Current Technical
Specifications Markup

No Changes.
For Information Only.

CONTAINMENT SYSTEMS

STANDBY GAS TREATMENT SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.6.3 Two independent standby gas treatment subsystems shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3, and *.

ACTION:

a. With one standby gas treatment subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 7 days, or:

   1. In OPERATIONAL CONDITION 1, 2, or 3, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

   2. In OPERATIONAL CONDITION *, suspend handling of irradiated fuel in the secondary containment, CORE ALTERATIONS and operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.3 are not applicable.

b. With both standby gas treatment subsystems inoperable in OPERATIONAL CONDITION *, suspend handling of irradiated fuel in the secondary containment, CORE ALTERATIONS and operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.6.6.3 Each standby gas treatment subsystem shall be demonstrated OPERABLE:

a. At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the subsystem operates for at least 10 hours with the heaters OPERABLE.

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 subsystem by:

*When irradiated fuel is being handled in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

CONTAINMENT SYSTEMS

STANDBY GAS TREATMENT SYSTEM

SURVEILLANCE REQUIREMENTS (Continued)

4.6.6.3 (Continued)

1. Verifying that the subsystem 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 4000 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*, for a methyl iodide penetration of less than 0.175%; when tested in accordance with ASTM D3803~~-79~~ methods, with the following parameters:

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   a) Bed Depth - 4 inches
   b) Velocity - 40 fpm
   c) Temperature - ~~80° C~~ 30°C
   d) Relative Humidity - 70%

   and

3. Verifying a subsystem flow rate of 4000 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*, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978*, for a methyl iodide penetration of less than 0.175%; in accordance with ASTM D3803~~-79~~ methods, with the following parameters:

   a) Bed Depth - 4 inches
   b) Velocity - 40 fpm
   c) Temperature - ~~80° C~~ 30°C
   d) Relative Humidity - 70%

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

No Changes.
For Information Only

PLANT SYSTEMS

3/4.7.2 CONTROL ROOM VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.2 Two independent Control Room Ventilation Systems shall be OPERABLE.†

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3, and *.

ACTION:

a. In OPERATIONAL CONDITION 1, 2 or 3 with one Control Room Ventilation System inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

b. In OPERATIONAL CONDITION *:

1. With one Control Room Ventilation System inoperable, restore the inoperable system to OPERABLE status within 7 days. Otherwise, immediately initiate and maintain operation of the OPERABLE system in the high radiation mode of operation or suspend CORE ALTERATIONS, handling of irradiated fuel in the secondary containment and operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.4 are not applicable for entry into OPERATIONAL CONDITION 4 or 5.

2. With both Control Room Ventilation Systems inoperable, immediately suspend CORE ALTERATIONS, handling of irradiated fuel in the secondary containment and operations with a potential for draining the reactor vessel.

3. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.2 Each Control Room Ventilation System shall be demonstrated OPERABLE:†

a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 86°F.

b. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the makeup filter system operates continuously for at least 10 hours with the heaters operating; and with flow through the recirculation charcoal adsorber for at least 15 minutes.

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*During movement of irradiated fuel assemblies in the primary or secondary containment, during CORE ALTERATIONS, or during operations with a potential for draining the reactor vessel.

†Automatic transfer to the chlorine mode is not required when chlorine containers having a capacity of 150 pounds or less are stored 100 meters or more from the control room or its fresh air inlets.

PLANT SYSTEMS

CONTROL ROOM VENTILATION SYSTEM

SURVEILLANCE REQUIREMENTS (Continued)

4.7.2 (Continued)

c. At least once per 18 months or (1) after any structural maintenance on the makeup or recirculation HEPA filters or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the makeup or recirculation filter system by:

1. Verifying that the makeup filter 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 3000 cfm ± 10%.

2. Verifying that the recirculation filter system satisfies bypass leakage testing acceptance criteria of less than 2% total bypass and uses test procedure guidance in Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978*, and the system flow rate is 64,000 cfm ± 10%.

3. 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*, for a methyl iodide penetration of less than 0.175% for makeup filter system carbon adsorber and 6% for recirculation filter system carbon adsorber when tested; in accordance with ASTM D3803~~-79~~-89 methods, with the following parameters:

Make Up Filter System

a)	Bed Depth	- 4 inches
b)	Velocity	- 40 fpm
c)	Temperature	- 30°C
d)	Relative Humidity	- 70%

Recirculation Filter System

a)	Bed Depth	- 2 inches
b)	Velocity	- 80 fpm
c)	Temperature	- 30°C
d)	Relative Humidity	- 70%

4. Verifying flow rate of 3000 cfm ± 10% for the makeup filter system and 64,000 cfm ± 10% for the recirculation filter system during operation when tested in accordance with ANSI N510-1980.

