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April 11, 2019

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

Serial No.	18-370
NSSL/TFO	R0
Docket Nos.	50-336
	50-423
License Nos.	DPR-65
	NPF-49

DOMINION ENERGY NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNITS 2 AND 3
APPLICATION TO REVISE TECHNICAL SPECIFICATIONS TO ADOPT TSTF-522, "REVISE VENTILATION SYSTEM SURVEILLANCE REQUIREMENTS TO OPERATE FOR 10 HOURS PER MONTH"

In accordance with the provisions of 10 CFR 50.90, Dominion Energy Nuclear Connecticut, Inc. (DENC) is submitting a request for an amendment to the Technical Specifications (TS) for Millstone Power Station Unit 2 (MPS2) and Millstone Power Station Unit 3 (MPS3). DENC proposes to adopt TSTF-522, "Revise Ventilation System Surveillance Requirements to Operate for 10 Hours per Month," and decrease ventilation system flow test requirements from 10 hours at the frequency specified in the MPS2 and MPS3 Surveillance Frequency Control Program (SFCP), to 15 continuous minutes at the frequency specified in the SFCP. For MPS2, the revision is proposed for TS Surveillance Requirement (SR) 4.6.5.1 for the Enclosure Building Filtration System (EBFS). For MPS3, the revision is proposed for TS SR 4.6.6.1 for the Supplementary Leak Collection and Release System (SLCRS), TS SR 4.7.7 for the Control Room Emergency Ventilation System (CREVS), and TS SR 4.7.9 for the Auxiliary Building Filter System (ABFS). Additionally, it is proposed that MPS2 TS SR 4.6.5.1.a be revised to remove the requirement to run the flow test with the duct heaters energized since the charcoal adsorption test is performed at 95% relative humidity.

Attachment 1 to this letter describes the proposed changes and provides justification for the changes. Attachment 2 provides marked-up MPS2 TS pages showing the proposed change. Attachment 3 provides marked-up MPS2 TS Bases pages showing the proposed change. Attachment 4 provides marked-up MPS3 TS pages showing the proposed change. Attachment 5 provides marked-up MPS3 TS Bases pages showing the proposed changes. The TS Bases mark-ups are provided for information only. The changes to the affected TS Bases pages will be incorporated in accordance with the TS Bases Control Program after this LAR is approved.

The proposed amendment does not involve a Significant Hazards Consideration under the standards set forth in 10 CFR 50.92. The basis for this determination is

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included in Attachment 1. DENC has also determined that operation with the proposed change will not result in any significant increase in the amount of effluents that may be released offsite or any significant increase in individual or cumulative occupational radiation exposure. Therefore, the proposed amendment is eligible for categorical exclusion from an environmental assessment as set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment is needed in connection with the approval of the proposed change.

The Facility Safety Review Committee has reviewed and concurred with the determinations herein.

DENC requests approval of this license amendment request by May 1, 2020, with implementation within 60 days of issuance.

In accordance with 10 CFR 50.91(b), a copy of this license amendment request is being provided to the State of Connecticut.

If you have any questions or require additional information, please contact Mr. Shayan Sinha at (804) 273-4687.

Sincerely,

Mark D. Sartain
Vice President – Nuclear Engineering and Fleet Support

COMMONWEALTH OF VIRGINIA)
)
COUNTY OF HENRICO)

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by Mark D. Sartain, who is Vice President – Nuclear Engineering and Fleet Support of Dominion Energy Nuclear Connecticut, Inc. He has affirmed before me that he is duly authorized to execute and file the foregoing document on behalf of that company, and that the statements in the document are true to the best of his knowledge and belief.

Acknowledged before me this 11th day of April, 2019.

My Commission Expires: 12/31/20 Craig D Sly
Notary Public

CRAIG D SLY
Notary Public
Commonwealth of Virginia
Reg. # 7518653
My Commission Expires December 31, 2020

Attachments:

1. Evaluation of Proposed License Amendment
2. Marked-Up Technical Specification Pages for MPS2
3. Marked-Up Technical Specification Bases Pages for MPS2 for Information Only
4. Marked-Up Technical Specification Pages for MPS3
5. Marked-Up Technical Specification Bases Pages for MPS3 for Information Only

Commitments made in this letter: None

cc: U.S. Nuclear Regulatory Commission
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ATTACHMENT 1

EVALUATION OF PROPOSED LICENSE AMENDMENT

DOMINION ENERGY NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNITS 2 and 3

EVALUATION OF PROPOSED LICENSE AMENDMENT

1.0 SUMMARY DESCRIPTION

In accordance with the provisions of 10 CFR 50.90, Dominion Energy Nuclear Connecticut, Inc. (DENC) is submitting a request for an amendment to the Technical Specifications (TS) for Millstone Power Station Unit 2 (MPS2) and Millstone Power Station Unit 3 (MPS3). DENC proposes to adopt TSTF-522, "Revise Ventilation System Surveillance Requirements to Operate for 10 Hours per Month," and decrease ventilation system flow test requirements from 10 hours at the frequency specified in the MPS2 and MPS3 Surveillance Frequency Control Program (SFCP), to 15 continuous minutes at the frequency specified in the SFCP. For MPS2, the revision is proposed for TS Surveillance Requirement (SR) 4.6.5.1 for the Enclosure Building Filtration System (EBFS). For MPS3, the revision is proposed for TS SR 4.6.6.1 for the Supplementary Leak Collection and Release System (SLCRS), TS SR 4.7.7 for the Control Room Emergency Ventilation System (CREVS), and TS SR 4.7.9 for the Auxiliary Building Filter System (ABFS). Additionally, it is proposed that MPS2 TS SR 4.6.5.1.a be revised to remove the requirement to run the flow test with the duct heaters energized since the charcoal adsorption test is performed at 95% relative humidity.

These proposed changes do not impact the ability of EBFS, ABFS, CREVS, and SLCRS to perform their safety functions. Therefore, the proposed changes will not adversely affect control room habitability or result in any significant increase in individual or cumulative occupational radiation exposure.

2.0 ASSESSMENT

DENC proposes to adopt TSTF-522, Revision 0, "Revise Ventilation System Surveillance Requirements to Operate for 10 Hours per Month," (Reference 5.1) for MPS2 TS SR 4.6.5.1.a, and for MPS3 TS SRs 4.6.6.1.a, 4.7.7.b, and 4.7.9.a. These SRs currently require operating associated ventilation systems, with the heaters operating, for a 10 hour period at the frequency specified in the SFCP. The proposed change would modify these SRs to require operation of the systems for 15 continuous minutes at the frequency specified in the SFCP.

Additionally, it is proposed that MPS2 TS SR 4.6.5.1.a be revised to remove the requirement to conduct the flow test with the duct heaters energized. The charcoal filter adsorption test is performed at a relative humidity of 95%. TSTF-522 indicates that, in accordance with Regulatory Position 4.9 of Regulatory Guide 1.52, Revision 3, (Reference 5.2), plants that perform adsorption testing with a relative humidity of 95% do not require heaters for the ventilation system to perform its specified safety function. In this case, TSTF-522 indicates that plants may eliminate reference to the heaters in the TS and TS Bases.

Attachment 2 provides marked-up MPS2 TS pages showing the proposed change. Attachment 3 provides marked-up MPS2 TS Bases pages showing the proposed change. Attachment 4 provides marked-up MPS3 TS pages showing the proposed

changes. Attachment 5 provides marked-up MPS3 TS Bases pages showing the proposed changes. The TS Bases mark-ups are provided for information only.

2.1 Applicability of Published Safety Evaluation

DENC has reviewed the model safety evaluation (Reference 5.3) dated September 13, 2012 and issued in the Federal Register (Reference 5.4) on September 20, 2012 (77 FR 58421). This review included a review of the Nuclear Regulatory Commission (NRC) staff's evaluation, as well as the information provided in TSTF-522, Revision 0. DENC has concluded that the justification presented in the TSTF-522, Revision 0 proposal and the model safety evaluation prepared by the NRC staff are applicable to Millstone Power Station (MPS) and justify this amendment for the incorporation of the changes to the MPS TS.

