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ROBERT C. MECREDDY  
Vice President  
Nuclear Operations

November 30, 1999

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Attn: Guy S. Vissing  
Project Directorate I-1  
Washington, D.C. 20555

Subject: Application for Amendment to Facility Operating License  
Ventilation Filter Testing Program Change (5.5.10)  
Rochester Gas and Electric Corporation  
R.E. Ginna Nuclear Power Plant  
Docket No. 50-244

Reference: NRC Generic Letter 99-02: Laboratory Testing of Nuclear-Grade Activated  
Charcoal, dated June 3, 1999.

Dear Mr. Vissing:

The enclosed License Amendment Request (LAR) proposes to revise the Ginna Station Improved Technical Specifications associated with the Ventilation Filter Testing Program (VFTP) (5.5.10).

This LAR is being proposed as the result of NRC Generic Letter 99-02, which requested that all addressees determine whether their technical specifications (TS) reference American Society for Testing and Materials (ASTM) D3803-1989, "Standard Test Method for Nuclear-Grade Activated Carbon," for charcoal adsorber laboratory testing. Addressees whose TS do not reference ASTM D3803-1989 were requested to either amend their TS to reference ASTM D3803-1989 or propose an alternative test protocol. RG&E is proposing to revise the Ginna Station Improved Technical Specifications to reference ASTM D3803-1989 for charcoal adsorber laboratory testing. Also, as the result of the more conservative nature of the proposed testing, RG&E is also proposing to revise the acceptance criteria for the charcoal adsorber.

A081

PDR ADDON 0500244

RG&E requests that upon NRC approval, this LAR should be effective immediately and implemented within 30 days.

Very truly yours,



Robert C. Mecredy

Attachments

xc: Mr. Guy S. Vissing (Mail Stop 8C2)  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Regional Administrator, Region 1  
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U.S. NRC Ginna Senior Resident Inspector

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Albany, NY 12203-6399

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of )  
 )  
Rochester Gas and Electric Corporation ) Docket No. 50-244  
(R.E. Ginna Nuclear Power Plant) )

**APPLICATION FOR AMENDMENT  
TO OPERATING LICENSE**

Pursuant to Section 50.90 of the regulations of the U.S. Nuclear Regulatory Commission (the "Commission"), Rochester Gas and Electric Corporation ("RG&E"), holder of Facility Operating License No. DPR-18, hereby requests that the Improved Technical Specifications set forth in Appendix A to that license be amended. This request for change in Improved Technical Specifications is to revise the Ventilation Filter Testing Program (5.5.10) requirements to reference ASTM D3803-1989 for charcoal adsorber laboratory testing and to revise the acceptance criteria.

A description of the amendment request, necessary background information, justification of the requested changes, and environmental impact considerations determination are provided in Attachment I. The no significant hazards consideration evaluation is provided as Attachment II. A marked up copy of the current Ginna Station Improved Technical Specifications which shows the requested changes is set forth in Attachment III. The proposed revised Improved Technical Specifications are provided in Attachment IV.

The evaluation set forth in Attachment I demonstrates that the proposed changes do not involve a significant change in the types or a significant increase in the amounts of effluent or any change in the authorized power level of the facility. The proposed changes also do not involve a significant hazards consideration, as documented in Attachment II.

WHEREFORE, Applicant respectfully requests that Appendix A to Facility Operating License No. DPR-18 be amended in the form attached hereto as Attachment IV.

Rochester Gas and Electric Corporation

By Robert C. Mecredy  
Robert C. Mecredy  
Vice President  
Nuclear Operations Group

Subscribed and sworn to before me  
on this 30th day of November, 1999.

