



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

BOSTON EDISON COMPANY

DOCKET NO. 50-293

PILGRIM NUCLEAR POWER STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.170
License No. DPR-35

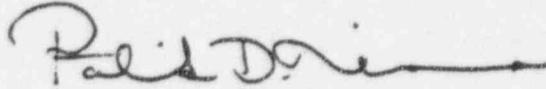
1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The application for amendment filed by the Boston Edison Company (the licensee) dated April 25, 1996, as supplemented on December 23, 1996, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-35 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 170, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Patrick D. Milano, Acting Director
Project Directorate I-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 10, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 170

FACILITY OPERATING LICENSE NO. DPR-35

DOCKET NO. 50-293

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change.

Remove

1.1
3/4.4-1
3/4.5-7
3/4.7-11
3/4.7-12
3/4.7-13
3/4.7-14
3/4.7-15
3/4.7-16
3/4.9-4
B3/4.7-10
B3/4.7-12

Insert

1.1
3/4.4-1
3/4.5-7
3/4.7-11
3/4.7-12
3/4.7-13
3/4.7-14
3/4.7-15
3/4.7-16
3/4.9-4
B3/4.7-10
B3/4.7-12

1.0 DEFINITIONS

The succeeding frequently used terms are explicitly defined so that a uniform interpretation of the specifications may be achieved.

A. Safety Limit

The safety limits are limits below which the reasonable maintenance of the cladding and primary systems are assured. Exceeding such a limit is cause for unit shutdown and review by the Nuclear Regulatory Commission before resumption of unit operation. Operation beyond such a limit may not in itself result in serious consequences but it indicates an operational deficiency subject to regulatory review.

B. Limiting Safety System Setting (LSSS)

The limiting safety system settings are settings on instrumentation which initiate the automatic protective action at a level such that the safety limits will not be exceeded. The region between the safety limit and these settings represent margin with normal operation lying below these settings. The margin has been established so that with proper operation of the instrumentation the safety limits will never be exceeded.

C. Limiting Conditions for Operation (LCO)

The limiting conditions for operation specify the minimum acceptable levels of system performance necessary to assure safe startup and operation of the facility. When these conditions are met, the plant can be operated safely and abnormal situations can be safely controlled.

D. Core Operating Limits Report

The CORE OPERATING LIMITS REPORT is a reload-cycle specific document, its supplements and revisions, that provides core operating limits for the current operating reload cycle. These cycle specific core operating limits shall be determined for each reload cycle in accordance with Specification 6.9.A.4. Plant operation within these operating limits is addressed in individual specifications.

E. Operable - Operability

A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal or emergency electrical power sources, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

F. Operating

Operating means that a system or component is performing its intended functions in its required manner.

LIMITING CONDITIONS FOR OPERATION

3.4 STANDBY LIQUID CONTROL SYSTEM

Specification:

Two SLC subsystems shall be OPERABLE.

Applicability:

Run and Startup MODES

Operation with Inoperable Equipment

- A. With concentration of boron in solution not within limits but > 8%, restore concentration of boron in solution to within limits within 72 hours AND 10 days from discovery of failure to meet the LCO.
- B. With one SLC subsystem inoperable for reasons other than Condition A,
 1. ensure that the diesel generator associated with the operable SLC subsystem is operable;

AND
 2. restore SLC subsystem to OPERABLE status within 7 days AND 10 days from discovery of failure to meet the LCO.
- C. With two SLC subsystems inoperable for reasons other than Condition A, restore one SLC subsystem to OPERABLE status within 8 hours.
- D. Required Action and associated Completion Time not met, be in Hot Shutdown within 12 hours.

SURVEILLANCE REQUIREMENTS

4.4 STANDBY LIQUID CONTROL SYSTEM

1. When tested as specified in 3.13 verify that each pump delivers at least 39 GPM against a system head of 1275 psig.
2. Manually initiate one of the Standby Liquid Control System loops and pump demineralized water into the reactor vessel every 24 months on a STAGGERED TEST BASIS.
3. Verify continuity of explosive charge every 31 days.
4. Verify available volume of sodium pentaborate solution is within the limits of Figure 3.4-1 or ≥ 4000 gallons every 24 hours.
5. Verify temperature of sodium pentaborate solution is $> 48^{\circ}\text{F}$ every 24 hours.
6. Verify the concentration of boron in solution is $\leq 9.22\%$ weight and within the limits of Figure 3.4-1 every 31 days;

AND

Once within 24 hours after water or boron is added to solution;

AND

Once within 24 hours after solution temperature is restored to $> 48^{\circ}\text{F}$.