2.2 Optional Changes and Variations

DENC is proposing the following variations from the TS changes described in TSTF-522, Revision 0, or the applicable parts of the NRC staff's model safety evaluation dated September 13, 2012:

1. The NRC's model safety evaluation noted that some plants have adopted TSTF-425, which relocated the fixed Surveillance Request Frequencies to a licensee-controlled SFCP. The SFCP was adopted under License Amendment 324 (Reference 5.5) for MPS2 and License Amendment 258 (Reference 5.6) for MPS3. The MPS2 and MPS3 SFCP currently specify performing filter runs every 31 days for the TS SRs being changed.

2. MPS2 and MPS3 have custom TSs. The inserts provided in TSTF-522 are revised to fit the MPS2 and MPS3 TS formats. Where the SR specifies "10 hours", the SR is being revised to specify "15 continuous minutes". Where the SR specifies "10 continuous hours", the SR is being revised to specify "15 continuous minutes".

3. The MPS2 TS uses different numbering and titles than the Combustion Engineering Owners Group (CEOG) Standard Technical Specifications (STS) NUREG-1432 (Reference 5.7), which was the basis for the TSTF-522 mark-ups for Combustion Engineering plants. The difference is administrative and does not affect the applicability of TSTF-522 to the MPS2 TS. The table below shows the differences between the plant-specific TS numbering and titles and the corresponding TSTF-522 numbering and titles:

MPS2 TS Number and Title	**TSTF-522 CEOG STS Number and Title**
TS 3/4.6.5.1, Secondary Containment Enclosure Building Filtration System, SR 4.6.5.1	TS 3.6.8, Shield Building Exhaust Air Cleanup System (SBEACS) (Dual), SR 3.6.8.1

There are NUREG-1432 STS sections not contained in MPS2 TS. The corresponding mark-ups included in TSTF-522 for these surveillances are not identical to MPS2. Regulatory Guide 1.52 is applicable to the MPS2 Secondary Containment Enclosure Building Filtration System, because it is a post-accident Engineered Safety Feature (ESF) atmosphere cleanup system containing air filtration and adsorption units. Therefore, this is an administrative deviation from TSTF-522 with no impact on the NRC staff's model safety evaluation. Additionally, MPS2 does not have STS 5.5.11, "Ventilation Filter Testing Program (VTFP)". The requirements of the VFTP (laboratory test of a charcoal sample, HEPA filter bypass testing, and charcoal filter bypass testing) are performed as directed in TS 3/4.6.5.1.

4. The MPS3 TS uses different numbering and titles than the Westinghouse Owners Group (WOG) STS NUREG-1431 (Reference 5.8), which was the basis for the TSTF-522 mark-ups for Westinghouse plants. The difference is administrative and does not affect the applicability of TSTF-522 to the MPS3 TS. The table below shows the differences between the plant-specific TS numbering and titles and the corresponding TSTF-522 numbering and titles:

MPS3 TS Number and Title	**TSTF-522 WOG STS Number and Title**
TS 3/4.6.6.1, Secondary Containment Supplementary Leak Collection And Release System, SR 4.6.6.1	TS 3.6.13, Shield Building Air Cleanup System (SBACS) (Dual and Ice Condenser), SR 3.6.13.1
TS 3/4.7.7, Control Room Emergency Ventilation System, SR 4.7.7	TS 3.7.10, Control Room Emergency Filtration System (CREFS), SR 3.7.10.1
TS 3/4.7.9, Auxiliary Building Filter System, SR 4.7.9	TS 3/4.7.14, Penetration Room Exhaust Air Cleanup System, (PREACS) TS 3.7.14.1

There are NUREG-1431 STS sections not contained in MPS3 TS. The corresponding mark-ups included in TSTF-522 for these surveillances are not identical to MPS3. Regulatory Guide 1.52 is applicable to the MPS3 systems because they are post-accident Engineered Safety Feature (ESF) atmosphere cleanup system containing air filtration and adsorption units. Therefore, this is an administrative deviation from TSTF-522 with no impact on the NRC staff's model safety evaluation dated September 20, 2012 (77 FR 58421). Additionally, MPS3 does not have STS 5.5.11, "Ventilation Filter Testing Program (VTFP)". The requirements of the VFTP (laboratory test of a charcoal sample, HEPA filter bypass testing, and charcoal filter bypass testing) are performed as directed in TS 3/4.6.6.1, 3/4.7.7, and 3/4.7.9.

The proposed changes are consistent with the current licensing basis, the NRC's model safety evaluation, and therefore, are an allowable variation from the approved Traveler.

3.0 REGULATORY ANALYSIS

3.1 No Significant Hazards Consideration

DENC is submitting a request for an amendment to the TS for MPS2 and MPS3. DENC proposes to adopt TSTF-522, "Revise Ventilation System Surveillance Requirements to Operate for 10 Hours per Month," and decrease the ventilation system flow durations from 10 hours at the frequency specified in the SFCP, to 15 continuous minutes at the frequency specified in the SFCP. For MPS2, the revision is proposed for TS SR 4.6.5.1 (EBFS). For MPS3, the revision is proposed for TS SR 4.6.6.1 (SLCRS), TS SR 4.7.7 (CREVS), and TS SR 4.7.9 (ABFS). The proposed change revises the SRs which currently require operating ventilation systems with the heaters operating for a 10 hour period at the frequency specified in the SFCP with a requirement to operate systems for 15 continuous minutes at the frequency specified in the SFCP. Additionally, it is proposed that MPS2 TS SR 4.6.5.1.a be revised to remove the requirement to conduct the flow test with the duct heaters energized since the charcoal adsorption test is performed at 95% relative humidity.

As required by 10 CFR 50.91(a), an analysis of the issue of no significant hazards consideration is presented below using the guidance provided in 10 CFR 50.92 and TSTF-522:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No.

   The proposed change modifies existing SRs to operate the EBFS system for MPS2 and ABFS, CREVS, and SLCRS systems for MPS3 that are equipped with electric heaters for a 10 hour period at the frequency specified in the SFCP with a requirement to operate the systems for 15 continuous minutes. Additionally, the SR for EBFS will be revised to remove the requirement conduct the flow test with the duct heaters energized since the charcoal adsorption test is performed at 95% relative humidity.

   These systems are not accident initiators and therefore, these changes do not involve a significant increase in the probability of an accident. The proposed system and filter testing changes are consistent with current regulatory guidance for these systems and will continue to assure that these systems perform their design function which may include mitigating accidents. Thus the change does not involve a significant increase in the consequences of an accident.

   Therefore, it is concluded that this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

   Response: No.

   The proposed change modifies existing SRs to operate the EBFS, ABFS, CREVS, and SLCRS systems equipped with electric heaters for a 10 hour period at the frequency specified in the SFCP with a requirement to operate the systems for 15 continuous minutes. Additionally, the SR for EBFS will be revised to remove the requirement conduct the flow test with the duct heaters energized since the charcoal adsorption test is performed at 95% relative humidity.

   The change proposed for these ventilation systems does not change any system operations or maintenance activities. Testing requirements will be revised and will continue to demonstrate that the Limiting Conditions for Operation are met and the system components are capable of performing their intended safety functions. The change does not create new failure modes or mechanisms and no new accident precursors are generated.

   Therefore, it is concluded that this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed amendment involve a significant reduction in the margin of safety?

   Response: No.

   The proposed change modifies existing SRs to operate the EBFS, ABFS, CREVS, and SLCRS systems equipped with electric heaters for a 10 hour period at the frequency specified in the SFCP with a requirement to operate the systems for 15 continuous minutes. Additionally, TSTF-522 identifies a regulatory position which indicates that plants which test ventilation system adsorption at a relative humidity of 95% do not require heaters for the ventilation system to perform its specified safety function systems and that reference to the heaters can be removed from the TS. Based on justification provided in TSTF-522, the existing SR for EBFS will be revised to remove the requirement to complete the ventilation system test with the duct heaters energized since the adsorption test is performed at 95% relative humidity. EBFS will continue to have the heaters, but they will not be credited in the TS.

   The design basis for the ventilation systems' heaters is to heat the incoming air which reduces the relative humidity. Per TSTF-522, the monthly 10 hour system operation utilizing the heaters was intended to remove moisture from the charcoal adsorber banks. Because the ASTM D3803-1989 Standard no longer requires this 10 hour operation utilizing the heaters, the duration is replaced with a continuous 15 minute operation requirement. The proposed change is consistent

with guidance provided in Regulatory Position 4.9 of Regulatory Guide 1.52, Revision 3.