Sharon P. Sortino  
Notary Public

SHARON P. SORTINO  
Notary Public, State of New York  
Registration No. 01S06017755  
Monroe County  
Commission Expires December 21, 2000

**Attachment I**  
R.E. Ginna Nuclear Power Plant

**LICENSE AMENDMENT REQUEST**  
**VENTILATION FILTER TESTING PROGRAM CHANGE**

This attachment provides a description of the amendment request and necessary justification for the proposed changes. The attachment is divided into five sections as follows. Section A identifies all changes to the current Ginna Station Improved Technical Specifications (ITS) while Section B provides the background and history associated with the changes being requested. Section C provides detailed justification for the proposed changes. An environmental impact consideration of the requested changes is provided in Section D. Section E lists all references used in Attachments I and II.

**A. DESCRIPTION OF AMENDMENT REQUEST**

This License Amendment Request (LAR) proposes to revise Ginna Station ITS to reflect the change in testing standards for the charcoal adsorber laboratory testing. The change is summarized below and shown in Attachments III and IV.

1. ADMINISTRATIVE CONTROLS 5.5

- a. Specification 5.5.10 is changed to provide a reference to the test methodology modifications within the subsequent specifications.
- b. Specification 5.5.10 (a.3) is changed to provide a reference to ASTM D3803-1989, and to provide a specific test temperature and relative humidity. The allowable limit for methyl iodide penetration is also changed.
- c. Specification 5.5.10 (c.5) is changed to provide a reference to ASTM D3803-1989, and to provide a specific test temperature and relative humidity. The allowable limit for methyl iodide penetration is also changed.
- d. Specification 5.5.10 (d.3) is changed to provide a reference to ASTM D3803-1989, and to provide a specific test temperature and relative humidity. The allowable limit for methyl iodide penetration is also changed.

## **B. BACKGROUND**

The installation of charcoal filters in an effluent stream provides an effective means of removing iodide from the stream and thereby reduces doses resulting from an effluent release. The installed charcoal filter systems and their effectiveness has been assumed to reduce the consequences of design basis accidents in three areas of Ginna Station. The Containment Post-Accident Charcoal System is installed in containment to mitigate the consequences of a loss of coolant accident and other less severe accidents which may occur inside the containment. Charcoal filtration is provided in the Control Room Emergency Air Treatment System to maintain doses to control room operators at acceptable levels following a design basis accident. The Spent Fuel Pool Charcoal Adsorber System is installed in the immediate vicinity of the spent fuel pool in the auxiliary building to assist in the mitigation of the consequences of a fuel handling accident in the auxiliary building. Testing the capacity of the charcoal to adsorb iodide assures that an acceptable removal efficiency under accident conditions would be obtained. The difference between the test requirement for the removal efficiency for methyl iodide and the percentage assumed in the associated accident analysis provides adequate safety margin for degradation of the filter after the tests.

In July 1980 the NRC issued an SER (Reference 1) approving the incorporation of changes to the Technical Specification test requirements for the installed charcoal filter systems. The changes specified the applicable test conditions for temperature and relative humidity, and the associated methyl iodide removal efficiency acceptance criteria. The test conditions were specific to the individual filters and were established to be representative of the values of temperature and relative humidity which enveloped the conditions that may be present at the systems following a design basis accident.

In February 1996 the NRC issued an SER (Reference 2) approving the full conversion of the Ginna Technical Specifications (TS) to a version based on NUREG-1431, "Standard Technical Specifications, Westinghouse Plants" (Reference 3). As part of the conversion the details (temperature and relative humidity) associated with the methyl iodide testing of charcoal adsorbers in the plant ventilation systems were allowed to be relocated to plant procedures. The current requirements of the Ginna Ventilation Filter Testing Program (VFTP), as stated in the Improved Technical Specifications (ITS) are to test the charcoal adsorbers in accordance with Regulatory Guide 1.52, Revision 2. The plant procedures which implement the VFTP provide reference to standards ANSI/ASME N-509-1976 (Nuclear Power Plant Air Cleaning Unit and Components) and ANSI/ASME N-510-1975 (Testing of Nuclear Air Cleaning Systems).

