

- (2) Pursuant to the Act and 10 CFR Part 70, VEPCO to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Updated Final Safety Analysis Report;
- (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material, without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or component; and
- (5) Pursuant to the Act and 10 CFR Parts 30 and 70, VEPCO to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

VEPCO is authorized to operate the North Anna Power Station, Unit No. 1, at reactor core power levels not in excess of 2893 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 252 are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications.

For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance subject to the modified acceptance criteria is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of this amendment.

For SRs that existed prior to this amendment whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to implementation of this amendment.

This license condition is effective as of its date of issuance.

- f. Upon implementation of Amendment No. 252 adopting TSTF-448, Revision 3, the determination of Main Control Room/Emergency Switchgear Room (MCR/ESGR) envelope unfiltered air inleakage as required by TS SR 3.7.10.4 in accordance with TS 5.5.16.c(i), the assessment of MCR/ESGR envelope habitability as required by Specification 5.5.16.c(ii), and the measurement of MCR/ESGR envelope pressure as required by Specification 5.5.16.d, shall be considered met. Following implementation:
- (i) The first performance of SR 3.7.10.4 in accordance with Specification 5.5.16.c(i), shall be within the specified frequency of 6 years plus the 18-month allowance of SR 3.0.2, as measured from September 21, 2003, the date of the most recent successful tracer gas test, as stated in the March 30, 2004 letter response to Generic Letter 2003-01, or within the next 18 months if the time period since the most recent successful tracer gas test is greater than 6 years.
  - (ii) The first performance of the periodic assessment of MCR/ESGR envelope habitability, Specification 5.5.16.c(ii), shall be within 3 years, plus the 9-month allowance of SR 3.0.2, as measured from September 21, 2003, the date of the most recent successful tracer gas test, as stated in the March 31, 2004 letter response to Generic Letter 2003-01, or within the next 9 months if the time period since the most recent successful tracer gas test is greater than 3 years.
  - (iii) The first performance of the periodic measurement of MCR/ESGR envelope pressure, Specification 5.5.16.d, shall be within 18 months, plus the 138 days allowed by SR 3.0.2, as measured from February 27, 2007, the date of the most recent successful pressure measurement test, or within 138 days if not performed previously.

- (4) The licensee is authorized to receive from the Surry Power Station, Unit Nos. 1 and 2, possess, and store irradiated Surry Power Station fuel assemblies containing special nuclear material, enriched to not more than 4.1 percent by weight U-235, subject to the following conditions:
- a. Surry Power Station fuel assemblies may not be placed in North Anna Power Station, Unit Nos. 1 and 2, reactors.
  - b. Irradiated fuel shipped to North Anna Power Station shall have been removed from the Surry Power Station reactors no less than 730 days prior to shipment.
  - c. No more than 500 Surry Power Station irradiated fuel assemblies shall be received for storage at the North Anna Power Station, Unit Nos. 1 and 2, spent fuel pool.

(5) Environmental Protection Plan

The Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 197, is hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Environmental Protection Plan.

D. Fire Protection

VEPCO shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report for the facility and as approved in the SER dated February 1979 subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

E. Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Millstone, North Anna and Surry Power Stations' Security Plan, Training, and Qualification Plan, Safeguards Contingency Plan, and Independent Spent Fuel Storage Installation Security Program" with revisions submitted through May 15, 2006.

F. Updated Final Safety Analysis Report

- (1) The licensee's Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on July 25, October 1, November 4, and December 2, 2002, describes certain future inspection activities to be completed before the period of extended operation. The licensee shall complete these activities no later than April 1, 2018, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.
- (2) The Updated Final Safety Analysis Report supplement as revised on July 25, October 1, November 4, and December 2, 2002, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71(e)(4), following the issuance of this renewed license. Until that update is complete, the licensee may make changes to the programs described in such supplement without prior Commission approval, provided that the licensee evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

G. Mitigation Strategy

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (1) Fire fighting response strategy with the following elements:
  - a. Pre-defined coordinated fire response strategy and guidance
  - b. Assessment of mutual aid fire fighting assets
  - c. Designated staging areas for equipment and materials
  - d. Command and control
  - e. Training of response personnel
- (2) Operations to mitigate fuel damage considering the following:
  - a. Protection and use of personnel assets
  - b. Communications
  - c. Minimizing fire spread
  - d. Procedures for implementing integrated fire response strategy
  - e. Identification of readily-available pre-staged equipment
  - f. Training on integrated fire response strategy
  - g. Spent fuel pool mitigation measures