Therefore, it is concluded that this change does not involve a significant reduction in a margin of safety.

Based on the above, DENC concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

4.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed change would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed change does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed change meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed change.

5.0 REFERENCES

5.1 Technical Specification Task Force TSTF–522, Revision 0, "Revise Ventilation System Surveillance Requirements to Operate for 10 hours per Month," (ML100890316), approved September 20, 2012.

5.2 NRC Regulatory Guide 1.52, "Design, Testing, and Maintenance Criteria for Post Accident Engineered-Safety-Feature Atmosphere Cleanup System Air Filtration and Adsorption Units of Light-Water-Cooled Nuclear Power Plants", Revision 3 (ML011710176), issued June 2001.

5.3 NRC Model Safety Evaluation for Plant-Specific Adoption of Technical Specification Task Force TSTF–522, Revision 0, "Revise Ventilation System Surveillance Requirements to Operate for 10 hours per Month," Using the Consolidated Line Item Improvement Process issued on September 20, 2012 (77 FR 58421).

5.4 Model Safety Evaluation for Plant-Specific Adoption of Technical Specifications Task Force Traveler TSTF-522, Revision 0, "Revise Ventilation System Surveillance Requirements to Operate for 10 Hours per Month," Using the Consolidated Line Item Improvement Process (ML12158A464), dated September 13, 2012.

5.5 Letter from R. V. Guzman (NRC) to D. A. Heacock (Dominion), "Millstone Power Station, Unit No. 2 - Issuance of Amendment re: Risk-Informed Justification for the Relocation of Specific Surveillance Frequency Requirements to a Licensee Controlled Program, Adoption of TSTF-425, Revision 3 (TAC No. MF5096)," (ML15280A242), dated October 29, 2015.

5.6 Letter from J. Kim (NRC) to D. A. Heacock (Dominion), "Millstone Power Station, Unit No. 3 - Issuance of Amendment re: Risk-Informed Justification for the Relocation of Specific Surveillance Frequency Requirements to a Licensee Controlled Program, Adoption of TSTF-425, Revision 3 (TAC No. ME9733)," (ML14023A748), dated February 25, 2014.

5.7 NUREG-1432, Standard Technical Specifications, Combustion Engineering Plants, Volume 1, Specifications (ML12102A165), published April 2012.

5.8 NUREG-1431, Standard Technical Specifications, Westinghouse Plants, Volume 1, Specifications (ML12100A222), published April 2012.

ATTACHMENT 2

MARKED-UP TECHNICAL SPECIFICATION PAGES FOR MPS2

DOMINION ENERGY NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 2

~~October 29, 2015~~

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:

Inoperable Equipment	Required ACTION
a. One Enclosure Building Filtration Train.	a.1 Restore the inoperable Enclosure Building Filtration Train to OPERABLE status within 7 days or be in COLD SHUTDOWN within the next 36 hours.
b. - - - - NOTE - - - - Not applicable when second Enclosure Building Filtration Train intentionally made inoperable. - - - - - - - - - - Two Enclosure Building Filtration Trains.	b.1 Verify at least one train of containment spray is OPERABLE within 1 hour or be in COLD SHUTDOWN within the next 36 hours. AND b.2 Restore at least one Enclosure Building Filtration Train to OPERABLE status within 24 hours 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 the frequency specified in the Surveillance Frequency Control Program 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~~ 15 continuous minutes.

b. At the frequency specified in the Surveillance Frequency Control Program or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, and (2) following painting, fire or chemical release in any ventilation zone communicating with the train by:

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 ± 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 ± 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 the frequency specified in the Surveillance Frequency Control Program by:

1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is ≤ 2.6 inches Water Gauge while operating the train at a flow rate of 9000 cfm ± 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 ± 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 ≥ 95%.

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 ± 10%.

ATTACHMENT 3

MARKED-UP TECHNICAL SPECIFICATION BASES PAGES FOR MPS2 FOR INFORMATION ONLY

DOMINION ENERGY NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 2

Provided for Information Only

~~LBDCR 14-MP2-001~~
~~May 20, 2014~~

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 50.67 during LOCA conditions.

With one Enclosure Building Filtration System Train inoperable, the inoperable train must be restored to OPERABLE status within 7 days. The components in this degraded condition are capable of providing 100% of the iodine removal needs after a DBA. The 7 day allowed outage time is based on consideration of such factors as the availability of the OPERABLE redundant Enclosure Building Filtration System Train and the low probability of a DBA occurring during this period.

If two Enclosure Building Filtration System Trains are inoperable, at least one Enclosure Building Filtration System Train must be returned to OPERABLE status within 24 hours. The Condition is modified by a Note stating it is not applicable if the second Enclosure Building Filtration System train is intentionally declared inoperable. The Condition does not apply to voluntary removal of redundant systems or components from service. The Condition is only applicable if one train is inoperable for any reason and the second train is discovered to be inoperable, or if both trains are discovered to be inoperable at the same time. In addition, at least one train of containment spray must be verified to be OPERABLE within 1 hour. In the event of an accident, containment spray reduces the potential radioactive release from the containment, which reduces the consequences of the inoperable Enclosure Building Filtration System Trains. The allowed outage time is based on Reference 1 which demonstrated that the 24 hour allowed outage time is acceptable based on the infrequent use of the Required Actions and the small incremental effect on plant risk.

The laboratory testing requirement for the charcoal sample to have a removal efficiency of ≥ 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 ≥ 95% will ensure the charcoal has the capability to perform its intended safety function throughout the length of an operating cycle.

Operating each Enclosure Building Filtration System train for greater than or equal to 15 minutes ensures that all trains are OPERABLE and that all associated controls are functioning properly. It also ensures that blockage, fan or motor failure, or excessive vibration can be detected for corrective action. Per TSTF-522, the filter heaters are not required for the filters to be OPERABLE since adsorption testing is performed at 95% relative humidity.

Provided for Information Only

LBDCR 14-MP2-016
September 4, 2014

CONTAINMENT SYSTEMS

BASES

3/4.6.5.1 ENCLOSURE BUILDING FILTRATION SYSTEM (Continued)

Surveillance Requirement 4.6.5.1.b.1 dictates the test frequency, method and acceptance criteria for the EBFS trains (cleanup trains). These criteria all originate in the Regulatory Position sections of Regulatory Guide 1.52, Rev. 2, March 1978 as discussed below:

Section C.5.a requires a visual inspection of the cleanup system be made before the following tests, in accordance with the provisions of section 5 of ANSI N510-1975:

- in-place air flow distribution test
- DOP test
- activated carbon adsorber section leak test

Section C.5.c requires the in-place Dioctyl phthalate (DOP) test for HEPA filters to section 10 of ANSI N510-1975. The HEPA filters should be tested in place (1) initially, (2) at the frequency specified in the Surveillance Frequency Control Program, and (3) following painting, fire, or chemical release in any ventilation zone communicating with the system. The testing is to confirm a penetration of less than or equal to 1%* at rated flow.

Section C.5.d requires the charcoal adsorber section to be leak tested with a gaseous halogenated hydrocarbon refrigerant, in accordance with section 12 of ANSI N510-1975 to ensure that bypass leakage through the adsorber section is less than or equal to 1%.** Adsorber leak testing should be conducted (1) initially, (2) at the frequency specified in the Surveillance Frequency Control Program, (3) following removal of an adsorber sample for laboratory testing if the integrity of the adsorber section is affected, and (4) following painting, fire, or chemical release in any ventilation zone communicating with the system.

REFERENCE

1. WCAP-16125-NP-A, "Justification for Risk-Informed Modifications to Selected Technical Specifications for Conditions Leading to Exigent Plant Shutdown," Revision 2, August 2010.

* Means that the HEPA filter will allow passage of less than or equal to 1% of the test concentration injected at the filter inlet from a standard DOP concentration injection.

** Means that the charcoal adsorber sections will allow passage of less than or equal to 1% of the injected test concentration around the charcoal adsorber sections.

ATTACHMENT 4

MARKED-UP TECHNICAL SPECIFICATION PAGES FOR MPS3

DOMINION ENERGY NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 3

~~February 25, 2014~~

CONTAINMENT SYSTEMS

3/4.6.6 SECONDARY CONTAINMENT

SUPPLEMENTARY LEAK COLLECTION AND RELEASE SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.6.1 Two independent Supplementary Leak Collection and Release Systems shall be OPERABLE with each system comprised of:

a. one OPERABLE filter and fan, and

b. one OPERABLE Auxiliary Building Filter System as defined in Specification 3.7.9.