In June 1999 the NRC issued Generic Letter 99-02 (Reference 4), which was issued to alert addressees that the NRC had determined that testing nuclear-grade activated charcoal to standards other than American Society for Testing and Materials (ASTM) D3803-1989, "Standard Test Method for Nuclear-Grade Activated Carbon," does not provide assurance for complying with the current licensing basis as it relates to the dose limits of General Design Criterion (GDC) 19 of

Appendix A to Part 50 of Title 10 of the Code of Federal Regulations (10 CFR) and Subpart A of 10 CFR Part 100. Utilities were requested to evaluate their charcoal adsorber test requirements and if it is determined to be necessary to adopt the ASTM D3803-1989 protocol, then to submit a TS amendment request to require testing to this protocol within 180 days of the date of the generic letter. The NRC also requested that the amendment request contain the test temperature, relative humidity, and penetration at which the proposed TS will require the test to be performed and the basis for these values. Because ASTM D3803-1989 is a more accurate and demanding test than older tests, the NRC is allowing utilities that upgrade their TS to this new protocol to be able to use a safety factor as low as 2 for determining the acceptance criteria for charcoal adsorber efficiency.

## C. JUSTIFICATION OF CHANGES

This section provides the justification for all changes described in Section A above and shown on Attachment IV. The justifications are organized based on whether the change is: more restrictive (M), less restrictive (L), administrative (A), or the requirement is relocated (R). The justifications listed below are also referenced in the technical specification(s) which are affected (see Attachment III).

### C.1 More Restrictive

M.1 The requirements for testing the Containment Post-Accident Charcoal System (5.5.10.a.3) will be revised to specifically provide reference to standard ASTM D3803-1989 as the test methodology and to specify a test temperature of 30°C (86°F) and a relative humidity of 95%. The 30°C (86°F) test temperature is considered to be a more conservative value, based on industry testing as described in Generic Letter 99-02 (Reference 4), than the current value of 141°C (286°F) which is specified in the RG&E filter inspection and testing program procedure. The 95% relative humidity is due to there being no humidity control. ASTM D3803-1989 is considered to be the most accurate and most realistic protocol for testing charcoal in ventilation systems because it offers the greatest assurance of accurately and consistently determining the capability of the charcoal. It requires the test to be performed at a constant low temperature of 30°C (86°F) and it provides for smaller tolerances in temperature, humidity, and air flow; and it has a humidity pre-equilibration. The proposed new test protocol and conditions will provide a higher assurance of the ability of the charcoal adsorbers to perform as assumed in the accident analysis and follows the guidance of NUREG-1431.

- M.2 The requirements for testing the Control Room Emergency Air Treatment System (5.5.10.c.5) will be revised to specifically provide reference to standard ASTM D3803-1989 as the test methodology and to specify a test temperature of 30°C (86°F) and a relative humidity of 95%. The 30°C (86°F) test temperature is considered to be a more conservative value, based on industry testing as described in Generic Letter 99-02 (Reference 4), than the current value of 52°C (125°F) which is specified in the RG&E filter inspection and testing program procedure. The 95% relative humidity is due to there being no humidity control. ASTM D3803-1989 is considered to be the most accurate and most realistic protocol for testing charcoal in ventilation systems because it offers the greatest assurance of accurately and consistently determining the capability of the charcoal. It requires the test to be performed at a constant low temperature of 30°C (86°F) and it provides for smaller tolerances in temperature, humidity, and air flow; and it has a humidity pre-equilibration. The proposed new test protocol and conditions will provide a higher assurance of the ability of the charcoal adsorbers to perform as assumed in the accident analysis and follows the guidance of NUREG-1431.
- M.3 The requirements for testing the Spent Fuel Pool Charcoal Adsorber System (5.5.10.d.3) will be revised to specifically provide reference to standard ASTM D3803-1989 as the test methodology and to specify a test temperature of 30°C (86°F) and a relative humidity of 95%. The 30°C (86°F) test temperature is considered to be a more conservative value, based on industry testing as described in Generic Letter 99-02 (Reference 4), than the current value of 66°C (150°F) which is specified in the RG&E filter inspection and testing program procedure. The 95% relative humidity is due to there being no humidity control. ASTM D3803-1989 is considered to be the most accurate and most realistic protocol for testing charcoal in ventilation systems because it offers the greatest assurance of accurately and consistently determining the capability of the charcoal. It requires the test to be performed at a constant low temperature of 30°C (86°F) and it provides for smaller tolerances in temperature, humidity, and air flow; and it has a humidity pre-equilibration. The proposed new test protocol and conditions will provide a higher assurance of the ability of the charcoal adsorbers to perform as assumed in the fuel handling accident analysis and follows the guidance of NUREG-1431.