7. Verify sodium pentaborate enrichment is ≥ 54.5 atom percent B-10 prior to addition to SLC tank.
8. Verify all heat traced piping between storage tank and pump suction is unblocked every 24 months.

AND

Once within 24 hours after solution temperature is restored to $> 48^{\circ}\text{F}$.

9. Verify temperature of pump suction piping is $> 48^{\circ}\text{F}$ every 24 hours.

LIMITING CONDITION FOR OPERATION

3.5 CORE AND CONTAINMENT COOLING SYSTEMS (Cont)

F. Minimum Low Pressure Cooling and Diesel Generator Availability

1. During any period when one diesel generator is inoperable, continued reactor operation is permissible only during the succeeding 72 hours unless such diesel generator is sooner made operable, provided that all of the low pressure core and containment cooling systems and the remaining diesel generator shall be operable. If this requirement cannot be met, an orderly shutdown shall be initiated and the reactor shall be placed in the Cold Shutdown Condition within 24 hours.
2. Any combination of inoperable components in the core and containment cooling systems shall not defeat the capability of the remaining operable components to fulfill the cooling functions.
3. When irradiated fuel is in the reactor vessel and the reactor is in the Cold Shutdown condition, both core spray systems, the LPCI and containment cooling systems may be inoperable, provided no work is being done which has the potential for draining the reactor vessel.
4. During a refueling outage, for a period of 30 days, refueling operation may continue provided that one core spray system or the LPCI system is operable or Specification 3.5.F.5 is met.

SURVEILLANCE REQUIREMENT

4.5 CORE AND CONTAINMENT COOLING SYSTEMS (Cont)

F. Minimum Low Pressure Cooling and Diesel Generator Availability

1. When it is determined that one diesel generator is inoperable, within 24 hours, determine that the operable diesel generator is not inoperable due to a common cause failure,

OR

perform surveillance 4.9.A.1.a for the operable diesel generator,

and

within 1 hour and once every 8 hours thereafter, verify correct breaker alignment and indicated power availability for each offsite circuit.

LIMITING CONDITIONS FOR OPERATION

3.7 CONTAINMENT SYSTEMS (Cont.)

A. Primary Containment (Cont.)

With no H₂ analyzer operable, reactor operation is allowed for up to 48 hours. If one of the inoperable analyzers is not made fully operable within 48 hours, the reactor shall be in a least Hot Shutdown within the next 12 hours.

B. Standby Gas Treatment System and Control Room High Efficiency Air Filtration System

1. Standby Gas Treatment System

- a. Except as specified in 3.7.B.1.c or 3.7.B.1.e below, both trains of the standby gas treatment system shall be operable when in the Run, Startup, and Hot Shutdown MODES, during movement of irradiated fuel assemblies in the secondary containment, and during movement of new fuel over the spent fuel pool, and during CORE ALTERATIONS, and during operations with a potential for draining the reactor vessel (OPDRVs),

or

the reactor shall be in cold shutdown within the next 36 hours.

- b. 1. The results of the in-place cold DOP tests on HEPA filters shall show $\geq 99\%$ DOP removal. The results of halogenated hydrocarbon tests on charcoal adsorber banks shall show $\geq 99\%$ halogenated hydrocarbon removal.

