10%] when tested in accordance with [ASME N510-1989].

(10)

ESF Ventilation System	Wattage

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

Move to Insert 5.5.7-B Page 5.0-12

(2)

5.5.12 Explosive Gas and Storage Tank Radioactivity Monitoring Program

(and)

This program provides control for potentially explosive gas mixtures contained in the [Waste Gas Holdup System], the quantity of radioactivity contained in gas storage tanks ~~or fed into the offgas treatment system, and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks~~]. The

(New)
Spec 5.0
DOC A.20

(1)
(11) (2)

(continued)

<CTS> 5.5 Programs and Manuals

5.5.12 Explosive Gas and Storage Tank Radioactivity Monitoring Program (continued)

gaseous radioactivity quantities shall be determined following the methodology in ~~[Branch Technical Position (BTP) ETSB 11-5, "Postulated Radioactive Release due to Waste Gas System Leak or Failure"]~~ the ODCM. ~~The liquid radwaste quantities shall be determined in accordance with [Standard Review Plan, Section 15.7.3, "Postulated Radioactive Release due to Tank Failures"].~~ (1) (11) (2)

The program shall include:

a. The limits for concentrations of hydrogen and oxygen in the ~~[Waste Gas Holdup System]~~ and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria (i.e., whether or not the system is designed to withstand a hydrogen explosion); and <3.11.2.5>

b. A surveillance program to ensure that the quantity of radioactivity contained in ~~[each gas storage tank and fed into the offgas treatment system]~~ is less than ~~the amount~~ or equal to 58,500 curies noble gases (considered as Xe-133). <3.11.2.6> (13) (1) (29) (2)
~~that would result in a whole body exposure of ≥ 0.5 rem to any individual in an unrestricted area, in the event of [an uncontrolled release of the tanks' contents];~~

~~c. A surveillance program to ensure that the quantity of radioactivity contained in all outdoor liquid radwaste tanks that are not surrounded by liners, dikes, or walls, capable of holding the tanks' contents and that do not have tank overflows and surrounding area drains connected to the [Liquid Radwaste Treatment System] is less than the amount that would result in concentrations less than the limits of 10 CFR Part 20, Appendix B, Table 2, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area, in the event of an uncontrolled release of the tanks' contents.~~ (11)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

(continued)

5.5 Programs and Manuals

5.5.15 Safety Function Determination Program (continued)

b. A required system redundant to system(s) in turn supported by the inoperable supported system is also inoperable; or

c. A required system redundant to support system(s) for the supported systems (a) and (b) above is also inoperable.

The SFDP identifies where a loss of safety function exists. If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

(13)

INSERT:

5.5.16 Containment Leakage Rate Testing Program (attached)

(TSTF-52)

(12)

<INSERT for ITS Administrative Controls> TSTF-115

5.5.17 Battery Inspection Program

A battery inspection program to monitor the battery condition and performance shall be established. The program shall include inspection and testing requirements and acceptance criteria, at the frequencies identified in Section 4.3 of IEEE-450 (1995) for the following parameters:

1. Condition of battery terminals and connectors;
2. Condition of battery cells, cell plates, and racks;
3. Battery connection resistance;
4. Battery cell electrolyte level; and
5. Battery cell float voltage; and
6. Battery cell specific gravity.

{Reviewers Note: Item 6 is not required if Licensee uses only battery charging current to determine state of charge and includes SR 3.8.6.2.}

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Battery Inspection Program frequencies.

Remove this page from the book.

5.0 ADMINISTRATIVE CONTROLS

5.6 Reporting Requirements

The following reports shall be submitted in accordance with 10 CFR 50.4

5.6.1 Occupational Radiation Exposure Report

NOTE

A single submittal may be made for ~~a multiple unit station~~. The submittal should combine sections common to ~~all~~ units at the station.

A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures > 100 mrem/yr and their associated man rem exposure according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). This tabulation supplements the requirements of 10 CFR 20.2206. The dose assignments to various duty functions may be estimated based on pocket dosimeter, thermoluminescent dosimeter (TLD), ~~or film badge measurements~~. Small exposures totalling < 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources should be assigned to specific major work functions. The report shall be submitted by April 30 of each year. ~~[The initial report shall be submitted by April 30 of the year following initial criticality.]~~

5.6.2 Annual Radiological Environmental Operating Report

NOTE

A single submittal may be made for ~~a multiple unit station~~. The submittal should combine sections common to ~~all~~ units at the station.

