

Docket No. 50-336
B16344

Attachment 3

Millstone Nuclear Power Station, Unit No. 2
Proposed Revision to Technical Specifications
Enclosure Building
Marked Up Pages

April 1997

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DEFINITIONSAXIAL SHAPE INDEX

1.23 The AXIAL SHAPE INDEX (Y_E) used for normal control and indication is the power level detected by the lower excore nuclear instrument detectors (L) less the power level detected by the upper excore nuclear instrument detectors (U) divided by the sum of these power levels. The AXIAL SHAPE INDEX (Y_I) used for the trip and pretrip signals in the reactor protection system is the above value (Y_E) modified by an appropriate multiplier (A) and a constant (B) to determine the true core axial power distribution for that channel.

$$Y_E = \frac{L-U}{L+U}$$

$$Y_I = AY_E + B$$

CORE OPERATING LIMITS REPORT

1.24 The CORE OPERATING LIMITS REPORT is the unit specific document that provides the core operating limits for the current operating reload cycle. These cycle specific core operating limits shall be determined for each reload cycle in accordance with Specification 6.9.1.7. Plant operation within these operating limits is addressed in individual specifications.

ENCLOSURE BUILDING INTEGRITY - DELETED

~~1.25 ENCLOSURE BUILDING INTEGRITY shall exist when:~~

~~1.25.1 Each door in each access opening is closed except when the access opening is being used for normal transit entry and exit, and~~

~~1.25.2 The enclosure building filtration system is OPERABLE.~~

REACTOR TRIP SYSTEM RESPONSE TIME

1.26 The REACTOR TRIP SYSTEM RESPONSE TIME shall be the time interval from when the monitored parameter exceeds its trip setpoint at the channel sensor until electrical power is interrupted to the CEA drive mechanism.

ENGINEERING SAFETY FEATURE RESPONSE TIME

1.27 The ENGINEERED SAFETY FEATURE RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ESF actuation setpoint at the channel sensor until the ESF equipment is capable of

CONTAINMENT SYSTEMS

3/4.6.5 SECONDARY CONTAINMENT

ENCLOSURE BUILDING FILTRATION SYSTEM

LIMITING CONDITION FOR OPERATION

Trains
3.6.5.1 Two separate and independent ^E enclosure ^B building ^F filtration systems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one ^E enclosure ^B building ^F filtration ^{Train} system inoperable, restore the inoperable system to OPERABLE status within 7 days or be in COLD SHUT-DOWN within the next 36 hours.

SURVEILLANCE REQUIREMENTS

4.6.5.1 Each ^E enclosure ^B building ^F filtration ^{Train} system 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 10 hours with the heaters on.
- 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:

Train

CONTAINMENT SYSTEMSSURVEILLANCE REQUIREMENTS (Continued)

1. Verifying that the cleanup ^{+train}system satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the ^{+train}system flow rate is 9000 cfm $\pm 10\%$.
2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.*
3. Verifying a ^{+train}system flow rate of 9000 cfm $\pm 10\%$ during ^{+train}system operation when tested in accordance with ANSI N510-1975. ^{+train}
- 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 in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.*
- d. At least once per 18 months by:
 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is ≤ 6 inches Water Gauge while operating the ^{+train}system at a flow rate of 9000 cfm $\pm 10\%$.
 2. Verifying that the ^{+train}system starts on an Enclosure Building Filtration Actuation Signal (EBFAS).
 3. Verifying that each system produces a negative pressure of greater than or equal to 0.25 inces W.G. in the Enclosure Building Filtration Region within (1) minute after an EBFAS.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the ^{+train}system at a flow rate of 9000 cfm $\pm 10\%$.

* ASTM D3803-89 shall be used in place of ANSI N509-1976 as referenced in table 2 of Regulatory Guide 1.52. The laboratory test of charcoal should be conducted at a temperature of 30°C and a relative humidity of 95% within the tolerances specified by ASTM D3803-89. Additionally, the charcoal sample shall have a removal efficiency of $\geq 95\%$.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the ~~system~~ at a flow rate of 9000 cfm \pm 10%.

train

61

CONTAINMENT SYSTEMSENCLOSURE BUILDING INTEGRITYLIMITING CONDITION FOR OPERATION

The Enclosure Building shall be OPERABLE.
 3.6.5.2 ~~ENCLOSURE BUILDING INTEGRITY shall be maintained.~~

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION: *With the Enclosure Building inoperable*

the Enclosure Building to OPERABLE status

Without ~~ENCLOSURE BUILDING INTEGRITY~~, restore ~~ENCLOSURE BUILDING INTEGRITY~~ within 24 hours or be in COLD SHUTDOWN within the next 36 hours.

