

ATTACHMENT D

REVISED TECHNICAL SPECIFICATION PAGES

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PLANT SYSTEMS

3/4.7.2 CONTROL ROOM AND AUXILIARY ELECTRIC EQUIPMENT ROOM EMERGENCY  
FILTRATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.2 Two independent control room and auxiliary electric equipment room emergency filtration system trains shall be OPERABLE.<sup>#</sup>

APPLICABILITY: All OPERATIONAL CONDITIONS and \*.

ACTION:

- a. With one emergency filtration system train inoperable, restore the inoperable train to OPERABLE status within 7 days or:
  1. In OPERATIONAL CONDITIONS 1, 2, 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 4, 5 or \*, initiate and maintain operation of the OPERABLE emergency filtration system in the pressurization mode of operation.
- b. With both emergency filtration system trains inoperable, in OPERATIONAL CONDITION 4, 5 or \*, suspend CORE ALTERATIONS, handling of irradiated fuel in the secondary containment and operations with a potential for draining the reactor vessel.
- c. The provisions of Specification 3.0.3 are not applicable in Operational Condition \*.

SURVEILLANCE REQUIREMENTS

4.7.2 Each control room and auxiliary electric equipment room emergency filtration system train shall be demonstrated OPERABLE:

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- a. 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 train operates for at least 10 hours with the heaters OPERABLE.

\*When irradiated fuel is being handled in the secondary containment.

#The normal or emergency power source may be inoperable in OPERATIONAL CONDITION 4, 5 or \*.

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- a. "At least once per 31 days on a STAGGERED TEST BASIS:
1. Operate each Control Room and Auxiliary Electric Equipment Room Emergency Filter System for greater than or equal to 10 continuous hours with the heaters operating, and
  2. Manually initiating flow through the control room and auxiliary electric equipment room recirculation filters for at least 10 hours.

BASES3/4.7.1 CORE STANDBY COOLING SYSTEM - EQUIPMENT COOLING WATER SYSTEMS

The OPERABILITY of the core standby cooling system - equipment cooling water systems and the ultimate heat sink ensure that sufficient cooling capacity is available for continued operation of safety-related equipment during normal and accident conditions. The redundant cooling capacity of these systems, assuming a single failure, is consistent with the assumptions used in the accident conditions within acceptable limits.

3/4.7.2 CONTROL ROOM AND AUXILIARY ELECTRIC EQUIPMENT ROOM EMERGENCY FILTRATION SYSTEM

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The OPERABILITY of the control room and auxiliary electric equipment room emergency filtration system ensures that the rooms will remain habitable for operations personnel during and following all design basis accident conditions. The OPERABILITY of this system in conjunction with room design provisions is based on limiting the radiation exposure to personnel occupying the rooms to 5 rem or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criteria 19 of Appendix "A", 10 CFR Part 50. Cumulative operation of the system with the heaters OPERABLE for 10 hours over a 31 day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters.

3/4.7.3 REACTOR CORE ISOLATION COOLING SYSTEM

Continuous

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 even though the LPCI mode of the the residual heat removal (RHR) system provides adequate core cooling up to 350 psig.

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 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.

The surveillance requirements provide adequate assurance that RCICS will be OPERABLE when required. Although all active components are testable and full flow can be demonstrated by recirculation during reactor operation, a complete functional test requires reactor shutdown. Initial startup test program data may be used to determine equivalent turbine/pump capabilities between test flow path and the vessel injection flow path. The pump discharge piping is maintained full to prevent water hammer damage and to start cooling at the earliest possible moment. The low pressure setpoint allowable value for the discharge line "keep-filled" alarm is based on the head of water between the centerline of the pump discharge and the system high point vent.

ADMINISTRATIVE CONTROLS

PLANT OPERATING PROCEDURES AND PROGRAMS (Continued)

6.2.F. Primary Containment Leakage Rate Testing Program

A program shall be established to implement the leakage rate testing of the primary containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as codified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Testing Program," dated September 1995.

The peak calculated primary containment internal pressure for the design basis loss of coolant accident,  $P_o$ , is 39.6 psig.

The maximum allowable primary containment leakage rate,  $L_o$ , at  $P_o$ , is 0.635% of primary containment air weight per day.