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

ACTION:

With one Supplementary Leak Collection and Release System inoperable, restore the inoperable system 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.

SURVEILLANCE REQUIREMENTS

4.6.6.1 Each Supplementary Leak Collection and Release System shall be demonstrated OPERABLE:

a. At the frequency specified in the Surveillance Frequency Control Program by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying a system flow rate of 7600 cfm to 9800 cfm and that the system operates for at least ~~10 continuous hours~~ 15 continuous minutes with the heaters operating.

b. At the frequency specified in the Surveillance Frequency Control Program and following painting, fire, or chemical release in any ventilation zone communicating with the system by:

1) Verifying that the system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978,* and the system flow rate is 7600 cfm to 9800 cfm;

February 25, 2014

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,* shows the methyl iodide penetration less than or equal to 2.5% when tested in accordance with ASTM D3803-89 at a temperature of 30°C (86°F) and a relative humidity of 70%; and

3) Verifying a system flow rate of 7600 cfm to 9800 cfm during system operation when tested in accordance with ANSI N510-1980.

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,* shows the methyl iodide penetration less than or equal to 2.5% when tested in accordance with ASTM D3803-89 at a temperature of 30°C (86°F) and a relative humidity of 70%.

d. At the frequency specified in the Surveillance Frequency Control Program by:

1) Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6.25 inches Water Gauge while operating the system at a flow rate of 7600 cfm to 9800 cfm,

2) Verifying that the system starts on a Safety Injection test signal, and

3) Verifying that the heaters dissipate 50 ±5 kW when tested in accordance with ANSI N510-1980.

* ANSI N510-1980 shall be used in place of ANSI N510-1975 referenced in Regulatory Guide 1.52, Revision 2, March 1978.

SURVEILLANCE REQUIREMENTS (Continued)

e. After each complete or partial replacement of a HEPA filter bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a DOP test aerosol while operating the system at a flow rate of 7600 cfm to 9800 cfm; and

f. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 7600 cfm to 9800 cfm.

Provided for Information Only

September 18, 2008

PLANT SYSTEMS

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.7 Two independent Control Room Emergency Air Filtration Systems shall be OPERABLE.*

APPLICABILITY: MODES 1, 2, 3, and 4.
During movement of recently irradiated fuel assemblies.

ACTION:

MODES 1, 2, 3 and 4:

a. With one Control Room Emergency Air Filtration System inoperable, except as specified in ACTION c., restore the inoperable system 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 both Control Room Emergency Air Filtration Systems inoperable, except as specified in ACTION c., restore at least one inoperable system to OPERABLE status within 1 hour or be in HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.

c. With one or more Control Room Emergency Air Filtration Systems inoperable due to an inoperable CRE boundary, perform the following:

1. Immediately initiate action to implement mitigating actions, and

2. Verify, within 24 hours, mitigating actions ensure CRE occupant exposures to radiological and chemical hazards will not exceed limits, and mitigating actions are taken for exposure to smoke hazards, and

3. Restore CRE boundary to OPERABLE status within 90 days.

Otherwise, be in HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.

During movement of recently irradiated fuel assemblies:

d. With one Control Room Emergency Air Filtration System inoperable, restore the inoperable system to OPERABLE status within 7 days. After 7 days, either initiate and maintain operation of the remaining OPERABLE Control Room Emergency Air Filtration System in the emergency mode of operation, or immediately suspend the movement of recently irradiated fuel assemblies.

* The Control Room Envelope (CRE) boundary may be opened intermittently under administrative control.

~~February 25, 2014~~

PLANT SYSTEMS

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

ACTION: (Continued)

e. With both Control Room Emergency Air Filtration Systems inoperable, or with the OPERABLE Control Room Emergency Air Filtration System required to be in the emergency mode by ACTION d. not capable of being powered by an OPERABLE emergency power source, or with one or more Control Room Emergency Air Filtration System Trains inoperable due to an inoperable CRE boundary, immediately suspend the movement of recently irradiated fuel assemblies.

SURVEILLANCE REQUIREMENTS

4.7.7 Each Control Room Emergency Air Filtration System shall be demonstrated OPERABLE:

a. At the frequency specified in the Surveillance Frequency Control Program by verifying that the control room air temperature is less than or equal to 95°F;

b. At the frequency specified in the Surveillance Frequency Control Program by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying a system flow rate of 1,120 cfm ± 20% and that the system operates for at least ~~10 continuous hours~~ 15 continuous minutes with the heaters operating;

c. At the frequency specified in the Surveillance Frequency Control Program and following painting, fire, or chemical release in any ventilation zone communicating with the system by:

1) Verifying that the system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% and uses the test procedure guidance in Regulatory Position C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revisions 2, March 1978,* and the system flow rate is 1,120 cfm ± 20%;

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,* shows the methyl iodide penetration less than or equal to 2.5% when tested in accordance with ASTM D3803-89 at a temperature of 30°C (86°F), a relative humidity of 70%, and a face velocity of 54 ft/min; and

3) Verifying a system flow rate of 1,120 cfm ± 20% during system operation when tested in accordance with ANSI N510-1980.

Provided for Information Only

February 25, 2014

PLANT SYSTEMS

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

SURVEILLANCE REQUIREMENTS (Continued)

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 in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978,* shows the methyl iodide penetration less than or equal to 2.5% when tested in accordance with ASTM D3803-89 at a temperature of 30°C (86°F), and a relative humidity of 70%, and a face velocity of 54 ft/min.

e. At the frequency specified in the Surveillance Frequency Control Program by:

1) Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6.75 inches Water Gauge while operating the system at a flow rate of 1,120 cfm ± 20%;

2) Deleted

3) Verifying that the heaters dissipate 9.4 ±1 kW when tested in accordance with ANSI N510-1980.

f. After each complete or partial replacement of a HEPA filter bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a DOP test aerosol while operating the system at a flow rate of 1120 cfm ± 20%; and

g. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 1120 cfm ± 20%.

h. By performance of CRE unfiltered air inleakage testing in accordance with the CRE Habitability Program at a frequency in accordance with the CRE Habitability Program.

* ANSI N510-1980 shall be used in place of ANSI N510-1975 referenced in Regulatory Guide 1.52, Revision 2, March 1978.

~~February 25, 2014~~

PLANT SYSTEMS

3/4.7.9 AUXILIARY BUILDING FILTER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.9 Two independent Auxiliary Building Filter Systems shall be OPERABLE.

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

ACTION:

With one Auxiliary Building Filter System inoperable, restore the inoperable system 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. In addition, comply with the ACTION requirements of Specification 3.6.6.1.

SURVEILLANCE REQUIREMENTS

4.7.9 Each Auxiliary Building Filter System shall be demonstrated OPERABLE:

a. At the frequency specified in the Surveillance Frequency Control Program by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying a system flow rate of 30,000 cfm ±10% and that the system operates for at least ~~10 continuous hours~~ 15 continuous minutes with the heaters operating;

b. At the frequency specified in the Surveillance Frequency Control Program and following painting, fire, or chemical release in any ventilation zone communicating with the system by:

1) Verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978,* and the system flow rate is 30,000 cfm ±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,* shows the methyl

iodide penetration less than or equal to 2.5% when tested in accordance with ASTM D3803-89 at a temperature of 30°C (86°F), a relative humidity of 70%, and a face velocity of 52 ft/min; and

3) Verifying a system flow rate of 30,000 cfm ±10% during system operation when tested in accordance with ANSI N510-1980.

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,* shows the methyl iodide penetration less than or equal to 2.5% when tested in accordance with ASTM D3803-89 at a temperature of 30°C (86°F), a relative humidity of 70%, and a face velocity of 52 ft/min;

d. At the frequency specified in the Surveillance Frequency Control Program by:

1) Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6.8 inches Water Gauge while operating the system at a flow rate of 30,000 cfm ±10%,

2) Verifying that the system starts on a Safety Injection test signal, and

3) Verifying that the heaters dissipate 180 ±18 kW when tested in accordance with ANSI N510-1980.

e. After each complete or partial replacement of a HEPA filter bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a DOP test aerosol while operating the system at a flow rate of 30,000 cfm ±10%; and

f. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 30,000 cfm ±10%.