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the radiological environmental monitoring program for the reporting period. The material provided shall be consistent with the objectives outlined in the Offsite Dose Calculation Manual

(continued)

<CTS>

5.6 Reporting Requirements

5.6.2 Annual Radiological Environmental Operating Report (continued)

<6.6.2>

(ODCM), and in 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements ~~[~~in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979~~]~~. ~~[~~The report shall identify the TLD results that represent collocated dosimeters in relation to the NRC TLD program and the exposure period associated with each result.~~]~~ In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

A 6

5.6.3 Radioactive Effluent Release Report

<6.6.3>

both 5

----------NOTE----------
A single submittal may be made for ~~a multiple~~ unit ~~station~~. The submittal should combine sections common to ~~all~~ units at the ~~station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit~~.
---

13 16

The Radioactive Effluent Release Report covering the operation ~~of~~ the unit shall be submitted in accordance with 10 CFR 50.36a ~~.~~ The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit~~s~~. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

{as modified by approved exemptions} 13

A 2

5.6.4 Monthly Operating Reports

<6.6.4>

Routine reports of operating statistics and shutdown experience~~, including documentation of all challenges to the pressurizer~~

17

(continued)

PLANT SPECIFIC CHANGES

1. This change incorporates the Calvert Cliffs-specific information into brackets.

2. The NUREG-1432 requirement (5.2.2.a) that two non-licensed operators be available for each unit in Modes 1, 2, 3, and 4, and a total of three be assigned for both units when the plant is shutdown or defueled, is being replaced by a requirement to have a total of three non-licensed operators available for both units at all times when the Technical Specifications are applicable. This requirement is consistent with Calvert Cliffs current licensing basis.

3. NUREG-1432 Specification 5.5.4 contains information regarding the Radioactive Effluent Controls Program. Calvert Cliffs Improved Technical Specifications (ITS) revise the wording for some of the requirements consistent with Calvert Cliffs Technical Specification Amendments 217 and 197, respectively, for Calvert Cliffs Units 1 and 2. This change is consistent with Calvert Cliffs current licensing basis.

4. The NUREG-1432 overtime policy (5.2.2.e) in brackets was changed to be consistent with Calvert Cliffs current licensing basis. The changes involved deleting the information in the first set of brackets and adopting the information in the second set of brackets, which is consistent with Calvert Cliffs current licensing basis.

5. The Shift Technical Advisor requirements in NUREG-1432 (5.2.2.g) were replaced by Calvert Cliffs-specific requirements for the Shift Technical Advisor. These changes are consistent with the Calvert Cliffs current licensing basis and were recently added to the CTS (as approved by the NRC) in Amendments 217 and 197, respectively, for Calvert Cliffs Units 1 and 2.

6. This change deletes the bracketed information labeled Reviewers Notes. This is acceptable because the Reviewers Notes are information for the Nuclear Regulatory Commission (NRC) reviewers and not intended to be maintained in the individual plant's Technical Specifications.

7. The bracketed information in NUREG-1432 Section 5.4.1.f, about Core Protection Calculator Addressable Constants, have been deleted because Calvert Cliffs does not have Core Protection Calculators.

8. The acronym "FSAR" is being change to "UFSAR" to reflect that Calvert Cliffs has an Updated Final Safety Analysis Report.

9. The applicable sections from Current Technical Specification (CTS) 3.4.5, "Steam Generators," were included as the Steam Generator Tube Surveillance Program as required by the Reviewer's Note in NUREG-1432.

10. The bracketed information in NUREG-1432 Section 5.5.11.e, Ventilation Filter Testing Program, is being deleted because Calvert Cliffs does not utilize heaters in their filtration trains.

11. The outdoor liquid storage tank requirements in Section 5.5.12 of NUREG-1432, including the program description, the liquid radwaste quantities are determined, and the surveillance program requirements, are being deleted because Calvert Cliffs does not have any outdoor liquid radwaste tanks. This change is consistent with the Calvert Cliffs current licensing basis.