Leakage rate acceptance criteria are:

- a. Primary containment overall leakage rate acceptance criterion is  $\leq 1.0 L_o$ . During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are  $\leq 0.60 L_o$  for the combined Type B and Type C tests, and  $\leq 0.75 L_o$  for Type A tests.
- b. Air lock testing acceptance criteria are:
  - 1) Overall air lock leakage rate is  $\leq 0.05 L_o$  when tested at  $\geq P_o$ .
  - 2) For each door, the seal leakage rate is  $\leq 5$  scf per hour when the gap between the door seals is pressurized to  $\geq 10$  psig.

The provisions of specification 4.0.2 do not apply to the test frequencies specified in the Primary Containment Leakage Rate Testing Program.

The provisions of specification 4.0.3 are applicable to the Primary Containment Leakage Rate Testing Program.

6.3 ACTION TO BE TAKEN IN THE EVENT OF A REPORTABLE EVENT IN PLANT OPERATION

The following actions shall be taken for REPORTABLE EVENTS:

- a. The Commission shall be notified and a Licensee Event Report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50, and
- b. Each REPORTABLE EVENT shall be reviewed by the Onsite Review and Investigative Function.

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### 8. Ventilation Filter Testing Program (VFTP)

A program shall be established to implement the following required testing of Engineered Safety Feature (ESF) filter ventilation systems at the frequencies specified in Regulatory Guide 1.52, Revision 2, dated March 1978, and in accordance with ASME N510-1989.

The provisions of Specifications 4.0.2 and 4.0.3 are applicable to the VFTP test frequencies.

- a. Demonstrate for each of the ESF systems that an in-place test of the high efficiency particulate air (HEPA) filters shows a penetration and system bypass  $< 0.05\%$  when tested in accordance with ASME N510-1989, at the system flowrate specified below:

ESF Ventilation System	Flowrate (cfm)
SBGT System	$\geq 3600$ and $\leq 4400$
CREF System	$\geq 3600$ and $\leq 4400$

- b. Demonstrate for each of the ESF system filter units that an in-place test of the charcoal adsorber shows a penetration and system bypass less than the value specified below, when tested in accordance with ASME N510-1989, at the system flowrate specified below:

ESF Ventilation System	Penetration and System Bypass	Flowrate (cfm)
SBGT System	0.05 %	$\geq 3600$ and $\leq 4400$
CREF System	0.05 %	$\geq 3600$ and $\leq 4400$
CRRF System	2.0 %	$\geq 18000$ and $\leq 28900$
AEERRF System	2.0 %	$\geq 14000$ and $\leq 22800$

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- c. Demonstrate for each of the ESF systems that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows the methyl iodide penetration less than the value specified below when tested in accordance with ASTM D3803-1989 at a temperature of 30°C, a relative humidity of 70 % and a face velocity as specified below.

ESF Ventilation System	Penetration	Face Velocity (fpm)
SBGT System	0.5 %	40
CREF System	2.5 %	40
CRRF System	15.0 %	80
AEERRF System	15.0 %	80

- d. Demonstrate for each of the ESF systems that the pressure drop across the combined moisture separator, heater, prefilter, HEPA filters and the charcoal adsorbers is less than the value specified below when tested at the system flowrate specified below:

ESF Ventilation System	Delta P (inches wg)	Flowrate (cfm)
SBGT System	8	≥ 3600 and ≤ 4400
CREF System	8	≥ 3600 and ≤ 4400
CRRF System	3.0	≥ 18000 and ≤ 28900
AEERRF System	3.0	≥ 14000 and ≤ 22800

- e. Demonstrate that the heaters for each of the ESF systems dissipate the electrical power specified below when tested in accordance with ASME N510-1989. These readings shall include appropriate corrections for variations from 480 Volts at the bus.

ESF Ventilation System	Wattage (kw)
SBGT System	≥ 21 and ≤ 25
CREF System	≥ 18 and ≤ 22

PLANT SYSTEMS

3/4.7.2 CONTROL ROOM AND AUXILIARY ELECTRIC EQUIPMENT ROOM EMERGENCY FILTRATION SYSTEM

EXISTING CONDITION FOR OPERATION

3.7.2 Two independent control room and auxiliary electric equipment room emergency filtration system trains shall be OPERABLE.<sup>6</sup>

APPLICABILITY: All OPERATIONAL CONDITIONS and <sup>a</sup>.