## C.2 Less Restrictive

- L.1 The methyl iodide penetration requirements of the Containment Post-Accident Charcoal System (5.5.10.a.3) will be revised to increase the allowed penetration from 10% to 14.5%. This change is the result of reducing the safety factor used in calculating the allowed penetration to a value of 2. The laboratory test acceptance criteria contain a safety factor to ensure that the efficiency assumed in the accident analysis is still valid at the end of the operating cycle. Because ASTM D3803-1989 is a more accurate and

demanding test than older tests, Generic Letter 99-02 allows utilities that upgrade their TS to this new protocol to be able to use a safety factor as low as 2 for determining the acceptance criteria for charcoal filter efficiency.

$$\text{Allowable Penetration} = \frac{100\% - \text{Accident Analysis Methyl Iodide Assumption}}{\text{Safety Factor}}$$

$$\text{Allowable Penetration} = \frac{100\% - 71\%}{2}$$

$$\text{Allowable Penetration} = 14.5\%$$

- L.2 The methyl iodide penetration requirements of the Control Room Emergency Air Treatment System (5.5.10.c.5) will be revised to increase the allowed penetration from 10% to 14.5%. This change is the result of reducing the safety factor used in calculating the allowed penetration to a value of 2. The laboratory test acceptance criteria contain a safety factor to ensure that the efficiency assumed in the accident analysis is still valid at the end of the operating cycle. Because ASTM D3803-1989 is a more accurate and demanding test than older tests, Generic Letter 99-02 allows utilities that upgrade their TS to this new protocol to be able to use a safety factor as low as 2 for determining the acceptance criteria for charcoal filter efficiency.

$$\text{Allowable Penetration} = \frac{100\% - \text{Accident Analysis Methyl Iodide Assumption}}{\text{Safety Factor}}$$

$$\text{Allowable Penetration} = \frac{100\% - 71\%}{2}$$

$$\text{Allowable Penetration} = 14.5\%$$

- L.3 The methyl iodide penetration requirements of the Spent Fuel Pool Charcoal Adsorber System (5.5.10.d.3) will be revised to increase the allowed penetration from 10% to 14.5%. This change is the result of reducing the safety factor used in calculating the allowed penetration to a value of 2. The laboratory test acceptance criteria contain a safety factor to ensure that the efficiency assumed in the accident analysis is still valid at the end of the operating cycle. Because ASTM D3803-1989 is a more accurate and demanding test than older tests, Generic Letter 99-02 allows utilities that upgrade their TS to this new protocol to be able to use a safety factor as low as 2 for determining the acceptance criteria for charcoal filter efficiency.

$$\text{Allowable Penetration} = \frac{100\% - \text{Accident Analysis Methyl Iodide Assumption}}{\text{Safety Factor}}$$

$$\text{Allowable Penetration} = \frac{100\% - 71\%}{2}$$

$$\text{Allowable Penetration} = 14.5\%$$

There are no administrative (A) or relocated (R) changes associated with this LAR.

#### **D. ENVIRONMENTAL IMPACT CONSIDERATION**

RG&E has evaluated the proposed changes and determined that:

1. The changes do not involve a significant hazards consideration as documented in Attachment II; and
2. The changes do not involve a significant change in the types or significant increase in the amounts of any effluent that may be released offsite since more stringent test protocol are being imposed and there is no change in accident assumptions; and
3. The changes do not involve a significant increase in individual or cumulative occupational radiation exposure since no new or different type of equipment are required to be installed as a result of this LAR.