* ANSI N510-1980 shall be used in place of ANSI N510-1975 referenced in Regulatory Guide 1.52, Revision 2, March 1978.

February 6, 2013

Provided for Information Only

PLANT SYSTEMS

3/4.7.10 SNUBBERS

LIMITING CONDITION FOR OPERATION

3.7.10 All snubbers shall be OPERABLE. The only snubbers excluded from the requirements are those installed on nonsafety-related systems and then only if their failure or failure of the system on which they are installed would have no adverse effect on any safety-related system.

APPLICABILITY: MODES 1, 2, 3, and 4. MODES 5 and 6 for snubbers located on systems required OPERABLE in those MODES.

ACTION:

With one or more snubbers inoperable on any system, within 72 hours replace or restore the inoperable snubber(s) to OPERABLE status and perform an engineering evaluation per Specification 4.7.10. on the attached component or declare the attached system inoperable and follow the appropriate ACTION statement for that system.

SURVEILLANCE REQUIREMENTS

4.7.10 Each snubber shall be demonstrated OPERABLE by performance of the Snubber Examination, Testing, and Service Life Monitoring Program Plan.

ATTACHMENT 5

MARKED-UP TECHNICAL SPECIFICATION BASES PAGES FOR MPS3 FOR INFORMATION ONLY

DOMINION ENERGY NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 3

Provided for Information Only

June 3, 2002

CONTAINMENT SYSTEMS

BASES

3/4.6.6 SECONDARY CONTAINMENT

3/4.6.6.1 SUPPLEMENTARY LEAK COLLECTION AND RELEASE SYSTEM

Background

The OPERABILITY of the Supplementary Leak Collection and Release System (SLCRS) ensures that radioactive materials that leak from the primary containment into the Secondary Containment following a Design Basis Accident (DBA) are filtered out and adsorbed prior to any release to the environment.

SLCRS Ductwork Integrity:

The Supplementary Leak Collection and Release System (SLCRS) remains OPERABLE with the following bolting configuration:

a. For 3HVR*DMPF44:

- Eight bolts properly installed on the ductwork access panels.
- At least one bolt must be installed in each corner area.
- The remaining bolts should be installed in the center area of each side.

b. For 3HVR*DMPF29:

- 12 bolts properly installed on the ductwork access panel.
- At least one bolt must be installed in each corner area.
- The remaining bolts should be approximately equally spaced along each side with two bolts per side.

With the above bolting specified for 3HVR*DMPF44 and 3HVR*DMPF29, reference (1) concluded the following:

- Any leakage around the plates is minimal and causes negligible effect on the performance of the SLCRS system.
- Assures the gasket will not be extruded from between the plate and duct flange when the SLCRS fans are started.
- The remaining bolts may be installed with the fans running.
- Provides adequate structural integrity in the seismic event based on engineering analysis.

Applicable Safety Analyses

The SLCRS design basis is established by the consequences of the limiting DBA, which is a LOCA. The accident analysis assumes that only one train of the SLCRS and one train of the auxiliary building filter system is functional due to a single failure that disables the other train. The accident analysis accounts for the reduction of the airborne radioactive material provided by the remaining one train of this filtration system. The amount of fission products available for release from the containment is determined for a LOCA.

The SLCRS is not normally in operation. The SLCRS starts on a SIS signal. The modeled SLCRS actuation in the safety analysis (the Millstone 3

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LBDCR No. 04-MP3-015
February 24, 2005

CONTAINMENT SYSTEMS

BASES

3/4.6.6.1 SUPPLEMENTARY LEAK COLLECTION AND RELEASE SYSTEM (Continued)

FSAR Chapter 15, Section 15.6) is based upon a worst-case response time following an SI initiated at the limiting setpoint. One train of the SLCRS in conjunction with the Auxiliary Building Filter (ABF) system is capable of drawing a negative pressure (0.4 inches water gauge at the auxiliary building 24'6" elevation) within 120 seconds after a LOCA. This time includes diesel generator startup and sequencing time, system startup time, and time for the system to attain the required negative pressure after starting.

LCO

In the event of a DBA, one SLCRS is required to provide the minimum postulated iodine removal assumed in the safety analysis. Two trains of the SLCRS must be OPERABLE to ensure that at least one train will operate, assuming that the other train is disabled by a single-active failure. The SLCRS works in conjunction with the ABF system. Inoperability of one train of the ABF system also results in inoperability of the corresponding train of the SLCRS. Therefore, whenever LCO 3.7.9 is entered due to the ABF train A (B) being inoperable, LCO 3.6.6.1 must be entered due to the SLCRS train A (B) being inoperable.

When a SLCRS LCO is not met, it is not necessary to declare the secondary containment inoperable. However, in this event, it is necessary to determine that a loss of safety function does not exist. A loss of safety function exists when, assuming no concurrent single failure, a safety function assumed in the accident analysis cannot be performed.

Applicability

In MODES 1, 2, 3, and 4, a DBA could lead to a fission product release to containment that leaks to the secondary containment. The large break LOCA, on which this system's design is based, is a full-power event. Less severe LOCAs and leakage still require the system to be OPERABLE throughout these MODES. The probability and severity of a LOCA decrease as core power and reactor coolant system pressure decrease. With the reactor shut down, the probability of release of radioactivity resulting from such an accident is low.

In MODES 5 and 6, the probability and consequences of a DBA are low due to the pressure and temperature limitations in these MODES. Under these conditions, the SLCRS is not required to be OPERABLE.

ACTIONS

With one SLCRS train inoperable, the inoperable train must be restored to OPERABLE status within 7 days. The OPERABLE train is capable of providing 100 percent of the iodine removal needs for a DBA. The 7-day Completion Time is based on consideration of such factors as the reliability of the OPERABLE redundant SLCRS train and the low probability of a DBA occurring during this period. The Completion Time is adequate to make most repairs. If the SLCRS cannot be restored to OPERABLE status within the required Completion Time, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to at least MODE 3 within 6 hours and MODE 5 within the following 30 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full-power conditions in an orderly manner and without challenging plant systems.

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LBDCR 12-MP3-010
September 20, 2012

CONTAINMENT SYSTEMS

BASES

3/4.6.6.1 SUPPLEMENTARY LEAK

Operating each SLCRS train for greater than or equal to 15 minutes ensures that all trains are OPERABLE and that all associated controls are functioning properly. It also ensures that blockage, fan or motor failure, or excessive vibration can be detected for corrective action. Since adsorption testing is performed at 70% relative humidity, the filter heaters are required to operate.

Surveillance Requirements

a

~~Cumulative operation of the SLCRS with heaters operating for at least 10 continuous hours is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters.~~ The surveillance frequency is controlled under the Surveillance Frequency Control Program.

b, c, e, and f

These surveillances verify that the required SLCRS filter testing is performed in accordance with Regulatory Guide 1.52, Revision 2. ANSI N510-1980 shall be used in place of ANSI N510-1975 referenced in Regulatory Guide 1.52, Revision 2. Laboratory testing of methyl iodide penetration shall be performed in accordance with ASTM D3803-89 and Millstone Unit 3 specific parameters. The surveillances include testing HEPA filter performance, charcoal adsorber efficiency, system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). The heater kW measured must be corrected to its nameplate rating. Variations in system voltage can lead to measurements of kW which cannot be compared to the nameplate rating because the output kW is proportional to the square of the voltage.

Any time the OPERABILITY of a HEPA filter or charcoal adsorber housing has been affected by repair, maintenance, modification, or replacement activity, post maintenance testing in accordance with SR 4.0.1 is required to demonstrate OPERABILITY.

The 720 hours of operation requirement originates from Regulatory Guide 1.52, Revision 2, March 1978, Table 2, Note "c", which states that "Testing should be performed (1) initially, (2) at least once per 18 months thereafter for systems maintained in a standby status or after 720 hours of system operations, and (3) following painting, fire, or chemical release in any ventilation zone communicating with the system." This testing ensures that the charcoal adsorbency capacity has not degraded below acceptable limits, as well as providing trend data. The 720 hour figure is an arbitrary number which is equivalent to a 30 day period. This criteria is directed to filter systems that are normally in operation and also provide emergency air cleaning functions in the event of a Design Basis Accident. The applicable filter units are not normally in operation and the sample canisters are typically removed due to the 18 month criteria.

d

The periodic automatic startup ensures that each SLCRS train responds properly. The surveillance frequency is controlled under the Surveillance Frequency Control Program. The surveillance verifies that the SLCRS starts on a SIS test signal. It also includes the automatic functions to isolate the other ventilation systems that are not part of the safety-related postaccident operating configuration and to start up and to align the ventilation systems that flow through the secondary containment to the accident condition.