(3) Actions to minimize release to include consideration of:

- a. Water spray scrubbing
- b. Dose to onsite responders

H. This renewed license is effective as of the date of issuance and shall expire at midnight on April 1, 2038.

FOR THE NUCLEAR REGULATORY COMMISSION

original signed by:

Samuel J. Collins, Director  
Office of Nuclear Reactor Regulation

Attachments:

- 1. Appendix A, Technical Specifications
- 2. Appendix B, Environmental Protection Plan

Date of Issuance: March 20, 2003

- (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material, without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This renewed license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations as set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

VEPCO is authorized to operate the facility at steady state reactor core power levels not in excess of 2893 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 232 are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Additional Conditions

The matters specified in the following conditions shall be completed to the satisfaction of the Commission within the stated time periods following the issuance of the condition or within the operational restrictions indicated. The removal of these conditions shall be made by an amendment to the renewed license supported by a favorable evaluation by the Commission:

- a. If VEPCO plans to remove or to make significant changes in the normal operation of equipment that controls the amount of radioactivity in effluents from the North Anna Power Station, the

Renewed License No NPF-7  
Amendment No. 232

interval begins upon completion of the last surveillance performed prior to implementation of this amendment.

This license condition is effective as of its date of issuance.

- e. VEPCO may operate one lead test assembly containing advanced zirconium-based alloys for one cycle, to a lead rod burnup not exceeding 75,000 MWD/MTU, as described in the licensee's submittal dated February 11, 2002.
- f. Upon implementation of Amendment No. 232 adopting TSTF-448, Revision 3, the determination of Main Control Room/Emergency Switchgear Room (MCR/ESGR) envelope unfiltered air inleakage as required by TS SR 3.7.10.4 in accordance with TS 5.5.16.c(i), the assessment of MCR/ESGR envelope habitability as required by Specification 5.5.16.c(ii), and the measurement of MCR/ESGR envelope pressure as required by Specification 5.5.16.d, shall be considered met. Following implementation:
  - (i) The first performance of SR 3.7.10.4 in accordance with Specification 5.5.16.c(i), shall be within the specified frequency of 6 years plus the 18-month allowance of SR 3.0.2, as measured from September 21, 2003, the date of the most recent successful tracer gas test, as stated in the March 30, 2004 letter response to Generic Letter 2003-01, or within the next 18 months if the time period since the most recent successful tracer gas test is greater than 6 years.
  - (ii) The first performance of the periodic assessment of MCR/ESGR envelope habitability, Specification 5.5.16.c(ii), shall be within 3 years, plus the 9-month allowance of SR 3.0.2, as measured from September 21, 2003, the date of the most recent successful tracer gas test, as stated in the March 31, 2004 letter response to Generic Letter 2003-01, or within the next 9 months if the time period since the most recent successful tracer gas test is greater than 3 years.
  - (iii) The first performance of the periodic measurement of MCR/ESGR envelope pressure, Specification 5.5.16.d, shall be within 18 months, plus the 138 days allowed by SR 3.0.2, as measured from February 27, 2007, the date of the most recent successful pressure measurement test, or within 138 days if not performed previously.

- (4) The licensee is authorized to receive from the Surry Nuclear Power Station, Unit Nos. 1 and 2, possess, and store irradiated Surry Power Station fuel assemblies containing special nuclear material, enriched to not more than 4.1 percent by weight U-235, subject to the following conditions:
- a. Surry Power Station fuel assemblies may not be placed in North Anna Power Station, Unit Nos. 1 and 2, reactors.
  - b. Irradiated fuel shipped to North Anna Power Station shall have been removed from the Surry Power Station reactors no less than 730 days prior to shipment.
  - c. No more than 500 Surry Power Station irradiated fuel assemblies shall be received for storage at the North Anna Power Station, Unit Nos. 1 and 2, spent fuel pool.

(5) Environmental Protection Plan

The Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 178, is hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Environmental Protection Plan.