SURVEILLANCE REQUIREMENTS

4.7 CONTAINMENT SYSTEMS (Cont.)

B. Standby Gas Treatment System and Control Room High Efficiency Air Filtration System

1. Standby Gas Treatment System

- a. 1. At least once per operating cycle, it shall be demonstrated that pressure drop across the combined high efficiency filters and charcoal adsorber banks is less than 8 inches of water at 4000 cfm.
2. At least once per operating cycle, demonstrate that the inlet heaters on each train are operable and are capable of an output of at least 14 kW.
3. The tests and analysis of Specification 3.7.B.1.b. shall be performed at least once per operating cycle or following painting, fire or chemical release in any ventilation zone communicating with the system while the system is operating that could contaminate the HEPA filters or charcoal adsorbers.
4. At least once per operating cycle, automatic initiation of

LIMITING CONDITIONS FOR OPERATION

3.7 CONTAINMENT SYSTEMS (Cont.)

B. Standby Gas Treatment System and Control Room High Efficiency Air Filtration System (Cont.)

2. The results of the laboratory carbon sample analysis shall show $\geq 95\%$ methyl iodide removal at a velocity within 10% of system design, 0.5 to 1.5 mg/m³ inlet methyl iodide concentration, $\geq 70\%$ R.H. and $\geq 190^\circ\text{F}$. The analysis results are to be verified as acceptable within 31 days after sample removal, or declare that train inoperable and take the actions specified in 3.7.B.1.c.
- c. From and after the date that one train of the Standby Gas Treatment System is made or found to be inoperable for any reason, continued reactor operation, irradiated fuel handling, or new fuel handling over the spent fuel pool is permissible only during the succeeding seven days providing that within 2 hours all active components of the other standby gas treatment train are verified to be operable and the diesel generator associated with the operable train is operable.

If the system is not made fully operable within 7 days, reactor shutdown shall be initiated and the reactor shall be in cold shutdown within the next 36 hours and fuel handling operations shall be terminated within 2 hours.

Fuel handling operations in progress may be completed.

SURVEILLANCE REQUIREMENTS

4.7 CONTAINMENT SYSTEMS (Cont.)

B. Standby Gas Treatment System and Control Room High Efficiency Air Filtration System (Cont.)

- each branch of the standby gas treatment system shall be demonstrated, with Specification 3.7.B.1.d satisfied.
5. Each train of the standby gas treatment system shall be operated for at least 15 minutes per month.
6. The tests and analysis of Specification 3.7.B.1.b.2 shall be performed after every 720 hours of system operation.
 - b. 1. In-place cold DOP testing shall be performed on the HEPA filters after each completed or partial replacement of the HEPA filter bank and after any structural maintenance on the HEPA filter system housing which could affect the HEPA filter bank bypass leakage.
 2. Halogenated hydrocarbon testing shall be performed on the charcoal adsorber bank after each partial or complete replacement of the charcoal adsorber bank or after any structural maintenance on the charcoal adsorber housing which could affect the charcoal adsorber bank bypass leakage.

LIMITING CONDITIONS FOR OPERATION

3.7 CONTAINMENT SYSTEMS (Cont.)

B. Standby Gas Treatment System and Control Room High Efficiency Air Filtration System (Cont.)

- d. Fans shall operate within $\pm 10\%$ of 4000 cfm.

- e. From and after the date that one train of the Standby Gas Treatment System is made or found to be inoperable for any reason during Refuel Outages, refueling operations are permissible only during the succeeding 7 days providing that within 2 hours all active components of the other train are verified to be operable and the diesel generator associated with the operable train is operable.

If the system is not made fully operable within 7 days,

i) place the operable train in operation immediately

or

ii) suspend movement of irradiated fuel assemblies in secondary containment or new fuel handling over the spent fuel pool or core.

Any fuel assembly movement in progress may be completed.

SURVEILLANCE REQUIREMENTS

4.7 CONTAINMENT SYSTEMS (Cont.)

B. Standby Gas Treatment System and Control Room High Efficiency Air Filtration System (Cont.)

LIMITING CONDITIONS FOR OPERATION

3.7 CONTAINMENT SYSTEMS (Cont.)

B. Standby Gas Treatment System and Control Room High Efficiency Air Filtration System (Cont.)

2. Control Room High Efficiency Air Filtration System

- a. Except as specified in Specification 3.7.B.2.c or 3.7.B.2.e below, both trains of the Control Room High Efficiency Air Filtration System used for the processing of inlet air to the control room under accident conditions shall be operable when in the Run, Startup, and Hot Shutdown MODES, during movement of irradiated fuel assemblies in the secondary containment, and during movement of new fuel over the spent fuel pool, and during CORE ALTERATIONS, and during operations with a potential for draining the reactor vessel (OPDRVs),

or

the reactor shall be in cold shutdown within the next 36 hours.