Accordingly, the proposed changes meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), an environmental assessment of the proposed changes is not required.

#### **E. REFERENCES**

- a. Letter from Dennis M. Crutchfield (NRC) to Leon D. White (RG&E), "Issuance of Amendment No. 34 to Provisional Operating License No. DPR-18 for the R. E. Ginna Nuclear Power Plant", dated July 14, 1980.
2. Letter from Allen R. Johnson (NRC) to Robert C. Mecredy (RG&E), "Issuance of Amendment No. 61 to Facility Operating License No. DPR-18, R. E. Ginna Nuclear Power Plant", dated February 13, 1996.

3. NUREG-1431 Rev.1, "Standard Technical Specifications, Westinghouse Plants".
4. NRC Generic Letter 99-02, "Laboratory testing of Nuclear-Grade Activated Charcoal", dated June 3, 1999.

**Attachment II**  
R.E. Ginna Nuclear Power Plant

**SIGNIFICANT HAZARDS CONSIDERATION EVALUATION**

The proposed changes to the Ginna Station Improved Technical Specifications as identified in Attachment I Section A and justified by Section C have been evaluated with respect to 10 CFR 50.92(c) and shown not to involve a significant hazards consideration as described below. This attachment is organized based on Attachment I Section C.

**Evaluation of More Restrictive Changes**

The more restrictive changes associated with the providing a reference to American Society for Testing and Materials (ASTM) D3803-1989, "Standard Test Method for Nuclear-Grade Activated Carbon," and to provide a specific test temperature and relative humidity for testing the charcoal adsorbers do not involve a significant hazards consideration as discussed below:

- 1) Operation of Ginna Station in accordance with the proposed changes does not involve a significant increase in the probability or consequences of an accident previously evaluated. The changes add a reference to the latest approved test protocol and provide for specific test conditions. This does not increase the probability of an accident previously evaluated since the tests are of themselves not an accident initiator. The proposed changes are in accordance with NUREG-1431 guidance and provide a higher assurance of the ability of the charcoal adsorbers to perform as assumed in the accident analysis. Therefore, the probability or consequences of an accident previously evaluated is not significantly increased.
- 2) Operation of Ginna Station in accordance with the proposed changes does not create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed changes add specific details of charcoal adsorber testing and do not of themselves involve a physical alteration of the plant (ie. no new or different type of equipment will be added to perform the required testing) or changes in the methods governing normal plant operation. The changes only involve implementing currently approved test methodology. Therefore, the possibility for a new or different kind of accident from any accident previously evaluated is not created.
- 3) Operation of Ginna Station in accordance with the proposed changes does not involve a significant reduction in a margin of safety. The proposed changes only add conservatism in the test requirements for the charcoal adsorbers credited in the accident analysis. ASTM D3803-1989 is considered to be the most accurate and most realistic protocol for testing charcoal in ventilation systems because it offers the greatest assurance of accurately and consistently determining the capability of the charcoal. Therefore, this change does not involve a significant reduction in a margin of safety.

Based upon the preceding information, it has been determined that the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated, create the possibility of a new or different kind of accident from any accident previously evaluated, or involve a significant reduction in a margin of safety. Therefore, it is concluded that the proposed changes meet the requirements of 10 CFR 50.92(c) and do not involve a significant hazards consideration.

### **Evaluation of Less Restrictive Changes**

The less restrictive changes associated with revising the allowable test limit for methyl iodide penetration of charcoal adsorbers do not involve a significant hazards consideration as discussed below:

- 1) Operation of Ginna Station in accordance with the proposed changes does not involve a significant increase in the probability or consequences of an accident previously evaluated. The changes revise the acceptance criteria for the allowed penetration of methyl iodide during the testing of charcoal adsorbers in the plant ventilation systems. This does not increase the probability of an accident previously evaluated since the tests are of themselves not an accident initiator. Because ASTM D3803-1989 is a more accurate and demanding test than older tests this new protocol will allow the use a safety factor of 2 for determining the acceptance criteria for charcoal filter efficiency. The new acceptance criteria continue to ensure that the efficiency assumed in the accident analysis is still valid. Therefore, the probability or consequences of an accident previously evaluated is not significantly increased.
- 2) Operation of Ginna Station in accordance with the proposed changes does not create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed changes of revising charcoal adsorber testing acceptance criteria do not of themselves involve a physical alteration of the plant (ie. no new or different type of equipment will be added to perform the required testing) or changes in the methods governing normal plant operation. Therefore, the possibility for a new or different kind of accident from any accident previously evaluated is not created.
- 3) Operation of Ginna Station in accordance with the proposed changes does not involve a significant reduction in a margin of safety. The proposed changes only revise the test acceptance criteria of charcoal adsorbers as the result of implementing testing in accordance with ASTM D3803-1989. ASTM D3803-1989 is considered to be the most accurate and most realistic protocol for testing charcoal in ventilation systems because it offers the greatest assurance of accurately and consistently determining the capability of the charcoal. Therefore, this change does not involve a significant reduction in a margin of safety.

Based upon the preceding information, it has been determined that the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated, create the possibility of a new or different kind of accident from any accident previously evaluated, or involve a significant reduction in a margin of safety. Therefore, it is concluded that the proposed changes meet the requirements of 10 CFR 50.92(c) and do not involve a significant hazards consideration.

**Attachment III**  
**R.E. Ginna Nuclear Power Plant**

**Mark-up of Existing Ginna Station Technical Specifications**

Included pages:

5.0-12

5.0-13

5.5 Programs and Manuals (continued)

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5.5.10 Ventilation Filter Testing Program (VFTP)

A program shall be established to implement the following required testing of Engineered Safety Feature filter ventilation systems and the Spent Fuel Pool (SFP) Charcoal Adsorber System. The test frequencies and methods will be in accordance with Regulatory Guide 1.52, Revision 2, except that in lieu of 18 month test intervals, a 24 month interval will be implemented.

a. Containment Post-Accident Charcoal System

← Insert 1

1. Demonstrate the pressure drop across the charcoal adsorber bank is < 3 inches of water at a design flow rate ( $\pm 10\%$ ).
2. Demonstrate that an in-place Freon test of the charcoal adsorber bank shows a penetration and system bypass < 1.0%, when tested under ambient conditions.
3. Demonstrate for a carbon sample that a laboratory analysis shows the iodine removal efficiency of  $\geq 90\%$  of radioactive methyl iodide.

← Insert 2

b. Containment Recirculation Fan Cooler System

1. Demonstrate the pressure drop across the high efficiency particulate air (HEPA) filter bank is < 3 inches of water at a design flow rate ( $\pm 10\%$ ).
2. Demonstrate that an in-place dioctylphthalate (DOP) test of the HEPA filter bank shows a penetration and system bypass < 1.0%.

c. Control Room Emergency Air Treatment System (CREATS)

1. Demonstrate the pressure drop across the HEPA filter bank is < 3 inches of water at a design flow rate ( $\pm 10\%$ ).
2. Demonstrate that an in-place DOP test of the HEPA filter bank shows a penetration and system bypass < 1.0%.

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5.5 Programs and Manuals (continued)

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5.5.10 VFTP (continued)

3. Demonstrate the pressure drop across the charcoal adsorber bank is < 3 inches of water at a design flow rate ( $\pm 10\%$ ).
4. Demonstrate that an in-place Freon test of the charcoal adsorber bank shows a penetration and system bypass < 1.0%, when tested under ambient conditions.
5. Demonstrate for a carbon sample that a laboratory analysis shows the iodine removal efficiency of  $\geq 90\%$  of radioactive methyl iodide.

d. SFP Charcoal Adsorber System

← Insert 3

1. Demonstrate that the total air flow rate from the charcoal adsorbers shows at least 75% of that measured with a complete set of new adsorbers.
2. Demonstrate that an in-place Freon test of the charcoal adsorbers bank shows a penetration and system bypass < 1.0%, when tested under ambient conditions.
3. Demonstrate for a carbon sample that a laboratory analysis shows the iodine removal efficiency of  $\geq 90\%$  of radioactive methyl iodide.

