ATTACHMENT 3

Revised Technical Specification Pages

3.15 CONTROL ROOM AIR CONDITIONING SYSTEM

Applicability

Applies to the Control Room Air Conditioning System which is comprised of two parts, an environmental control system and an air clean-up system.

The Control Room Air Conditioning System contains redundant safety-related active components. Passive safety-related components and nonsafety-related components are not required to be redundant.

Objective

To provide limiting conditions for operation which ensure the operability of the air conditioning system during plant operation, such that normal operation or plant accident conditions requiring operation of the system will not result in consequences more severe than those analyzed.

Specification

3.15.1 During all modes of plant operation, except cold shutdown, the Control Room Air Conditioning System shall be operable with two trains of active safety-related components and the shared safety-related passive components, except as described below:

a. With one safety-related active component or train of the Control Room Air Conditioning System inoperable, restore the inoperable component or train to operable status within 7 days or be in at least hot shutdown within the next 8 hours and in cold shutdown within the following 30 hours.

b. With both redundant active components or trains or a safety-related passive component inoperable, restore at least one redundant train/active component or the inoperable passive component to operable status within 48 hours or be in at least hot shutdown within the next 8 hours and cold shutdown within the following 30 hours.

3.15.2 If the system is determined to be inoperable while the reactor is in cold shutdown, both trains shall be made operable prior to exceeding 200 degrees F reactor coolant temperature. Also, during cold shutdown and refueling when containment integrity is required, the following restrictions apply:

a. With one safety-related active component or train of the Control Room Air Conditioning System inoperable, restore the inoperable component or train to operable status within 7 days or initiate and maintain operation of the remaining operable train in the emergency pressurization mode.

b. With both redundant safety-related active components or trains or a safety-related passive component inoperable, suspend all operations involving core alterations or any operation which would reduce shutdown margin to less than that required for cold shutdown or refueling as appropriate.

Basis

Operability of the Control Room Air Conditioning System ensures that the Control Room will remain habitable during an accidental atmospheric radiation release to the extent that none of the occupants would receive a personal radiation exposure in excess of the limits specified in GDC 19 of Appendix A to 10CFR50[1]. Because the system's protection is required only during low probability events, a system train may be out of service for 7 days for repairs. Since reactor startup should not commence without this system in service, the specification prohibits exceeding 200 degrees F reactor coolant temperature with the system inoperable.

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1 FSAR Section 6.4

4.15 CONTROL ROOM AIR CONDITIONING SYSTEM

Applicability

Applies to the Control Room Air Conditioning System which is comprised of two parts, an environmental control system and an air cleaning system

Objective

To verify that the Control Room Air Conditioning System will maintain the Control Room environment and adequately remove radioactivity from the incoming ambient air should there be an accidental radiation release to the atmosphere.

Specification

The Control Room Air Conditioning System shall be demonstrated operable by:

a. At least once per 12 hours by verifying that the Control Room air temperature is less than or equal to 85 degrees F;

b. At least once per 31 days on a staggered testing basis initiating, from the Control Room, flow through the HEPA filters and carbon adsorber and verifying that the system operates for at least one hour;

c. At least once per 31 days, on a staggered testing basis, verify that a positive pressure is maintained in the Control Room during the Emergency Pressurization operating mode.

d. At least once per 18 months or (1) after any structural maintenance on the HEPA filters or carbon adsorber housings, or (2) following painting, fire, or chemical release in the Control Room envelope by:

   1. Verifying that the cleanup system satisfies the in-place penetration and by-pass 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 not less than 3300 ACFM or more than 4150 ACFM through the air cleaning unit and not less than 5200 ACFM or more than 5800 ACFM through the air handling unit; and,

2. Verifying, within 31 days of 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, by showing a methyl iodide penetration of less than 1% when tested at a temperature of 30 degree C and at a relative humidity of 70% in accordance with ASTM D3803.

e. After every 720 hours of carbon 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, by showing a methyl iodide penetration of less than 1% when tested at a temperature of 30 degrees C and at a relative humidity of 70% in accordance with ASTM D3803.

f. At least once per 18 months by:

1. Verifying the following for the air cleaning unit:

a. The overall different pressure is less than or equal to 3.4 inches water gauge,

b. Air flow through the unit is greater than or equal to 3300 ACFM and less than or equal to 4150 ACFM and

2. Verifying the following for the air handling unit:

a. Air flow through the unit is greater than or equal to 5200 ACFM and less than or equal to 5800 ACFM.

3. Verifying that, on either a safety injection test signal or a high radiation test signal, the system automatically switches into the emergency pressurization operating mode with flow through the HEPA filters and carbon adsorber bank;

4. Verifying that the system maintains the Control Room at a positive pressure relative to the outside atmosphere at less than or equal to a pressurization rate of 400 ACFM during the emergency pressurization operating mode;

g. After each complete or partial replacement of a HEPA filter bank, verify that the unit 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 ACU system at a flow rate between 3300 ACFM and 4150 ACFM, inclusive.

h. After each complete or partial replacement of a carbon adsorber bank, verify that the cleanup system satisfies the in-place penetration 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 ACU system at a flow rate between 3300 ACFM and 4150 ACFM, inclusive.

Basis

Determination that the system air flow versus pressure drop is per design assures that the air cleanup system is operating within the boundaries of the radiological dose calculation with regards to system air flows. Monitoring of pressure drop across the air cleaning unit and air handling unit assures that filters and adsorbers are replaced prior to excessive filter loading.

The frequency of in-place testing and sample analysis is necessary to show that the HEPA filters and carbon adsorbers can perform as evaluated under postulated accident conditions. Any HEPA filters found defective shall be replaced with the filters qualified pursuant to the Regulatory Position C.3.d of Regulatory Guide 1.52, Revision 2, March 1978. If the carbon fails to pass the laboratory test, all adsorbent in the system shall be replaced with an adsorber qualified according to Table 5.1 of ANSI N509-1980; with performance requirements of 30 degrees C and 70% RH and acceptance values of 0.1% penetration maximum for elemental iodine and 1% penetration maximum for methyl iodide. The performance requirements are consistent with in-service test conditions, as recommended by Regulatory Guide 1.52, Revision 2, March 1978, paragraph C.6.b, and the acceptance values are consistent with Regulatory Guide 1.52, Revision 2, March 1978, paragraph C.6.a., for a two-inch deep bed designed to operate outside primary containment. Methyl iodide penetration of less than 1% at 70% RH is required, consistent with Table 2 of the above referenced Regulatory Guide. All references by Regulatory Guide 1.52 to ANSI N509-1975 and ANSI N510-1975 are superseded by ANSI N509-1980 and ANSI N510-1980, respectively.

If painting, fire, or chemical release occurs such that the HEPA filters or carbon adsorbers could become contaminated from the fumes, chemicals, or foreign material, the same in-place testing and sample analysis shall be performed, as required, for operational use.