- b. 1. The results of the in-place cold DOP tests on HEPA filters shall show $\geq 99\%$ DOP removal. The results of the halogenated hydrocarbon tests on charcoal adsorber banks shall show $\geq 99\%$ halogenated hydrocarbon removal when test results are extrapolated to the initiation of the test.
2. The results of the laboratory carbon sample analysis shall show $\geq 95\%$ methyl iodide removal at a velocity within 10% of system design, 0.05 to 0.15 mg/m³ inlet methyl iodide concentration, $\geq 70\%$ R.H., and $\geq 125^\circ\text{F}$. The analysis results are to be verified as acceptable within 31 days after sample removal, or declare that train inoperable and take the actions specified in 3.7.B.2.c.

SURVEILLANCE REQUIREMENTS

4.7 CONTAINMENT SYSTEMS (Cont.)

B. Standby Gas Treatment System and Control Room High Efficiency Air Filtration System (Cont.)

2. Control Room High Efficiency Air Filtration System

- a. At least once per operating cycle the pressure drop across each combined filter train shall be demonstrated to be less than 6 inches of water at 1000 cfm or the calculated equivalent.
- b. 1. The tests and analysis of Specification 3.7.B.2.b shall be performed once per operating cycle or following painting, fire or chemical release in any ventilation zone communicating with the system while the system is operating.
2. In-place cold DOP testing shall be performed after each complete or partial replacement of the HEPA filter bank or after any structural maintenance on the system housing which could affect the HEPA filter bank bypass leakage.
3. Halogenated hydrocarbon testing shall be performed after each complete or partial replacement of the charcoal adsorber bank or after any structural maintenance on the system housing which could affect the charcoal adsorber bank bypass leakage.
4. Each train shall be operated with the heaters in automatic for at least 15 minutes every month.

LIMITING CONDITIONS FOR OPERATION

3.7 CONTAINMENT SYSTEMS (Cont.)

B. Standby Gas Treatment System and Control Room High Efficiency Air Filtration System (Cont.)

- c. From and after the date that one train of the Control Room High Efficiency Air Filtration System is made or found to be inoperable for any reason, reactor operation, irradiated fuel handling, or new fuel handling over the spent fuel pool is permissible only during the succeeding 7 days providing that within 2 hours all active components of the other CRHEAF train are verified to be operable and the diesel generator associated with the operable train is operable. If the system is not made fully operable within 7 days, reactor shutdown shall be initiated and the reactor shall be in cold shutdown within the next 36 hours and fuel handling operations shall be terminated within 2 hours. Fuel handling operations in progress may be completed.
- d. Fans shall operate within $\pm 10\%$ of 1000 cfm.
- e. From and after the date that one train of the Control Room High Efficiency Air Filtration System is made or found to be inoperable for any reason during Refuel Outages, refueling operations are permissible only during the succeeding 7 days providing that within 2 hours all active components of the other train are verified to be operable and the diesel generator associated with the operable train is operable.

If the system is not made fully operable within 7 days,

SURVEILLANCE REQUIREMENTS

4.7 CONTAINMENT SYSTEMS (Cont.)

B. Standby Gas Treatment System and Control Room High Efficiency Air Filtration System (Cont.)

- 5. The test and analysis of Specification 3.7.B.2.b.2 shall be performed after every 720 hours of system operation.

- c. At least once per operating cycle demonstrate that the inlet heaters on each train are operable and capable of an output of at least 14 kw.
- d. Perform an instrument functional test on the humidistats controlling the heaters once per operating cycle.

LIMITING CONDITIONS FOR OPERATION

3.7 CONTAINMENT SYSTEMS (Cont.)

- i) perform surveillance 4.7.B.2.b.4 for the operable CRHEAF every 24 hours
OR
- ii) suspend movement of irradiated fuel assemblies in secondary containment or new fuel handling over the spent fuel pool or core.

Any fuel assembly movement in progress may be completed.