D. Fire Protection

VEPCO shall implement and maintain in effect all provisions of the approved fire protection program as described in the licensee's Updated Final Safety Analysis Report for the facility and as approved in the SER dated February 1979 subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

E. Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Millstone, North Anna and Surry Power Stations' Security Plan, Training, and Qualification Plan, Safeguards Contingency Plan, and Independent Spent Fuel Storage Installation Security Program" with revisions submitted through May 15, 2006.



F. Updated Final Safety Analysis Report

- (1) The Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on July 25, October 1, November 4, and December 2, 2002, describes certain future inspection activities to be completed before the period of extended operation. The licensee shall complete these activities no later than August 21, 2020, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.
- (2) The Updated Final Safety Analysis Report supplement as revised on July 25, October 1, November 4, and December 2, 2002, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71(e)(4), following the issuance of this renewed license. Until that update is complete, the licensee may make changes to the programs described in such supplement without prior Commission approval, provided that the licensee evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

G. Mitigation Strategy

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (1) Fire fighting response strategy with the following elements:
  - a. Pre-defined coordinated fire response strategy and guidance
  - b. Assessment of mutual aid fire fighting assets
  - c. Designated staging areas for equipment and materials
  - d. Command and control
  - e. Training of response personnel
- (2) Operations to mitigate fuel damage considering the following:
  - a. Protection and use of personnel assets
  - b. Communications
  - c. Minimizing fire spread
  - d. Procedures for implementing integrated fire response strategy
  - e. Identification of readily-available pre-staged equipment
  - f. Training on integrated fire response strategy
  - g. Spent fuel pool mitigation measures

(3) Actions to minimize release to include consideration of:

- a. Water spray scrubbing
- b. Dose to onsite responders

H. This renewed license is effective as of the date of issuance and shall expire at midnight on August 21, 2040.

FOR THE NUCLEAR REGULATORY COMMISSION

original signed by:

Samuel J. Collins, Director  
Office of Nuclear Reactor Regulation

Attachments:

- 1. Appendix A, Technical Specifications
- 2. Appendix B, Environmental Protection Plan

Date of Issuance: March 20, 2003

3.7 PLANT SYSTEMS

3.7.10 Main Control Room/Emergency Switchgear Room (MCR/ESGR) Emergency Ventilation System (EVS)-MODES 1, 2, 3, and 4

LCO 3.7.10 Two MCR/ESGR EVS trains shall be OPERABLE.

----- NOTE -----

The MCR/ESGR envelope boundary may be opened intermittently under administrative control.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One required MCR/ESGR EVS train inoperable for reasons other than Condition B.	A.1 Restore MCR/ESGR EVS train to OPERABLE status.	7 days
B. One or more required MCR/ESGR EVS trains inoperable due to inoperable MCR/ESGR envelope boundary.	B.1 Initiate action to implement mitigating actions.	Immediately
	<u>AND</u>	
	B.2 Verify mitigating actions ensure MCR/ESGR envelope occupant exposures to radiological, chemical, and smoke hazards will not exceed limits.	24 hours
	<u>AND</u>	
	B.3 Restore MCR/ESGR envelope boundary to OPERABLE status.	90 days

MCR/ESGR EVS-MODES 1, 2, 3, and 4  
3.7.10

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Required Action and associated Completion Time of Condition A or B not met.	C.1 Be in MODE 3.	6 hours
	<u>AND</u>	
	C.2 Be in MODE 5.	36 hours
D. Two required MCR/ESGR EVS trains inoperable for reasons other than Condition B.	D.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.10.1 Operate each required MCR/ESGR EVS train for $\geq 10$ continuous hours with the heaters operating.	31 days
SR 3.7.10.2 Perform required MCR/ESGR EVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with VFTP
SR 3.7.10.3 Not Used	
SR 3.7.10.4 Perform required MCR/ESGR Envelope unfiltered air inleakage testing in accordance with the MCR/ESGR Envelope Habitability Program.	In accordance with the MCR/ESGR Envelope Habitability Program

3.7 PLANT SYSTEMS

3.7.13 Main Control Room/Emergency Switchgear Room (MCR/ESGR) Bottled Air System

LCO 3.7.13 Three MCR/ESGR bottled air system trains shall be OPERABLE.