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LBDCR 05-MP3-025
March 7, 2006

3/4.6.6.1 SUPPLEMENTARY LEAK COLLECTION AND RELEASE SYSTEM (Continued)

- The main steam valve building ventilation system isolates.
- Auxiliary building ventilation (normal) system isolates.
- Charging pump/reactor plant component cooling water pump area cooling subsystem aligns and discharges to the auxiliary building filters and a filter fan starts.
- Hydrogen recombiner ventilation system aligns to the postaccident configuration.
- The engineered safety features building ventilation system aligns to the postaccident configuration.

References:

1. Engineering analysis, Memo MP3-DE-94-539, "Bolting Requirements for Access Panels on Dampers 3HVR*DMPF29 & 44," dated June 16, 1994.

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LBDCR 13-MP3-002
May 2, 2013

PLANT SYSTEMS

BASES

SURVEILLANCE REQUIREMENTS

This surveillance requirement verifies that the UHS is capable of providing a 30 day cooling water supply to safety related equipment without exceeding its design basis temperature. This surveillance requirement verifies that the water temperature of the UHS is $\leq$ 80°F.

REFERENCES

1. FSAR, Section 6.2, Containment Systems
2. FSAR, Section 9.2, Water Systems
3. FSAR, Section 15.6, Decrease in Reactor Coolant Inventory

3/4.7.6 DELETED

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

BACKGROUND

The control room emergency ventilation system provides a protected environment from which operators can control the unit following an uncontrolled release of radioactivity, hazardous chemicals, or smoke. Additionally, the system provides temperature control for the control room envelope (CRE) during normal and post-accident operations.

The control room emergency ventilation system is comprised of the CRE emergency air filtration system and a temperature control system.

The control room emergency air filtration system consists of two redundant systems that recirculate and filter the air in the CRE and a CRE boundary that limits the inleakage of unfiltered air. Each control room emergency air filtration system consists of a moisture separator, electric heater, prefilter, upstream high efficiency particulate air (HEPA) filter, charcoal adsorber, downstream HEPA filter, and fan. Additionally, ductwork, valves or dampers, and instrumentation form part of the system.

The CRE is the area within the confines of the CRE boundary that contains the spaces that control room occupants inhabit to control the unit during normal and accident conditions. This area encompasses the control room, and other non-critical areas including adjacent support offices,

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LBDCR No. 08-MP3-014
October 21, 2008

PLANT SYSTEMS

BASES

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

BACKGROUND (Continued)

toilet and utility rooms. The CRE is protected during normal operation, natural events, and accident conditions. The CRE boundary is the combination of walls, floor, ceiling, ducting, valves, doors, penetrations and equipment that physically form the CRE. The OPERABILITY of the CRE boundary must be maintained to ensure that the inleakage of unfiltered air into the CRE will not exceed the inleakage assumed in the licensing basis analysis of design basis accident (DBA) consequences to CRE occupants. The CRE and its boundary are defined in the Control Room Envelope Habitability Program and UFSAR Section 6.4.2.1.

Normal Operation

A portion of the control room emergency ventilation system is required to operate during normal operations to ensure the temperature of the control room is maintained at or below 95°F.

Post Accident Operation

The control room emergency ventilation system is required to operate during post-accident operations to ensure the temperature of the CRE is maintained and to ensure the CRE will remain habitable during and following accident conditions.

The following event occurs upon receipt of a control building isolation (CBI) signal or a signal indicating high radiation in the air supply duct to the CRE.

The control room emergency ventilation system will automatically start in the emergency mode (filtered pressurization whereby outside air is diverted through the filters to the CRE to maintain a positive pressure).

APPLICABLE SAFETY ANALYSIS

The OPERABILITY of the Control Room Emergency Ventilation System ensures that: (1) the ambient air temperature does not exceed the allowable temperature for continuous-duty rating for the equipment and instrumentation cooled by this system, and (2) the CRE will remain

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LBDCR No. 08-MP3-014
October 21, 2008

PLANT SYSTEMS

BASES

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

APPLICABLE SAFETY ANALYSIS (Continued)

habitable for occupants during and following all credible accident conditions. The OPERABILITY of this system in conjunction with control room design provisions is based on limiting the radiation exposure to CRE occupants. For all postulated design basis accidents, the radiation exposure to CRE occupants shall be 5 rem TEDE or less, consistent with the requirements of 10 CFR 50.67. This limitation is consistent with the requirements of General Design Criterion 19 of Appendix A, 10 CFR Part 50.

LIMITING CONDITION FOR OPERATION

Two independent control room emergency air filtration systems are required to be OPERABLE to ensure that at least one is available in the event the other system is disabled. Total system failure, such as from a loss of both ventilation trains or from an inoperable CRE boundary, could result in exceeding a dose of 5 rem TEDE to the CRE occupants in the event of a large radioactive release.

A control room emergency air filtration system is OPERABLE when the associated:

a. Fan is OPERABLE;

b. HEPA filters and charcoal adsorbers are not excessively restricting flow and are capable of performing their filtration functions; and

c. moisture separator, heater, ductwork, valves, and dampers are OPERABLE, and air circulation can be maintained.

In order for the CREVs to be considered OPERABLE, the CRE boundary must be maintained such that the CRE occupant dose from a large radioactive release does not exceed the calculated dose in the licensing basis consequence analyses for DBAs, and that CRE occupants are protected from hazardous chemicals and smoke.

TS LCO 3.7.7 is modified by a footnote allowing the CRE boundary to be opened intermittently under administrative controls. This footnote only applies to openings in the CRE boundary that can be rapidly restored to the design condition, such as doors, hatches,

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LBDCR No. 08-MP3-014
October 21, 2008

PLANT SYSTEMS

BASES

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

LIMITING CONDITION FOR OPERATION (Continued)

floor plugs, and access panels. For entry and exit through doors, the administrative control of the opening is performed by the person(s) entering or exiting the area. For other openings, these controls should be proceduralized and consist of stationing a dedicated individual at the opening who is in continuous communication with the operators in the CRE. This individual will have a method to rapidly close the opening and to restore the CRE boundary to a condition equivalent to the design condition when a need for CRE isolation is indicated.

Operation of the Control Room Emergency Ventilation System in the emergency mode is credited for design basis accident mitigation. The fuel handling accident analyses assume the emergency mode will be established within 30 minutes of a fuel handling accident. The other applicable design basis accidents (e.g., large break loss of coolant accident) assume the emergency mode will be established within 101 minutes of the accident. Even though manual operator action to establish the emergency mode could be credited within these time periods, the system has been designed to automatically establish the required equipment alignment upon receipt of a Control Building Isolation signal. Therefore, when stopping a Control Room Emergency Filter Fan by placing the control switch in OFF, the fan remains OPERABLE. The administrative controls associated with the procedure in use to stop the fan are sufficient to ensure the associated control switch is returned to the AUTO position. In addition, the Emergency Operating Procedure will ensure a Control Room Emergency Filter fan is running in the emergency mode post accident well within the credited accident mitigation time frame.

Control Room inlet isolation valves 3HVC*AOV25 and 3HVC*AOV26 are maintained open with air isolated whenever Technical Specification 3.7.7 is applicable. The only procedural guidance to close 3HVC*AOV25 when this specification is applicable is in the alarm response procedure for smoke in the control room air inlet ventilation duct. The alarm response procedure will provide direction to establish the filtered recirculation mode of operation by restoring air and closing 3HVC*AOV25. During this limited time period, both Control Room Emergency Filtration trains remain OPERABLE, but degraded. Even though 3HVC*AOV25 is closed, it is a fail open valve and will automatically open on a Control Building Isolation signal, making it OPERABLE. However, should it to fail open, the system will not function. Therefore, it is not single failure proof and is degraded. Operation in this condition should be minimized.