12. NUREG-1432 Diesel Fuel Oil Testing Program (5.5.13) requires a clear and bright test of new fuel oil, and requires the total particulates of stored fuel oil to be determined every 31 days. The Calvert Cliffs ITS 5.5.13 will require a water and sediment test be performed in lieu of the clear and bright test. Calvert Cliffs will not utilize a clear and bright test because the diesel fuel oil is dyed. The Calvert Cliffs ITS 5.5.0 will also require the total particulates of stored fuel oil to be determined every 92 days. Calvert Cliffs contains a CTS Surveillance Requirement which allows the interval for testing fuel oil in the stored diesel generator fuel oil tank to be 92 days. The current test, which checks for viscosity, water, and sediment, was replaced with the total particulate test, as described in Discussion of Change L.3 to Section 5.0. The change from 31 days required by the STS to the 92 days provided in the ITS is based on the current licensing basis time provided in the CTS and is justified since the sediment portion of the current 92 day test is testing for the same basic purpose as the proposed total particulate test; both are evaluating the quality of the fuel oil by looking at fuel breakdown (the fuel breaks down into solids, which then precipitate out as sediment).

13. This change was made to make an editorial correction (including renumbering) to be in compliance with the Writers Guide, or reword a requirement from being general to being specific to Calvert Cliffs.

14. This change to NUREG-1432 Section 5.6.1, Occupational Radiation Exposure Report, was made to reflect the actual mechanisms used at Calvert Cliffs to measure dose rates.

15. The bracketed information in NUREG-1432 Section 5.6.1, Occupational Radiation Exposure Report, is being deleted because Calvert Cliffs has already submitted their initial Occupational Radiation Exposure Report.

16. The bracketed information in NUREG-1432 Section 5.6.3 is being deleted because the information is not consistent with Calvert Cliffs design or current licensing basis.

17. The bracketed information in NUREG 1432 Section 5.6.4, Monthly Operating Report, discuses the inclusion of documentation of all challenges to the pressurizer power-operated relief valves or pressurizer safety valves, with the monthly operating report. This information is being deleted because Calvert Cliffs currently has (CTS 6.6.6) a requirement to report on an annual basis the challenges to the pressurizer power-operated relief valves and the safety valves. Calvert Cliffs will add the requirements for this report into the ITS. These changes are consistent with Calvert Cliffs current licensing basis.

18. NUREG-1432 Section 5.6.6, RCS Pressure and Temperature Limits Report (PTLR), will be deleted. Calvert Cliffs does not anticipate the temperature/pressure values to change from cycle to cycle, which would negate the benefits of the Pressure and Temperature Limits Report. Therefore, Calvert Cliffs will retain the specific pressure/temperature limits in the Technical Specifications.

19 NUREG-1432 Section 5.6.7, EDG Failures Report, will be deleted because Calvert Cliffs does not currently have a Technical Specification requirement to submit diesel generator failures. This change is consistent with the Calvert Cliffs current licensing basis. This change is also consistent with NUREG-1432, Generic Change TSTF-37.

20. The Calvert Cliffs CTS 4.4.5.5 requirements for steam generator tube inspection reports were inserted into NUREG-1432 Section 5.6.9, Steam Generator Tube Inspection Report. This change is consistent with the Reviewer's Note for this section, which requires the licensee to incorporate their current licensing basis regarding steam generator tube inspection reports.

21. Calvert Cliffs will not include a section on High Radiation Area (as depicted in NUREG-1432 Section 5.7.1 as a bracketed specification) consistent with the current licensing basis.

22. The proposed change to NUREG-1432 adds a requirement that licensed operators counted towards the minimum shift crew composition shall be licensed for both units. This is a specific requirement for Calvert Cliffs and is consistent with the current licensing basis.

23. The proposed change to Specification 5.5.11.c changes the penetration requirements of methyl iodide from less than 10%, to less than or equal to 10%. This change is consistent with the Calvert Cliffs current licensing basis, which requires a $\geq$ 90% removed efficiency of methyl iodide.

24. The proposed changes to Specifications 5.5.11.a and 5.5.11.b change the penetration system bypass requirements of the high efficiency particulate air filters and charcoal absorbers from $< 1.0\%$ to $\leq 1.0\%$. This change is consistent with the current Calvert Cliffs licensing basis which requires a $\geq$ 99% removal efficiency.

