

**Attachment 2**

**Mark-up of Technical Specifications Changes**

**North Anna Power Station  
Units 1 and 2  
Virginia Electric and Power Company**

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CONTAINMENT SYSTEMSWASTE GAS CHARCOAL FILTER SYSTEMLIMITING CONDITION FOR OPERATION

3.6.4.3 A waste gas charcoal filter system (shared with Unit 2) shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

With the waste gas charcoal filter system inoperable, restore the inoperable system to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours.

SURVEILLANCE REQUIREMENTS

4.6.4.3 The waste gas charcoal filter system shall be demonstrated OPERABLE:

- a. At least once per 31 days by:
  1. Initiating flow through the HEPA filter and charcoal adsorber train using the process vent blowers and verifying that the purge system operates for at least 15 minutes,
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:
  1. Verifying that the cleanup system satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a., C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 300 cfm  $\pm$  10% (except as shown in Specifications 4.6.4.3e. and f.).

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CONTAINMENT SYSTEMSSURVEILLANCE REQUIREMENTS (Continued)

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 system flow rate of 300 cfm  $\pm 10\%$  during system operation when tested in accordance with ANSI N 510-1975.
- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.
- d. At least once per 18 months by:
  1. Verifying that the pressure drop across the HEPA filter charcoal adsorber assembly is  $< 8.5$  inches Water Gauge while operating the filter train at a flow rate of 300 cfm  $\pm 10\%$ .
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove  $\geq 99\%$  of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 300 cfm  $\pm 10\%$ .
- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove  $\geq 99\%$  of halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 300 cfm  $\pm 10\%$ .

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CONTAINMENT SYSTEMS

WASTE GAS CHARCOAL FILTER SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.4.3 A waste gas charcoal filter system (shared with Unit 1) shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

With the waste gas charcoal filter system inoperable, restore the inoperable system to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours.

SURVEILLANCE REQUIREMENTS

4.6.4.3 The waste gas charcoal filter system shall be demonstrated OPERABLE.

- a. At least once per 31 days by:
  - 1. Initiating flow through the HEPA filter and charcoal adsorber train using the process vent blowers and verifying that the purge system operates for at least 15 minutes,
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housing, or (2) 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 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 system flow rate is 300 cfm ± 10% (except as shown in Specifications 4.6.4.3.e. and f.).
  - 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 system flow rate of 300 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975.

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CONTAINMENT SYSTEMSSURVEILLANCE REQUIREMENTS (Continued)

- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.
- d. At least once per 18 months by:
1. Verifying that the pressure drop across the HEPA filter and charcoal adsorber assembly is less than 8.5 inches Water Gauge while operating the filter train at a flow rate of 300 cfm  $\pm$  10%.
- 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 system at a flow rate of 300 cfm  $\pm$  10%.
- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 300 cfm  $\pm$  10%.

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**Attachment 3**

**Proposed Technical Specifications Changes**

**North Anna Power Station  
Units 1 and 2  
Virginia Electric and Power Company**



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**Attachment 4**

**Significant Hazards Consideration Determination**

**North Anna Power Station  
Units 1 and 2  
Virginia Electric and Power Company**

## SIGNIFICANT HAZARDS CONSIDERATION

Virginia Electric and Power Company has reviewed the proposed Technical Specification changes and has determined that the proposed changes would not pose an unreviewed safety question or a significant hazards consideration. The proposed changes will remove the operability and surveillance requirements for the Waste Gas Charcoal Filter System from the Technical specifications and relocate these requirements in the Technical Requirements Manual (TRM).

A waste gas decay tank rupture is highly unlikely, as the waste gas decay tanks are designed and constructed to stringent quality control standards, are provided with pressure relief valves to prevent overpressurization, are missile-shielded by installation below grade, and have their gaseous contents controlled to prevent potentially explosive mixtures. The entire gaseous content of the waste gas decay tank is assumed to be released to the atmosphere as a ground-level release during. The waste gas charcoal filter system is not credited for any mitigation of the release in the accident analysis for a waste gas decay tank rupture. In addition, the releases associated with a waste gas decay tank rupture are bounded by the existing LOCA releases. Specifically, operation of the North Anna Power Station in accordance with the proposed Technical Specification changes will not:

Involve a significant increase in the probability or consequences of an accident previously evaluated.

Relocating the operability and surveillance requirements for The Waste Gas Charcoal Filter System to the TRM does not change the operation of the plant. The plant and the radioactive gas waste system will not be operated differently. No new accident initiators are established as a result of the proposed changes. Therefore, the probability of occurrence is not increased for any accident previously evaluated.

Relocating the operability and surveillance requirements for The Waste Gas Charcoal Filter to the TRM does not effect the gaseous releases to the environment, which are controlled by the ODCM. Additionally, no credit for these filters is taken in the accident analysis for Waste Gas Decay Tank rupture. Therefore, there is no increase in the consequences of any accident previously analyzed.

Create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed changes do not affect the operation of the plant. The gaseous waste systems will not be operated differently as a result of the proposed



changes. No new accident or event initiators are created moving the operability and surveillance requirements for The Waste Gas Charcoal Filter to the TRM. Therefore, the proposed changes do not create the possibility of any accident or malfunction of a different type.

Involve a significant reduction in the margin of safety as defined in the bases on any Technical Specifications.

The proposed changes have no effect on any safety analyses assumptions. The waste gas charcoal filters are not used to mitigate the consequence a Waste Gas Decay Tank rupture. The accident analysis assumes total release of the radioactive in the Waste Gas Decay Tank in the accident analysis. Therefore, the proposed changes do not result in a reduction in a margin of safety.