SURVEILLANCE REQUIREMENTS

.1 *OPERABILITY of the Enclosure Building*
 4.6.5.2 ~~ENCLOSURE BUILDING INTEGRITY~~ shall be demonstrated at least once per 31 days by verifying that ~~each door in~~ each access opening is closed except when the access opening is being used for normal transit entry and exit.

4.6.5.2.2 At least once per 18 months verify each Enclosure Building Filtration Train produces a negative pressure of greater than or equal to 0.25 inches W.G. in the Enclosure Building Filtration Region within 1 minute after an Enclosure Building Filtration Actuation Signal.

REFUELING OPERATIONS

STORAGE POOL AREA VENTILATION SYSTEM - FUEL STORAGE

LIMITING CONDITION FOR OPERATION

3.9.15 At least one Enclosure Building Filtration ^{Train} ~~System~~ shall be OPERABLE and capable of automatically initiating operation in the auxiliary exhaust mode and exhausting through HEPA filters and charcoal adsorbers on a storage pool area high radiation signal.

APPLICABILITY: WHENEVER IRRADIATED FUEL IS IN THE STORAGE POOL.

ACTION:

With the requirements of the above specification not satisfied, suspend all operations involving movement of fuel within the storage pool or crane operation with loads over the storage pool until at least one ~~spent fuel storage pool ventilation system~~ is restored to OPERABLE status.

Enclosure Building
Filtration Train

SURVEILLANCE REQUIREMENTS

4.9.15 The above required Enclosure Building Filtration ^{Train} ~~System~~ 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 filters and charcoal adsorbers and verifying that the ~~system~~ ^{Train} operates for at least 10 hours with the heaters on.
- 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~~ ^{Train} by:

Train

REFUELING OPERATIONSSURVEILLANCE REQUIREMENTS (Continued)

1. Verifying that the cleanup ^{train}system satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the ^{train}system flow rate is 9000 cfm \pm 10%.
2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.*
3. Verifying a ^{train}system flow rate of 9000 cfm \pm 10% during ^{train}system operation when tested in accordance with ANSI N510-1975.
- 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 in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.*
- d. At least once per 18 months by:
 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is \leq 6 inches Water Gauge while operating the ^{train}system at a flow rate of 9000 cfm \pm 10%.
 2. Verifying that ^{train}on a Spent Fuel Storage Pool Area high radiation signal, the ^{train}system automatically starts (unless already operating) and directs its exhaust flow through the HEPA filters and charcoal adsorber banks.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the ^{train}system at a flow rate of 9000 cfm \pm 10%.

* ASTM D3803-89 shall be used in place of ANSI N509-1976 as referenced in table 2 of Regulatory Guide 1.52. The laboratory test of charcoal should be conducted at a temperature of 30°C and a relative humidity of 95% within the tolerances specified by ASTM D3803-89. Additionally, the charcoal sample shall have a removal efficiency of \geq 95%.

February 22, 1982

REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 9000 cfm \pm 10%.

train

61

August 1, 1975

CONTAINMENT SYSTEMS

BASES

3/4.6.5 SECONDARY CONTAINMENT

FILTRATION

3/4.6.5.1 ENCLOSURE BUILDING VENTILATION SYSTEM

Filtration

The OPERABILITY of the enclosure building ventilation systems ensures that containment leakage occurring during LOCA conditions into the annulus will be filtered through the HEPA filters and charcoal absorber trains prior to discharge to the atmosphere. This requirement is necessary to meet the assumptions used in the accident analyses and limit the site boundary radiation doses to within the limits of 10 CFR 100 during LOCA conditions.

adsorber

INSERT A

3/4.6.5.2 ENCLOSURE BUILDING INTEGRITY

The OPERABILITY of the Enclosure Building

ENCLOSURE BUILDING INTEGRITY ensures that the releases of radioactive materials from the primary containment atmosphere will be restricted to those leakage paths and associated leak rates assumed in the accident analyses. This restriction, in conjunction with operation of the enclosure building ventilation system, will limit the site boundary radiation doses to within the limits of 10 CFR 100 during accident conditions.

Filtration

INSERT B

REFUELING OPERATIONSBASES3/4.9.13 STORAGE POOL RADIATION MONITORING

The OPERABILITY of the storage pool radiation monitors ensures that sufficient radiation monitoring capability is available to detect excessive radiation levels resulting from 1) the inadvertent lowering of the storage pool water level or 2) the release of activity from an irradiated fuel assembly.