C. Secondary Containment

1. Secondary containment shall be OPERABLE when in the Run, Startup and Hot Shutdown MODES, during movement of irradiated fuel assemblies in the secondary containment, and during movement of new fuel over the spent fuel pool, and during CORE ALTERATIONS, and during operations with a potential for draining the reactor vessel (OPDRVs).
2. a. With Secondary Containment inoperable when in the Run, Startup and Hot Shutdown MODES, restore Secondary Containment to OPERABLE status within 4 hours.

b. Required Action and Completion Time of 2. a not met, be in Hot Shutdown in 12 hours AND Cold Shutdown within 36 hours.

c. With Secondary Containment inoperable during movement of irradiated fuel assemblies in the secondary containment, and during movement of new fuel over the spent fuel pool, and during CORE ALTERATIONS, and during OPDRVs, immediately
 1. Suspend movement of irradiated fuel assemblies in the secondary containment.
AND
 2. Suspend movement of new fuel over the spent fuel pool.
AND
 3. Suspend CORE ALTERATIONS.
AND
 4. Initiate action to suspend OPDRVs.

SURVEILLANCE REQUIREMENTS

4.7 CONTAINMENT SYSTEMS (Cont.)

C. Secondary Containment

1. Each refueling outage prior to refueling, secondary containment capability shall be demonstrated to maintain 1/4 inch of water vacuum under calm wind (5 mph) conditions with a filter train flow rate of not more than 4000 cfm.

LIMITING CONDITION FOR OPERATION

3.9 AUXILIARY ELECTRICAL SYSTEM (Cont)

B. Operation with Inoperable Equipment

Whenever the reactor is in Run Mode or Startup Mode with the reactor not in a Cold Condition, the availability of electric power shall be as specified in 3.9.B.1, 3.9.B.2, 3.9.B.3, 3.9.B.4, and 3.9.B.5.

1. From and after the date that incoming power is not available from the startup or shutdown transformer, continued reactor operation is permissible under this condition for seven days. During this period, both diesel generators and associated emergency buses must remain operable.
2. From and after the date that incoming power is not available from both startup and shutdown transformers, continued operation is permissible, provided both diesel generators and associated emergency buses remain operable, all core and containment cooling systems are operable, reactor power level is reduced to 25% of design and the NRC is notified within one (1) hour as required by 10CFR50.72.
3. From and after the date that one of the diesel generators or associated emergency bus is made or found to be inoperable for any reason, continued reactor operation is permissible in accordance with Specifications 3.4.B.1, 3.5.F.1, 3.7.B.1.c, 3.7.B.1.e, 3.7.B.2.c, and 3.7.B.2.e if Specification 3.9.A.1 and 3.9.A.2.a are satisfied.
4. From and after the date that one of the diesel generators or associated emergency buses and either the shutdown or startup transformer power source are

SURVEILLANCE REQUIREMENTS

4.9 AUXILIARY ELECTRICAL SYSTEM (Cont)

A. Auxiliary Electrical Equipment Surveillance (Cont)

3. Emergency 4160V Buses A5-A6 Degraded Voltage Annunciation System.

- a. Once each operating cycle, calibrate the alarm sensor.
- b. Once each 31 days perform a channel functional test on the alarm system.
- c. In the event the alarm system is determined inoperable under 3.b above, commence logging safety related bus voltage every 30 minutes until such time as the alarm is restored to operable status.

4. RPS Electrical Protection Assemblies

- a. Each pair of redundant RPS EPAs shall be determined to be operable at least once per 6 months by performance of an instrument functional test.
- b. Once per 18 months each pair of redundant RPS EPAs shall be determined to be operable by performance of an instrument calibration and by verifying tripping of the circuit breakers upon the simulated conditions for automatic actuation of the protective relays within the following limits:

Overvoltage	≤ 132 volts
Undervoltage	≥ 108 volts
Underfrequency	≥ 57Hz

BASES:

3/4.7 CONTAINMENT SYSTEMS (Cont.)

Tests of impregnated charcoal identical to that used in the filters indicate that a shelf life of five years leads to only minor decreases in methyl iodide removal efficiency. Hence, the frequency of laboratory carbon sample analysis is adequate to demonstrate acceptability. Since adsorbers must be removed to perform this analysis this frequency also minimizes the system out of service time as a result of surveillance testing. In addition, although the halogenated hydrocarbon testing is basically a leak test, the adsorbers have charcoal of known efficiency and holding capacity for elemental iodine and/or methyl iodide, the testing also gives an indication of the relative efficiency of the installed system. The 31 day requirement for the ascertaining of test results ensures that the ability of the charcoal to perform its designed function is demonstrated and known in a timely manner.