← Insert 4

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

(continued)

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**Insert 1**

The test methods will be in accordance with Regulatory Guide 1.52, Revision 2, except as modified below.

**Insert 2**

Demonstrate that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows a methyl iodide penetration of less than 14.5% when tested in accordance with ASTM D3803-1989 at a test temperature of 30°C (86°F) and a relative humidity of 95%. L.1

M.1

**Insert 3**

Demonstrate that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows a methyl iodide penetration of less than 14.5% when tested in accordance with ASTM D3803-1989 at a test temperature of 30°C (86°F) and a relative humidity of 95%. L.2

M.2

**Insert 4**

Demonstrate that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows a methyl iodide penetration of less than 14.5% when tested in accordance with ASTM D3803-1989 at a test temperature of 30°C (86°F) and a relative humidity of 95%. L.3

M.3

**Attachment IV**  
R.E. Ginna Nuclear Power Plant

**Proposed Ginna Station Technical Specifications**

Included pages:

5.0-12

5.0-13

## 5.5 Programs and Manuals (continued)

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### 5.5.10 Ventilation Filter Testing Program (VFTP)

A program shall be established to implement the following required testing of Engineered Safety Feature filter ventilation systems and the Spent Fuel Pool (SFP) Charcoal Adsorber System. The test frequencies will be in accordance with Regulatory Guide 1.52, Revision 2, except that in lieu of 18 month test intervals, a 24 month interval will be implemented. The test methods will be in accordance with Regulatory Guide 1.52, Revision 2, except as modified below.

#### a. Containment Post-Accident Charcoal System

1. Demonstrate the pressure drop across the charcoal adsorber bank is < 3 inches of water at a design flow rate ( $\pm 10\%$ ).
2. Demonstrate that an in-place Freon test of the charcoal adsorber bank shows a penetration and system bypass < 1.0%, when tested under ambient conditions.
3. Demonstrate that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows a methyl iodide penetration of less than 14.5% when tested in accordance with ASTM D3803-1989 at a test temperature of 30°C (86°F) and a relative humidity of 95%.

#### b. Containment Recirculation Fan Cooler System

1. Demonstrate the pressure drop across the high efficiency particulate air (HEPA) filter bank is < 3 inches of water at a design flow rate ( $\pm 10\%$ ).
2. Demonstrate that an in-place dioctylphthalate (DOP) test of the HEPA filter bank shows a penetration and system bypass < 1.0%.

#### c. Control Room Emergency Air Treatment System (CREATS)

1. Demonstrate the pressure drop across the HEPA filter bank is < 3 inches of water at a design flow rate ( $\pm 10\%$ ).

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5.5 Programs and Manuals (continued)

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5.5.10 VFTP (continued)

2. Demonstrate that an in-place DOP test of the HEPA filter bank shows a penetration and system bypass < 1.0%.
3. Demonstrate the pressure drop across the charcoal adsorber bank is < 3 inches of water at a design flow rate ( $\pm$  10%).
4. Demonstrate that an in-place Freon test of the charcoal adsorber bank shows a penetration and system bypass < 1.0%, when tested under ambient conditions.
5. Demonstrate that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows a methyl iodide penetration of less than 14.5% when tested in accordance with ASTM D3803-1989 at a test temperature of 30°C (86°F) and a relative humidity of 95%.

d. SFP Charcoal Adsorber System

1. Demonstrate that the total air flow rate from the charcoal adsorbers shows at least 75% of that measured with a complete set of new adsorbers.
2. Demonstrate that an in-place Freon test of the charcoal adsorbers bank shows a penetration and system bypass < 1.0%, when tested under ambient conditions.
3. Demonstrate that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows a methyl iodide penetration of less than 14.5% when tested in accordance with ASTM D3803-1989 at a test temperature of 30°C (86°F) and a relative humidity of 95%.

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

(continued)

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