3/4.9.14 & 3/4.9.15 STORAGE POOL AREA VENTILATION SYSTEM

The limitations on the storage pool area ventilation system ensures that all radioactive material released from an irradiated fuel assembly will be filtered through the HEPA filters and charcoal adsorber prior to discharge to the atmosphere. The OPERABILITY of this system and the resulting iodine removal capacity are consistent with the assumptions of the accident analyses.

3/4.9.16 SHIELDED CASKINSERT A

The limitations of this specification ensure that in an event of a cask tilt accident 1) the doses from ruptured fuel assemblies will be within the assumptions of the safety analyses, 2) K_{eff} will remain $\leq .95$.

3/4.9.17 MOVEMENT OF FUEL IN SPENT FUEL POOL

The limitations of this specification ensure that, in the event of a fuel assembly or a consolidated fuel storage box drop accident into a Region B or C rack location completing a 4-out-of-4 fuel assembly geometry, K_{eff} will remain ≤ 0.95 .

3/4.9.18 SPENT FUEL POOL - REACTIVITY CONDITION

The limitations described by Figures 3.9-1a, 3.9-1b, and 3.9-3 ensure that the reactivity of fuel assemblies and consolidated fuel storage boxes, introduced into the Region C spent fuel racks, are conservatively within the assumptions of the safety analysis.

The limitations described by Figure 3.9-4 ensure that the reactivity of the fuel assemblies, introduced into the Region A spent fuel racks, are conservatively within the assumptions of the safety analysis.

INSERT A

The laboratory testing requirement for the charcoal sample to have a removal efficiency of $\geq 95\%$ is more conservative than the elemental and organic iodine removal efficiencies of 90% and 70%, respectively, assumed in the DBA analyses for the EBFS charcoal adsorbers in the Millstone Unit 2 Final Safety Analysis Report. A removal efficiency acceptance criteria of $\geq 95\%$ will ensure the charcoal has the capability to perform its intended safety function throughout the length of an operating cycle.

INSERT B

One Enclosure Building Filtration System train is required to establish a negative pressure of 0.25 inches W.G. in the Enclosure Building Filtration Region within one minute after an Enclosure Building Filtration Actuation Signal is generated. The one minute time requirement does not include the time necessary for the associated emergency diesel generator to start and power Enclosure Building Filtration System equipment.

To enable the Enclosure Building Filtration System to establish the required negative pressure in the Enclosure Building, it is necessary to ensure that all Enclosure Building access openings are closed. For double door access openings, only one door is required to be closed and latched, except for normal passage. For single door access openings, that door is required to be closed and latched, except for normal passage.

A door is OPERABLE when it is capable of automatically closing and latching. If the required door is not capable of automatically closing and latching, the door must be maintained closed and latched or personnel may be stationed at the door to ensure that the door is closed and latched after each transit through the door. Otherwise, the access opening (door) should be declared inoperable and the appropriate technical specification action statement entered.

Attachment 4

Millstone Nuclear Power Station, Unit No. 2
Proposed Revision to Technical Specifications
Enclosure Building
Retyped Pages

April 1997

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DEFINITIONS

AXIAL SHAPE INDEX

1.23 The AXIAL SHAPE INDEX (Y_E) used for normal control and indication is the power level detected by the lower excore nuclear instrument detectors (L) less the power level detected by the upper excore nuclear instrument detectors (U) divided by the sum of these power levels. The AXIAL SHAPE INDEX (Y_I) used for the trip and pretrip signals in the reactor protection system is the above value (Y_E) modified by an appropriate multiplier (A) and a constant (B) to determine the true core axial power distribution for that channel.

$$Y_E = \frac{L-U}{L+U} \qquad Y_I = AY_E + B$$

CORE OPERATING LIMITS REPORT

1.24 The CORE OPERATING LIMITS REPORT is the unit specific document that provides the core operating limits for the current operating reload cycle. These cycle specific core operating limits shall be determined for each reload cycle in accordance with Specification 6.9.1.7. Plant operation within these operating limits is addressed in individual specifications.

ENCLOSURE BUILDING INTEGRITY - DELETED

REACTOR TRIP SYSTEM RESPONSE TIME

1.26 The REACTOR TRIP SYSTEM RESPONSE TIME shall be the time interval from when the monitored parameter exceeds its trip setpoint at the channel sensor until electrical power is interrupted to the CEA drive mechanism.