The required Standby Gas Treatment System flow rate is that flow, less than or equal to 4000 CFM which is needed to maintain the Reactor Building at a 0.25 inch of water negative pressure under calm wind conditions. This capability is adequately demonstrated during Secondary Containment Leak Rate Testing performed pursuant to Technical Specification 4.7.C.1.c.

The test frequencies are adequate to detect equipment deterioration prior to significant defects, but the tests are not frequent enough to load the filters or adsorbers, thus reducing their reserve capacity too quickly. The filter testing is performed pursuant to appropriate procedures reviewed and approved by the Operations Review Committee pursuant to Section 6 of these Technical Specifications. The in-place testing of charcoal filters is performed by injecting a halogenated hydrocarbon into the system upstream of the charcoal adsorbers. Measurements of the concentration upstream and downstream are made. The ratio of the inlet and outlet concentrations gives an overall indication of the leak tightness of the system. A similar procedure substituting dioctyl phthalate for halogenated hydrocarbon is used to test the HEPA filters.

Pressure drop tests across filter and adsorber banks are performed to detect plugging or leak paths through the filter or adsorber media. Considering the relatively short times the fans will be run for test purposes, plugging is unlikely and the test interval of once per operating cycle is reasonable.

System drains and housing gasket doors are designed such that any leakage would be inleakage from the Standby Gas Treatment System Room. This ensures that there will be no bypass of process air around the filters or adsorbers.

Only one of the two Standby Gas Treatment Systems (SBGTS) is needed to maintain the secondary containment at a 0.25 inch of water negative pressure upon containment isolation. If one system is made or found to be inoperable, there is no immediate threat to the containment system performance and reactor operation or refueling activities may continue while repairs are being made. In the event one SBGTS is inoperable, the redundant system's active components will be verified to be operable within 2 hours. This substantiates the availability of the operable system and justifies continued reactor or refueling operations.

During refueling outages, if the inoperable train is not restored to operable status within the required completion time, the operable train should immediately be placed in operation. This action ensures that the remaining train is operable, that no failures that could prevent automatic actuation have occurred, and that any other failure would be readily detected. An alternative is to suspend fuel movement, thus, placing the plant in a condition that minimizes risk.

BASES:

3/4.7 CONTAINMENT SYSTEMS (Cont.)

B.2 Control Room High Efficiency Air Filtration System (Cont.)

The test frequencies are adequate to detect equipment deterioration prior to significant defects, but the tests are not frequent enough to load the filters or adsorbers, thus reducing their reserve capacity too quickly. The filter testing is performed pursuant to appropriate procedures reviewed and approved by the Operations Review Committee pursuant to Section 6 of these Technical Specifications. The in-place testing of charcoal filters is performed by injecting a halogenated hydrocarbon into the system upstream of the charcoal adsorbers. Measurements of the concentration upstream and downstream are made. The ratio of the inlet and outlet concentrations gives an overall indication of the leak tightness of the system. A similar procedure substituting dioctyl phthalate for halogenated hydrocarbon is used to test the HEPA filters.

Air flow through the filters and charcoal adsorbers for 15 minutes each month assures operability of the system. Since the system heaters are automatically controlled, the air flowing through the filters and adsorbers will be $\leq 70\%$ relative humidity and will have the desired drying effect.

If one train of the system is made or found to be inoperable, there is no immediate threat to the control room, and reactor operation or fuel handling may continue for a limited period of time while repairs are being made. In the event one CRHEAF train is inoperable, the redundant system's active components will be verified to be operable within 2 hours. During refueling outages, if the inoperable train is not restored to operable status within the required completion time, refueling operations may continue provided the operable CRHEAF train is placed in the pressurization mode daily. This action ensures that the remaining train is operable, that no failures that would prevent actuation will occur, and that any active failure will be readily detected. An alternative is to suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. If both trains of the CRHEAF system are inoperable, the reactor will be brought to a condition where the Control Room High Efficiency Air Filtration System is not required.