25. NUREG-1432 requires the particulate concentration to be tested in accordance with American Society of Testing Material D-2276-89, Method A-2 or A-3. Calvert Cliffs ITS will include the requirement to test for particulates, but not in accordance with ASTM D-2276-89, Method A-2 or A-3. Total particulate concentration will be determined by gravimetric analysis. ASTM D-2276-89, Method A-2 is the test method for fuel systems under pressure. The Calvert Cliffs diesel fuel oil tanks are not under pressure, so this is not an appropriate test method. ASTM D-2276-89, Method A-3, is primarily a gravimetric analysis, but the test methods used at Calvert Cliffs to determine total particulate concentration do not match all detail contained in Method A-3. Among the differences between Calvert Cliffs test methods and ASTM D-2276-89, Method A.3, are:

    a. The reagents used are different,
    b. A filter reagent is not used,
    c. The preparation of apparatus is different, and
    d. The volumes of the sample are different.

26. The Calvert Cliffs CTS Administrative Controls uses generic titles provided in American National Standards Institute/American Nuclear Society 3.1 instead of plant specific titles. The plant-specific titles that correspond to the generic titles are given in the Updated Final Safety Analysis Report. The use of generic titles in the Administrative Controls was encouraged in a letter from C. I. Grimes (NRC) to Lee Bush (WOG), Brian Mann (CEOG), Clinton Szabo (B&WOG), and Andrew Maron (BWROG), dated November 10,1994. These generic titles are carried over into the Calvert Cliffs ITS. Also, some additional titles appear in NUREG-1432. For consistency, generic titles have been used in those locations. In addition, a change was made to allow the corresponding plant-specific titles to be placed in the Quality Assurance Plan or the Updated Final Safety Analysis Report. This is consistent with the November 10, 1994 letter.

This change has been proposed as a change to the ITS NUREG as TSTF-65, but has not yet been approved by the NRC.

27. The Calvert Cliffs current licensing basis requires the General Supervisor-Nuclear Plant Operations to hold a license, and also requires the operations manager (the individual the General Supervisor-Nuclear Plant Operations reports to) to hold or have held a Senior Reactor Operator license at Calvert Cliffs. This requirement is being retained in the ITS.

28. This change incorporates the current Calvert Cliffs requirements for the Iodine Removal System into the Ventilation Filter Testing Program. This requirement is consistent with the Calvert Cliffs current licensing basis.

29. The gas storage tank radioactivity limit in NUREG-1432 Specification 5.5.12.b has been changed to be consistent with the Calvert Cliffs current licensing basis. The Calvert Cliffs ITS radioactivity limit will be that in the event of an uncontrolled release of the tank's contents, the resulting total body exposure to a member of the public at the site boundary will not exceed accident guidelines.

30. The CTS state that the Occupational Radiation Exposure Report for the Independent Spent Fuel Storage Installation is reported separately from the Units 1 and 2 Occupational Radiation Exposure Report. Therefore, for clarity, the Note to ITS 5.6.1 has been modified to preclude combining the reports into a single submittal.

31. The phrase ", as modified by approved exemptions" has been added to the ITS 5.6.3 requirement that the Radioactive Effluent Release Report be submitted in accordance with 10 CFR 50.36a. Current Technical Specification 6.6.3 footnote "**" allows an exemption to 10 CFR 50.36a that allows the Sr^{89} and Sr^{90} analysis results to be submitted at a later date. The addition of the phrase ", as modified by approved exemptions" is consistent with its use in other ITS that allow exemptions (e.g., ITS 3.6.1).

32. The current Calvert Cliffs licensing basis surveillance frequencies have been provided in ITS 5.5.11. In addition, for clarity the NUREG-1432 discussion concerning the provisions of SR 3.0.2 and SR 3.0.3 have been moved to the end of this specification after the discussion of frequencies, since it applies only to the frequencies.

33. The statement in NUREG-1432 Specification 5.5.11, "at the system flowrate specified below [+-10%]" has been deleted since it is redundant. Each of the requirements in NUREG-1432 Specification 5.5.11 that require a specific flowrate have the same statement.