ENGINEERING SAFETY FEATURE RESPONSE TIME

1.27 The ENGINEERED SAFETY FEATURE RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ESF actuation setpoint at the channel sensor until the ESF equipment is capable of

CONTAINMENT SYSTEMS

3/4.6.5 SECONDARY CONTAINMENT

ENCLOSURE BUILDING FILTRATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.5.1 Two separate and independent Enclosure Building Filtration Trains | shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one Enclosure Building Filtration Train inoperable, restore the inoperable train to OPERABLE status within 7 days or be in COLD SHUTDOWN within the next 36 hours. |

SURVEILLANCE REQUIREMENTS

4.6.5.1 Each Enclosure Building Filtration 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 absorber train and verifying that the train operates for at least 10 hours with the heaters on.
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal absorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the train by: |

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

1. Verifying that the cleanup train satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the train flow rate is 9000 cfm $\pm 10\%$.
 2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.*
 3. Verifying a train flow rate of 9000 cfm $\pm 10\%$ during train operation when tested in accordance with ANSI N510-1975.
- 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 in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.*
- d. At least once per 18 months by:
1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is ≤ 6 inches Water Gauge while operating the train at a flow rate of 9000 cfm $\pm 10\%$.
 2. Verifying that the train starts on an Enclosure Building Filtration Actuation Signal (EBFAS).
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the train at a flow rate of 9000 cfm $\pm 10\%$.

* ASTM D3803-89 shall be used in place of ANSI N509-1976 as referenced in table 2 of Regulatory Guide 1.52. The laboratory test of charcoal should be conducted at a temperature of 30°C and a relative humidity of 95% within the tolerances specified by ASTM D3803-89. Additionally, the charcoal sample shall have a removal efficiency of $\geq 95\%$.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- f. After each complete or partial replacement of a charcoal absorber bank by verifying that the charcoal absorbers remove greater than or equal to 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the train at a flow rate of 9000 cfm \pm 10%. |

CONTAINMENT SYSTEMS

ENCLOSURE BUILDING

LIMITING CONDITION FOR OPERATION

3.6.5.2 The Enclosure Building shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With the Enclosure Building inoperable, restore the Enclosure Building to OPERABLE status within 24 hours or be in COLD SHUTDOWN within the next 36 hours.

SURVEILLANCE REQUIREMENTS

4.6.5.2.1 OPERABILITY of the Enclosure Building shall be demonstrated at least once per 31 days by verifying that each access opening is closed except when the access opening is being used for normal transit entry and exit.

4.6.5.2.2. At least once per 18 months verify each Enclosure Building Filtration Train produces a negative pressure of greater than or equal to 0.25 inches W.G. in the Enclosure Building Filtration Region within 1 minute after an Enclosure Building Filtration Actuation Signal.

REFUELING OPERATIONS

STORAGE POOL AREA VENTILATION SYSTEM - FUEL STORAGE

LIMITING CONDITION FOR OPERATION

3.9.15 At least one Enclosure Building Filtration Train shall be OPERABLE and capable of automatically initiating operation in the auxiliary exhaust mode and exhausting through HEPA filters and charcoal adsorbers on a storage pool area high radiation signal.

APPLICABILITY: WHENEVER IRRADIATED FUEL IS IN THE STORAGE POOL.

ACTION:

With the requirements of the above specification not satisfied, suspend all operations involving movement of fuel within the storage pool or crane operation with loads over the storage pool until at least one Enclosure Building Filtration Train is restored to OPERABLE status.

SURVEILLANCE REQUIREMENTS

4.9.15 The above required Enclosure Building Filtration 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 filters and charcoal adsorbers and verifying that the train operates for at least 10 hours with the heaters on.
- 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 train by:

REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

1. Verifying that the cleanup train satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the train flow rate is 9000 cfm \pm 10%.
 2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.*
 3. Verifying a train flow rate of 9000 cfm \pm 10% during train operation when tested in accordance with ANSI N510-1975.
- 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 in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.*
- d. At least once per 18 months by:
1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is \leq 6 inches Water Gauge while operating the train at a flow rate of 9000 cfm \pm 10%.
 2. Verifying that on a Spent Fuel Storage Pool Area high radiation signal, the train automatically starts (unless already operating) and directs its exhaust flow through the HEPA filters and charcoal adsorber banks.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the train at a flow rate of 9000 cfm \pm 10%.

* ASTM D3803-89 shall be used in place of ANSI N509-1976 as referenced in table 2 of Regulatory Guide 1.52. The laboratory test of charcoal should be conducted at a temperature of 30°C and a relative humidity of 95% within the tolerances specified by ASTM D3803-89. Additionally, the charcoal sample shall have a removal efficiency of \geq 95%.

REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in place in accordance with ANSI N510-1975 while operating the train at a flow rate of 9000 cfm \pm 10%. |

CONTAINMENT SYSTEMS

BASES

3/4.6.5 SECONDARY CONTAINMENT

3/4.6.5.1 ENCLOSURE BUILDING FILTRATION SYSTEM

The OPERABILITY of the Enclosure Building Filtration System ensures that containment leakage occurring during LOCA conditions into the annulus will be filtered through the HEPA filters and charcoal adsorber trains prior to discharge to the atmosphere. This requirement is necessary to meet the assumptions used in the accident analyses and limit the site boundary radiation doses to within the limits of 10 CFR 100 during LOCA conditions.

The laboratory testing requirement for the charcoal sample to have a removal efficiency of $\geq 95\%$ is more conservative than the elemental and organic iodine removal efficiencies of 90% and 70%, respectively, assumed in the DBA analyses for the EBFS charcoal adsorbers in the Millstone Unit 2 Final Safety Analysis Report. A removal efficiency acceptance criteria of $\geq 95\%$ will ensure the charcoal has the capability to perform its intended safety function throughout the length of an operating cycle.

3/4.6.5.2 ENCLOSURE BUILDING

The OPERABILITY of the Enclosure Building ensures that the releases of radioactive materials from the primary containment atmosphere will be restricted to those leakage paths and associated leak rates assumed in the accident analyses. This restriction, in conjunction with operation of the Enclosure Building Filtration System, will limit the site boundary radiation doses to within the limits of 10 CFR 100 during accident conditions.

One Enclosure Building Filtration System train is required to establish a negative pressure of 0.25 inches W.G. in the Enclosure Building Filtration Region within one minute after an Enclosure Building Filtration Actuation Signal is generated. The one minute time requirement does not include the time necessary for the associated emergency diesel generator to start and power Enclosure Building Filtration System equipment.

To enable the Enclosure Building Filtration System to establish the required negative pressure in the Enclosure Building, it is necessary to ensure that all Enclosure Building access openings are closed. For double door access openings, only one door is required to be closed and latched, except for normal passage. For single door access openings, that door is required to be closed and latched, except for normal passage.

A door is OPERABLE when it is capable of automatically closing and latching. If the required door is not capable of automatically closing and latching, the door must be maintained closed and latched or personnel may be stationed at the door to ensure that the door is closed and latched after each transit through the door. Otherwise, the access opening (door) should be declared inoperable and the appropriate technical specification action statement entered.

REFUELING OPERATIONS

BASES

3/4.9.13 STORAGE POOL RADIATION MONITORING

The OPERABILITY of the storage pool radiation monitors ensures that sufficient radiation monitoring capability is available to detect excessive radiation levels resulting from 1) the inadvertent lowering of the storage pool water level or 2) the release of activity from an irradiated fuel assembly.

3/4.9.14 & 3/4.9.15 STORAGE POOL AREA VENTILATION SYSTEM

The limitations on the storage pool area ventilation system ensures that all radioactive material released from an irradiated fuel assembly will be filtered through the HEPA filters and charcoal adsorber prior to discharge to the atmosphere. The OPERABILITY of this system and the resulting iodine removal capacity are consistent with the assumptions of the accident analyses.

The laboratory testing requirement for the charcoal sample to have a removal efficiency of $\geq 95\%$ is more conservative than the elemental and organic iodine removal efficiencies of 90% and 70%, respectively, assumed in the DBA analyses for the EBFS charcoal adsorbers in the Millstone Unit 2 Final Safety Analysis Report. A removal efficiency acceptance criteria of $\geq 95\%$ will ensure the charcoal has the capability to perform its intended safety function throughout the length of an operating cycle.

3/4.9.16 SHIELDED CASK

The limitations of this specification ensure that in an event of a cask tilt accident 1) the doses from ruptured fuel assemblies will be within the assumptions of the safety analyses, 2) K_{eff} will remain $\leq .95$.

3/4.9.17 MOVEMENT OF FUEL IN SPENT FUEL POOL

The limitations of this specification ensure that, in the event of a fuel assembly or a consolidated fuel storage box drop accident into a Region B or C rack location completing a 4-out-of-4 fuel assembly geometry, K_{eff} will remain ≤ 0.95 .

3/4.9.18 SPENT FUEL POOL - REACTIVITY CONDITION

The limitations described by Figures 3.9-1a, 3.9-1b, and 3.9-3 ensure that the reactivity of fuel assemblies and consolidated fuel storage boxes, introduced into the Region C spent fuel racks, are conservatively within the assumptions of the safety analysis.

The limitations described by Figure 3.9-4 ensure that the reactivity of the fuel assemblies, introduced into the Region A spent fuel racks, are conservatively within the assumptions of the safety analysis.