ACTION:

- a. With one emergency filtration system train inoperable, restore the inoperable train to OPERABLE status within 7 days or:
  1. In OPERATIONAL CONDITIONS 1, 2, 3, be in at least NOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
  2. In OPERATIONAL CONDITION 4, 5 or <sup>a</sup>, initiate and maintain operation of the OPERABLE emergency filtration system in the pressurization mode of operation.
- b. With both emergency filtration system trains inoperable, in OPERATIONAL CONDITION 4, 5 or <sup>a</sup>, suspend CORE ALTERATIONS, handling of irradiated fuel in the secondary containment and operations with a potential for draining the reactor vessel.
- c. The provisions of Specification 3.0.3 are not applicable in Operational Condition <sup>a</sup>.

SURVEILLANCE REQUIREMENTS

4.7.2 Each control room and auxiliary electric equipment room emergency filtration system train shall be demonstrated OPERABLE:

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- a. 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 train operates for at least 10 hours with the heaters OPERABLE.

<sup>a</sup>When irradiated fuel is being handled in the secondary containment.

<sup>6</sup>The normal or emergency power source may be inoperable in OPERATIONAL CONDITION 4, 5 or <sup>a</sup>.



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- a. "At least once per 31 days on a STAGGERED TEST BASIS:
  - 1. Operate each Control Room and Auxiliary Electric Equipment Room Emergency Filter System for greater than or equal to 10 continuous hours with the heaters operating, and
  - 2. Manually initiating flow through the control room and auxiliary electric equipment room recirculation filters for at least 10 hours.

### 3/4.7 PLANT SYSTEMS

#### BASES

#### 3/4.7.1 CORE STANDBY COOLING SYSTEM - EQUIPMENT COOLING WATER SYSTEMS

The OPERABILITY of the core standby cooling system - equipment cooling water systems and the ultimate heat sink ensure that sufficient cooling capacity is available for continued operation of safety-related equipment during normal and accident conditions. The redundant cooling capacity of these systems, assuming a single failure, is consistent with the assumptions used in the accident conditions within acceptable limits.

#### 3/4.7.2 CONTROL ROOM AND AUXILIARY ELECTRIC EQUIPMENT ROOM EMERGENCY FILTRATION SYSTEM

The OPERABILITY of the control room and auxiliary electric equipment room emergency filtration system ensures that the rooms will remain habitable for operations personnel during and following all design basis accident conditions. The OPERABILITY of this system in conjunction with room design provisions is based on limiting the radiation exposure to personnel occupying the rooms to 5 rem or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criteria 19 of Appendix "A", 10 CFR Part 50. Cumulative operation of the system with the heaters OPERABLE for 10 hours over a 31 day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters.

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The surveillance requirements provide adequate assurance that RCICS will be OPERABLE when required. Although all active components are testable and full flow can be demonstrated by recirculation during reactor operation, a complete functional test requires reactor shutdown. Initial startup test program data may be used to determine equivalent turbine/pump capabilities between test flow path and the vessel injection flow path. The pump discharge piping is maintained full to prevent water hammer damage and to start cooling at the earliest possible moment. The low pressure setpoint allowable value for the discharge line "keep-filled" alarm is based on the head of water between the centerline of the pump discharge and the system high point vent.

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ADMINISTRATIVE CONTROLS

PLANT OPERATING PROCEDURES AND PROGRAMS (Continued)

the Initial Structural Integrity Tests were not within 2 years of each other.

The Onsite Review and Investigative Function shall be responsible for reviewing and approving changes to the Inservice Inspection Program for Post Tensioning Tendons.

The provisions of 4.0.2 and 4.0.3 are applicable to the Tendon Surveillance Program inspection frequencies.

6.2.F. Primary Containment Leakage Rate Testing Program

A program shall be established to implement the leakage rate testing of the primary containment as required by 10 CFR 50.54(o) and 10 CFR 50 Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Testing Program," dated September 1995.

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The maximum allowable primary containment leakage rate,  $L_a$ , at  $P_a$ , is 0.635% of primary containment air weight per day.

Leakage rate acceptance criteria are:

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