----- NOTE -----

The MCR/ESGR envelope boundary may be opened intermittently under administrative control.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One required MCR/ESGR bottled air system train inoperable for reasons other than Condition B.	A.1 Restore MCR/ESGR bottled air system train to OPERABLE status.	7 days
B. One or more required MCR/ESGR bottled air system trains inoperable due to inoperable MCR/ESGR envelope boundary in MODE 1, 2, 3, or 4.	B.1 Initiate action to implement mitigating actions.	Immediately
	<u>AND</u> B.2 Verify mitigating actions ensure MCR/ESGR envelope occupant exposures to radiological, chemical, and smoke hazards will not exceed limits.  <u>AND</u>	24 hours          (continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	B.3 Restore MCR/ESGR envelope boundary to OPERABLE status.	90 days
C. Two or more required MCR/ESGR bottled air system trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B.	C.1 Initiate action to implement mitigating actions.	Immediately
	<u>AND</u> C.2 Restore at least two MCR/ESGR bottled air system trains to OPERABLE status.	24 hours
D. Required Action and associated Completion Time of Condition A, B or C not met in MODE 1, 2, 3, or 4.	D.1 Be in MODE 3.	6 hours
	<u>AND</u> D.2 Be in MODE 5.	36 hours

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>E. Required Action and associated Completion Time of Condition A not met during movement of recently irradiated fuel assemblies.</p> <p><u>OR</u></p> <p>Two or more required MCR/ESGR bottled air system trains inoperable during movement of recently irradiated fuel assemblies.</p> <p><u>OR</u></p> <p>One or more required bottled air system trains inoperable due to an inoperable MCR/ESGR envelope boundary during movement of recently irradiated fuel assemblies.</p>	<p>E.1 Suspend movement of recently irradiated fuel assemblies.</p>	<p>Immediately</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.13.1 Verify each required MCR/ESGR bottled air bank is pressurized to <math>\geq 2300</math> psig.</p>	<p>31 days</p>
<p>SR 3.7.13.2 Verify each required MCR/ESGR bottled air bank manual valve not locked, sealed, or otherwise secured and required to be open during accident conditions is open.</p>	<p>31 days</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.13.3 Verify each required MCR/ESGR bottled air system train actuates on an actual or simulated actuation signal.	18 months
SR 3.7.13.4 Verify two required MCR/ESGR bottled air system trains can maintain a positive pressure of $\geq 0.05$ inches water gauge, relative to the adjacent areas for at least 60 minutes.	18 months on a STAGGERED TEST BASIS



MCR/ESGR EVS—During Movement of Recently Irradiated Fuel Assemblies  
3.7.14

3.7 PLANT SYSTEMS

3.7.14 Main Control Room/Emergency Switchgear Room (MCR/ESGR) Emergency Ventilation System (EVS)—During Movement of Recently Irradiated Fuel Assemblies

LCO 3.7.14 Two MCR/ESGR EVS trains shall be OPERABLE.

----- NOTE -----

The MCR/ESGR envelope boundary may be opened intermittently under administrative control.

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APPLICABILITY: During movement of recently irradiated fuel assemblies.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One required MCR/ESGR EVS train inoperable for reasons other than inoperable MCR/ESGR envelope boundary.	A.1 Restore MCR/ESGR EVS train to OPERABLE status.	7 days
B. Required Action and associated Completion Time of Condition A not met.  <u>OR</u>  Two required MCR/ESGR EVS trains inoperable.  <u>OR</u>  One or more required MCR/ESGR EVS trains inoperable due to inoperable MCR/ESGR envelope boundary.	B.1 Suspend movement of recently irradiated fuel assemblies.	Immediately

MCR/ESGR EVS—During Movement of Recently Irradiated Fuel Assemblies  
3.7.14

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.14.1 Operate each required MCR/ESGR EVS train for $\geq 10$ continuous hours with the heaters operating.	31 days
SR 3.7.14.2 Perform required MCR/ESGR EVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with VFTP
SR 3.7.14.3 Perform required MCR/ESGR envelope unfiltered air inleakage testing in accordance with the MCR/ESGR Envelope Habitability Program.	In accordance with the MCR/ESGR Envelope Habitability Program

5.5 Programs and Manuals

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5.5.15 Containment Leakage Rate Testing Program (continued)

d. Leakage Rate acceptance criteria are:

1. Prior to entering a MODE where containment OPERABILITY is required, the containment leakage rate acceptance criteria are:

$\leq 0.60 L_a$  for the Type B and Type C tests on a Maximum Path Basis and  $\leq 0.75 L_a$  for Type A tests.