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LBDCR 10-MP3-003
February 23, 2010

PLANT SYSTEMS

BASES

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

APPLICABILITY

In MODES 1, 2, 3, and 4.
During movement of recently irradiated fuel assemblies.

ACTIONS a., b., and c. of this specification are applicable at all times during plant operation in MODES 1, 2, 3, and 4. ACTIONS d. and e. are applicable during movement of recently irradiated fuel assemblies. The CREVs is required to be OPERABLE during fuel handling involving handling recently irradiated fuel (i.e., fuel that has occupied part of a critical reactor core within the previous 350 hours*).

An analysis was completed that analyzed a bounding drop of a non-spent fuel component. The analysis showed that the amount of fuel damage from this drop resulted in control room dose less than 5 rem TEDE without operation of the control room ventilation system.

ACTIONS

MODES 1, 2, 3, and 4

a. With one control room emergency air filtration system inoperable for reasons other than an inoperable CRE boundary, action must be taken to restore the inoperable system to an OPERABLE status within 7 days. In this condition, the remaining control room emergency air filtration system is adequate to perform the CRE occupant protection function. However, the overall reliability is reduced because a single failure in the OPERABLE train could result in a loss of the control room emergency air filtration system function. The 7-day completion time is based on the low probability of a DBA occurring during this time period, and the ability of the remaining train to provide the required capability.

If the inoperable train cannot be restored to an OPERABLE status within 7 days, the unit must be placed in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. These completion times are reasonable, based on operating experience, to reach the required unit condition from full power conditions in an orderly manner and without challenging unit systems.

* During fuel assembly cleaning evolutions that involve the handling or cleaning of two fuel assemblies coincidentally, recently irradiated fuel is fuel that has occupied part of a critical reactor core within the previous 525 hours.

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BASES

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

ACTIONS (Continued)

b. With both control room emergency air filtration systems inoperable, except due to an inoperable CRE boundary, at least one control room emergency air filtration system must be restored to OPERABLE status within 1 hour, or the unit must be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. These completion times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

c. With one or more control room emergency air filtration systems inoperable due to an inoperable CRE boundary, (1) action must be immediately initiated to implement mitigating actions; (2) action must be taken within 24 hours to verify mitigating actions ensure CRE occupant exposures to radiological and chemical hazards will not exceed limits, and mitigating actions are taken for exposure to smoke hazards; and (3) the CRE boundary must be restored to OPERABLE status within 90 days. Otherwise, the unit must be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

If the unfiltered inleakage of potentially contaminated air past the CRE boundary and into the CRE can result in CRE occupant radiological dose greater than the calculated dose of the licensing basis analyses of DBA consequences (allowed to be up to 5 rem TEDE), or inadequate protection of CRE occupants from hazardous chemicals or smoke, the CRE boundary is inoperable. Actions must be taken to restore an OPERABLE CRE boundary within 90 days.

During the period that the CRE boundary is considered inoperable, action must be initiated to implement mitigating actions to lessen the effect on CRE occupants from the potential hazards of a radiological or chemical event or a challenge from smoke. Actions must be taken within 24 hours to verify that in the event of a DBA, the mitigating actions will ensure that CRE occupant radiological exposures will not exceed the calculated dose of the licensing basis analyses of DBA consequences, and that CRE occupants are protected from hazardous chemicals and smoke. These mitigating actions (i.e., actions that are taken to offset the consequences of the inoperable CRE boundary) should be preplanned for implementation upon entry into the condition, regardless of whether entry is intentional or unintentional. The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period, and the use of mitigating actions. The 90 day Completion Time is reasonable based on the determination that the mitigating actions will ensure protection of CRE occupants within analyzed limits while limiting the probability that CRE occupants will have to implement protective measures that may adversely affect

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3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

ACTIONS (Continued)

their ability to control the reactor and maintain it in a safe shutdown condition in the event of a DBA. In addition, the 90 day Completion Time is a reasonable time to diagnose, plan and possibly repair, and test most problems with the CRE boundary.

Immediate action(s), in accordance with the LCO ACTION Statements, means that the required action should be pursued without delay and in a controlled manner.

During movement of recently irradiated fuel assemblies

d. With one control room emergency air filtration system inoperable, action must be taken to restore the inoperable system to an OPERABLE status within 7 days. After 7 days, either initiate and maintain operation of the remaining OPERABLE control room emergency air filtration system in the emergency mode or suspend the movement of fuel. Initiating and maintaining operation of the OPERABLE train in the emergency mode ensures: (i) OPERABILITY of the train will not be compromised by a failure of the automatic actuation logic; and (ii) active failures will be readily detected.

e. With both control room emergency air filtration systems inoperable, or with the train required by ACTION 'd' not capable of being powered by an OPERABLE emergency power source, actions must be taken to suspend all operations involving the movement of recently irradiated fuel assemblies. This action places the unit in a condition that minimizes risk. This action does not preclude the movement of fuel to a safe position.

SURVEILLANCE REQUIREMENTS

4.7.7.a

The CRE environment should be checked periodically to ensure that the CRE temperature control system is functioning properly. The surveillance frequency is controlled under the Surveillance Frequency Control Program. It is not necessary to cycle the CRE ventilation chillers. The CRE is manned during operations covered by the technical specifications. Typically, temperature aberrations will be readily apparent.

4.7.7.b

Standby systems should be checked periodically to ensure that they function properly. The surveillance frequency is controlled under the Surveillance Frequency Control Program.

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3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

SURVEILLANCE REQUIREMENTS (Continued)

This surveillance requirement verifies a system flow rate of 1,120 cfm ± 20%. ~~Additionally, the system is required to operate for at least 10 continuous hours with the heaters energized. These operations are sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters due to the humidity in the ambient air.~~

Operation with the heaters on for greater than or equal to 15 continuous minutes demonstrates OPERABILITY of the system. Periodic operation ensures that heater failure, blockage, fan or motor failure, or excessive vibration can be detected for corrective action. Since adsorption testing is performed at 70% relative humidity, the filter heaters are required to operate.

4.7.7.c

The performance of the control room ~~emergency filtration systems should be checked~~ periodically by verifying the HEPA filter efficiency, charcoal adsorber efficiency, minimum flow rate, and the physical properties of the activated charcoal. The frequency is as specified in the Surveillance Frequency Control Program and following painting, fire, or chemical release in any ventilation zone communicating with the system.

ANSI N510-1980 will be used as a procedural guide for surveillance testing.

Any time the OPERABILITY of a HEPA filter or charcoal adsorber housing has been affected by repair, maintenance, modification, or replacement activity, post maintenance testing in accordance with SR 4.0.1 is required to demonstrate OPERABILITY.

4.7.7.c.1

This surveillance verifies that the system satisfies the in-place penetration and bypass leakage testing acceptance criterion of less than 0.05% in accordance with Regulatory Position C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the system at a flow rate of 1,120 cfm ± 20%. ANSI N510-1980 is used in lieu of ANSI N510-1975 referenced in the regulatory guide.

4.7.7.c.2

This surveillance requires that a representative carbon sample be obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978 and that a laboratory analysis verify that the representative carbon sample meets the laboratory testing criteria of ASTM D3803-89 and Millstone Unit 3 specific parameters. The laboratory analysis is required to be performed within 31 days after removal of the sample. ANSI N510-1980 is used in lieu of ANSI N510-1975 referenced in Revision 2 of Regulatory Guide 1.52.

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PLANT SYSTEMS

BASES

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

SURVEILLANCE REQUIREMENTS (Continued)

4.7.7.c.3

This surveillance verifies that a system flow rate of 1,120 cfm ± 20%, during system operation when testing in accordance with ANSI N510-1980.

4.7.7.d

After 720 hours of charcoal adsorber operation, a representative carbon sample must be obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, and a laboratory analysis must verify that the representative carbon sample meets the laboratory testing criteria of ASTM D3803-89 and Millstone Unit 3 specific parameters.

The laboratory analysis is required to be performed within 31 days after removal of the sample. ANSI N510-1980 is used in lieu of ANSI N510-1975 referenced in Revision 2 of Regulatory Guide 1.52.

The maximum surveillance interval is 900 hours, per Surveillance Requirement 4.0.2. The 720 hours of operation requirement originates from Nuclear Regulatory Guide 1.52, Table 2, Note C. This testing ensures that the charcoal adsorbency capacity has not degraded below acceptable limits as well as providing trending data.