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

PLANT SYSTEMS

CONTROL ROOM VENTILATION SYSTEM

SURVEILLANCE REQUIREMENTS (Continued)

4.7.2 (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*, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978*, for a methyl iodide penetration of less than 0.175% for the makeup filter system carbon adsorber and 6% for the recirculation filter system carbon adsorber when tested; in accordance with ASTM D3803~~79~~-89 methods, with the following parameters:

Make Up Filter System

a)	Bed Depth	- 4 inches
b)	Velocity	- 40 fpm
c)	Temperature	- 30°C
d)	Relative Humidity	- 70%

Recirculation Filter System

a)	Bed Depth	- 2 inches
b)	Velocity	- 80 fpm
c)	Temperature	- 30°C
d)	Relative Humidity	- 70%

e. At least once per 18 months by:

1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches Water Gauge while operating the makeup filter system at a flow rate of 3000 cfm ± 10%.

2. Verifying that on a high chlorine actuation** and a manual initiation test signal, the system automatically** switches to the chlorine mode of operation and the dampers close within 2 seconds.***

3 Verifying that the control room leak rate is limited to ≤ 4000 cfm ± 10% at ≥ 1/8-inch Water Gauge (W.G.) with respect to adjacent areas.

4. Verifying that on a smoke mode actuation test signal, the system automatically switches to the smoke mode of operation at a flow rate less than or equal to 64,000 cfm ± 10%.

5. Verifying that on a high radiation actuation test signal, the system automatically switches to the high radiation mode of operation and

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

**Automatic transfer to the chlorine mode is not required when chlorine containers having a capacity of 150 pounds or less are stored 100 meters from the control room or its fresh air inlets.

***This specification is not applicable after all chlorine containers having a capacity of 100 pounds or greater are removed from the site including the chlorine containers located at the site sewage treatment plant.

Current Technical
Specifications BASES Markup

BASES

3/4.7.1 SHUTDOWN SERVICE WATER SYSTEM

The OPERABILITY of the shutdown service water system ensures that sufficient cooling capacity is available for continued operation of safety-related equipment during accident conditions. The redundant cooling capacity of these systems, assuming a single failure, is consistent with the assumptions used in the accident analyses within acceptable limits.

The ultimate heat sink (UHS) specification ensure that sufficient cooling capacity is available for continued operation of safety-related equipment for at least 30 days to permit safe shutdown and cooldown of the reactor. The surveillance requirements ensure that quantities maintained are consistent with the assumption used in the accident analysis as described in the USAR and the guidance provided in Regulatory Guide 1.27, January 1976.

3/4.7.2 CONTROL ROOM VENTILATION SYSTEM

The OPERABILITY of the control room 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 control room will remain habitable for operations personnel during and following all design basis accident conditions. The OPERABILITY of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to 5 rem or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criterion 19 of Appendix "A", 10 CFR 50. Surveillance testing provides assurance that system and component performances continue to be in accordance with performance specifications for Clinton Unit 1, including applicable parts of ANSI ~~N509-1980~~ N510-1980. Continuous operation of the system with the heaters OPERABLE for 10 hours during each 31 day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The specified heater dissipation is based on a bus voltage of 460 volts. Heater test results shall be adjusted to account for actual bus voltage.

3/4.7.3 REACTOR CORE ISOLATION COOLING SYSTEM

The reactor core isolation cooling (RCIC) system is provided to assure adequate core cooling in the event of reactor isolation from its primary heat sink and the loss of feedwater flow to the reactor vessel without requiring actuation of any of the Emergency Core Cooling System equipment. The RCIC system is conservatively required to be OPERABLE whenever reactor pressure exceeds 150 psig. This pressure is substantially below that for which the low pressure core cooling systems can provide adequate core cooling for events requiring the RCIC system.

The RCIC system specifications are applicable during OPERATIONAL CONDITIONS 1, 2, and 3 when reactor vessel pressure exceeds 150 psig because RCIC is the primary (non-ECCS) source of emergency core cooling when the reactor is pressurized.

With the RCIC system inoperable, adequate core cooling is assured by the OPERABILITY of the HPCS system and justifies the specified 14 day out-of-service period.