During operation where containment OPERABILITY is required, the containment leakage rate acceptance criteria are:

$\leq 1.0 L_a$  for overall containment leakage rate and  $\leq 0.60 L_a$  for the Type B and Type C tests on a Minimum Path Basis.

2. Overall air lock leakage rate testing acceptance criterion is  $\leq 0.05 L_a$  when tested at  $\geq P_a$ .

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

f. Nothing in these Technical Specifications shall be construed to modify the testing Frequencies required by 10 CFR 50, Appendix J.

5.5.16 Main Control Room/Emergency Switchgear Room (MCR/ESGR) Envelope Habitability Program

A MCR/ESGR Envelope Habitability Program shall be established and implemented to ensure that MCR/ESGR envelope habitability is maintained such that, with an OPERABLE Emergency Habitability System (i.e., MCR/ESGR EVS and MCR/ESGR Bottled Air System), MCR/ESGR envelope occupants can control the reactor safely under normal conditions and maintain it in a safe condition following a radiological event, hazardous chemical release, or a smoke challenge. The program shall ensure that adequate radiation protection is provided to permit access and occupancy of the MCR/ESGR envelope under design basis accident conditions without  
(continued)

5.5 Programs and Manuals

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5.5.16 Main Control Room/Emergency Switchgear Room Envelope Habitability Program (MCR/ESGR) (continued)

personnel receiving radiation exposures in excess of 5 rem total effective dose equivalent for the duration of the accident. The program shall include the following elements:

- a. The definition of the MCR/ESGR envelope and the MCR/ESGR envelope boundary.
- b. Requirements for maintaining the MCR/ESGR envelope boundary in its design condition including configuration control and preventive maintenance.
- c. Requirements for (i) determining the unfiltered air inleakage past the MCR/ESGR envelope into the MCR/ESGR envelope in accordance with the testing methods and at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, "Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors," Revision 0, May 2003, and (ii) assessing MCR/ESGR envelope habitability at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, Revision 0.

The following is an exception to Section C.2 of Regulatory Guide 1.197, Revision 0:

- 2.C.1 Licensing Bases - Vulnerability assessments for radiological, hazardous chemical and smoke, and emergency ventilation system testing were completed as documented in the UFSAR. The exceptions to the Regulatory Guides (RG) referenced in RG 1.196 (i.e., RG 1.52, RG 1.78, and RG 1.183), which were considered in completing the vulnerability assessments, are documented in the UFSAR/current licensing basis. Compliance with these RGs is consistent with the current licensing basis as described in the UFSAR.
- d. Measurement, at designated locations, of the MCR/ESGR envelope pressure relative to all external areas adjacent to the MCR/ESGR envelope boundary during the pressurization mode of operation by one train of the MCR/ESGR EVS, operating at the flow rate required by the VFTP, at a Frequency of 18 months on a STAGGERED TEST BASIS. The results shall be trended and used as part of the 18 month assessment of the MCR/ESGR envelope boundary.

(continued)

5.5 Programs and Manuals

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5.5.16 Main Control Room/Emergency Switchgear Room Envelope Habitability Program (MCR/ESGR) (continued)

- e. The quantitative limits on unfiltered air inleakage into the MCR/ESGR envelope. These limits shall be stated in a manner to allow direct comparison to the unfiltered air inleakage measured by the testing described in paragraph c. The unfiltered air inleakage limit for radiological challenges is the inleakage flow rate assumed in the licensing basis analyses of design basis accident consequences. Unfiltered air inleakage limits for hazardous chemicals must ensure that exposure of MCR/ESGR envelope occupants to these hazards will be within the assumptions in the licensing basis.
  - f. The provisions of SR 3.0.2 are applicable to the Frequencies for assessing MCR/ESGR envelope habitability, determining MCR/ESGR envelope unfiltered inleakage, and measuring MCR/ESGR envelope pressure and assessing the MCR/ESGR envelope boundary as required by paragraphs c and d, respectively.
-