4.7.7.e.1

This surveillance verifies that the pressure drop across the combined HEPA filters and charcoal adsorbers banks at less than 6.75 inches water gauge when the system is operated at a flow rate of 1,120 cfm ± 20%. The surveillance frequency is controlled under the Surveillance Frequency Control Program.

4.7.7.e.2

Deleted.

4.7.7.e.3

This surveillance verifies that the heaters can dissipate 9.4 ± 1 kW at 480V when tested in accordance with ANSI N510-1980. The surveillance frequency is controlled under the Surveillance Frequency Control Program. The heater kW measured must be corrected to its nameplate rating. Variations in system voltage can lead to measurements of kW which cannot be compared to the nameplate rating because the output kW is proportional to the square of the voltage.

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3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

SURVEILLANCE REQUIREMENTS (Continued)

4.7.7.f

Following the complete or partial replacement of a HEPA filter bank, the OPERABILITY of the cleanup system should be confirmed. This is accomplished by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criterion of less than 0.05% in accordance with ANSI N510-1980 for a DOP test aerosol while operating the system at a flow rate of 1,120 cfm ± 20%.

4.7.7.g

Following the complete or partial replacement of a charcoal adsorber bank, the OPERABILITY of the cleanup system should be confirmed. This is accomplished by verifying that the cleanup system satisfied the in-place penetration and bypass leakage testing acceptance criterion of less than 0.05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow of 1,120 cfm ± 20%.

4.7.7.h

This Surveillance verifies the OPERABILITY of the CRE boundary by testing for unfiltered air inleakage past the CRE boundary and into the CRE. The details of the testing are specified in the Control Room Envelope Habitability Program.

The CRE is considered habitable when the radiological dose to CRE occupants calculated in the licensing basis analyses of DBA consequences is no more than 5 rem TEDE and the CRE occupants are protected from hazardous chemicals and smoke. This SR verifies that the unfiltered air inleakage into the CRE is no greater than the flow rate assumed in the licensing basis analyses of DBA consequences. When unfiltered air inleakage is greater than the assumed flow rate, ACTION c. must be entered. ACTION c. allows time to restore the CRE boundary to OPERABLE status provided mitigating actions can ensure that the CRE remains within the licensing basis habitability limits for the occupants following an accident. Compensatory measures are discussed in Regulatory Guide 1.196, which endorses, with exceptions, NEI 99-03. These compensatory measures may also be used as mitigating actions as required by ACTION c. Temporary analytical methods may also be used as compensatory measures to restore OPERABILITY. Options for restoring the CRE boundary to OPERABLE status include changing the licensing basis DBA consequence analysis, repairing the CRE boundary, or a combination of these actions. Depending upon the nature of the problem and the corrective action, a full scope inleakage test may not be necessary to establish that the CRE boundary has been restored to OPERABLE status.

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3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

References:

(1) Nuclear Regulatory Guide 1.52, Revision 2

(2) MP3 UFSAR, Table 1.8-1, NRC Regulatory Guide 1.52

(3) NRC Generic Letter 91-04

(4) Condition Report (CR) #M3-99-0271

(5) NEI 99-03, "Control Room Habitability Assessment"

(6) Letter from Eric J. Leeds (NRC) to James W. Davis (NEI) dated January 30, 2004, "NEI Draft White paper, Use of Generic Letter 91-18 Process and Alternative Source Terms in the Context of Control Room Habitability."

3/4.7.8 DELETED

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Operating each Auxiliary Building Filtration System train for greater than or equal to 15 minutes ensures that all trains are OPERABLE and that all associated controls are functioning properly. It also ensures that blockage, fan or motor failure, or excessive vibration can be detected for corrective action. Since adsorption testing is performed at 70% relative humidity, the filter heaters are required to operate.

3/4.7.9 AUXILIARY BUILDING FILTER SYSTEM

The OPERABILITY of the Auxiliary Building Filter System, and associated filters and fans, ensures that radioactive materials leaking from the equipment within the charging pump, component cooling water pump and heat exchanger areas following a LOCA are filtered prior to reaching the environment. ~~Periodic operation of the system with the heaters operating for at least 10 continuous hours is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters.~~ The surveillance frequency is controlled under the Surveillance Frequency Control Program. The operation of this system and the resultant effect on offsite dosage calculations was assumed in the safety analyses. ANSI N510-1980 will be used as a procedural guide for surveillance testing. Laboratory testing of methyl iodide penetration shall be performed in accordance with ASTM D3803-89 and Millstone Unit 3 specific parameters. The heater kW measured must be corrected to its nameplate rating. Variations in system voltage can lead to measurements of kW which cannot be compared to the nameplate rating because the output kW is proportional to the square of the voltage.

The Charging Pump/Reactor Plant Component Cooling Water Pump Ventilation System is required to be available to support the Auxiliary Building Filter System and the Supplementary Leak Collection and Release System (SLCRS). The Charging Pump/Reactor Plant Component Cooling Water Pump Ventilation System consists of two redundant trains, each capable of providing 100% of the required flow. Each train has a two position, "Off" and "Auto," remote control switch. With the remote control switches for each train in the "Auto" position, the system is capable of automatically transferring operation to the redundant train in the event of a low flow condition in the operating train. The associated fans do not receive any safety related automatic start signals (e.g., Safety Injection Signal).

Placing the remote control switch for a Charging Pump/Reactor Plant Component Cooling Water Pump Ventilation Train in the "Off" position to start the redundant train or to perform post maintenance testing to verify availability of the redundant train will not affect the availability of that train, provided appropriate administrative controls have been established to ensure the remote control switch is immediately returned to the "Auto" position after the completion of the specified activities or in response to plant conditions. These administrative controls include the use of an approved procedure and a designated individual at the control switch for the respective Charging Pump/Reactor Plant Component Cooling Water Pump Ventilation Train who can rapidly respond to instructions from procedures, or control room personnel, based on plant conditions.

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LCO 3.7.9 ACTION statement:

With one Auxiliary Building Filter System inoperable, restoration to OPERABLE status within 7 days is required.

The 7 days restoration time requirement is based on the following: The risk contribution is less for an inoperable Auxiliary Building Filter System, than for the charging pump or reactor plant component cooling water (RPCCW) systems, which have a 72 hour restoration time requirement. The Auxiliary Building Filter System is not a direct support system for the charging pumps or RPCCW pumps. Because the pump area is a common area, and as long as the other train of the Auxiliary Building Filter System remains OPERABLE, the 7 day restoration time limit is acceptable based on the low probability of a DBA occurring during the time period and the ability of the remaining train to provide the required capability. A concurrent failure of both trains would require entry into LCO 3.0.3 due to the loss of functional capability. The Auxiliary Building Filter System does support the Supplementary Leak Collection and Release System (SLCRS) and the LCO ACTION statement time of 7 days is consistent with that specified for SLCRS (See LCO 3.6.6.1).

Any time the OPERABILITY of a HEPA filter or charcoal adsorber housing has been affected by repair, maintenance, modification, or replacement activity, post maintenance testing in accordance with SR 4.0.1 is required to demonstrate OPERABILITY.

Surveillance Requirement 4.7.9.c

Surveillance requirement 4.7.9.c requires that after 720 hours of operation a charcoal sample must be taken and the sample must be analyzed within 31 days after removal.

The 720 hours of operation requirement originates from Regulatory Guide 1.52, Revision 2, March 1978, Table 2, Note "c", which states that "Testing should be performed (1) initially, (2) at least once per 18 months thereafter for systems maintained in a standby status or after 720 hours of system operations, and (3) following painting, fire, or chemical release in any ventilation zone communicating with the system." This testing ensures that the charcoal adsorbency capacity has not degraded below acceptable limits as well as providing trending data. The 720 hour figure is an arbitrary number which is equivalent to a 30 day period. This criteria is directed to filter systems that are normally in operation and also provide emergency air cleaning functions in the event of a Design Basis Accident. The applicable filter units are not normally in operation and sample canisters are typically removed due to the 18 month criteria.

3/4.7.10 SNUBBERS

All snubbers are required OPERABLE to ensure that the structural integrity of the Reactor Coolant System and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads. For the purpose of declaring the affected system OPERABLE with the inoperable snubber(s), an engineering evaluation may be performed, in accordance with Section 50.59 of 10 CFR Part 50.

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