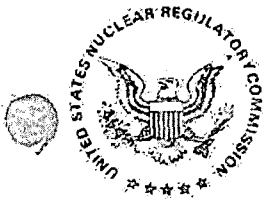
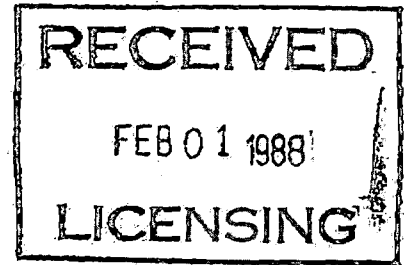


188.026



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

January 20, 1988



Docket No.: 50-293

Boston Edison Company
ATTN: Mr. Ralph E. Bird
Senior Vice President - Nuclear
800 Boylston Street
Boston, Massachusetts 02199

SUBJECT: ISSUANCE OF AMENDMENT NO. 112 TO FACILITY OPERATING LICENSE NO. DPR-35
(TAC# 55571) PILGRIM NUCLEAR POWER STATION

Dear Mr. Bird:

The Commission has issued the enclosed Amendment No. 112 to Facility Operating License No. DPR-35 for the Pilgrim Nuclear Power Station. This amendment consists of changes to the Technical Specifications in response to your application dated August 9, 1984 as supplemented by letters dated August 9, 1985, July 24, 1987, December 7, 1987 and January 14, 1988.

This amendment revises the Technical Specification (TS) to clarify the requirements concerning operability in Sections 3.7.B.1 and 4.7.B.1 for the Standby Gas Treatment System and Sections 3.7.B.2 and 4.7.B.2 for the Control Room High Efficiency Air Filtration System, and corrects an error of omission in Section 4.7.B.1.a(3). Your supplemental letters dated December 7, 1987 and January 14, 1988 consolidated previous submittals and corrected errors identified by the NRC staff.

A copy of our Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's Bi-Weekly Federal Register Notice.

Sincerely,

Richard H. Wessman, Senior Project Manager
Project Directorate I-3
Division of Reactor Projects I/II

Enclosures:

- 1. Amendment No. 112 to DPR-35
- 2. Safety Evaluation

cc w/enclosures:
See next page

Mr. Ralph G. Bird
Boston Edison Company

Pilgrim Nuclear Power Station

cc:

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Boston Edison Company
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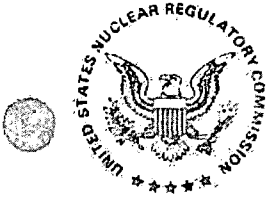
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

BOSTON EDISON COMPANY

DOCKET NO. 50-293

PILGRIM NUCLEAR POWER STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 112
License No. DPR-35


1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Boston Edison Company (the licensee) dated August 9, 1984 as supplemented by letters dated August 9, 1985, July 24, 1987, December 7, 1987, and January 14, 1988 complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - 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 3.B 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. 112, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective immediately.

FOR THE NUCLEAR REGULATORY COMMISSION


Richard H. Wessman, Acting Director
Project Directorate I-3
Division of Reactor Projects I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 20, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 112

FACILITY OPERATING LICENSE NO. DPR-35

DOCKET NO. 50-293

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change. The corresponding overleaf pages are provided to maintain document completeness. ---

Remove Pages

158
158A
158B
158C
172
173
174
174A

Insert Pages

158
158A
158B
158C
172
173
174
174A

LIMITING CONDITIONS FOR OPERATION

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

1. Standby Gas Treatment System

- a. Except as specified in 3.7.B.1.c below, both trains of the standby gas treatment system and the diesel generators required for operation of such trains shall be operable at all times when secondary containment integrity is required or the reactor shall be shutdown in 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.
(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 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

SURVEILLANCE REQUIREMENTS

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

1. Standby Gas Treatment System

- a. (1.) At least once every 18 months, 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 every 18 months, 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 every 18 months 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 every 18 months, automatic initiation of 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.

3.7.B (Continued)

handling over the spent fuel pool or core is permissible only during the succeeding seven days providing that within 2 hours all active components of the other standby gas treatment train shall be demonstrated to be operable.

- d. Fans shall operate within $\pm 10\%$ of 4000 cfm.
- e. Except as specified in 3.7.B.1.c, both trains of the Standby Gas Treatment System shall be operable during irradiated fuel handling, or new fuel handling over the spent fuel pool or core. If the system is not operable, fuel movement shall not be started. Any fuel assembly movement in progress may be completed.

4.7.B (Continued)

- 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

SURVEILLANCE REQUIREMENTS

3.7.B (Continued)

2. Control Room High Efficiency Air Filtration System

- a. Except as specified in Specification 3.7.B.2.c 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 and the diesel generator(s) required for operation of each train of the system shall be operable whenever secondary containment integrity is required and during fuel handling operations.
- 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 125°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.

4.7.B (Continued)

2. Control Room High Efficiency Air Filtration System

- a. At least once every 18 months 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 every 18 months 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.
- (5.) The test and analysis of Specification 3.7.B.2.b.(2) shall be performed after every 720 hours of system operation.

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

3.7.8 (Continued)

- c. From and after the date that one train of the Control Room High Efficiency Air Filtration System is made or found to be incapable of supplying filtered air to the control room for any reason, reactor operation or refueling operations are permissible only during the succeeding 7 days providing that within 2 hours all active components of the other CRHEAF train shall be demonstrated 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 irradiated 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.

4.7.8 (Continued)

- c. At least once every 18 months demonstrate that the inlet heaters on each train are operable and capable of an output of at least 14kw.
- d. Perform an instrument functional test on the humidistats controlling the heaters once per 18 months.

BASES:

3.7.B.1 and 4.7.B.1 - Standby Gas Treatment System

The Standby Gas Treatment System is designed to filter and exhaust the reactor building atmosphere to the stack during secondary containment isolation conditions. Upon containment isolation, both standby gas treatment fans are designed to start to bring the reactor building pressure negative so that all leakage should be in leakage. After a preset time delay, the standby fan automatically shuts down so the reactor building pressure is maintained approximately 1/4 inch of water negative. Should one system fail to start, the redundant system is designed to start automatically. Each of the two trains has 100% capacity.

High Efficiency Particulate Air (HEPA) filters are installed before and after the charcoal adsorbers to minimize potential release of particulates to the environment and to prevent clogging of the iodine adsorbers. The charcoal adsorbers are installed to reduce the potential release of radioiodine to the environment. The in-place test results should indicate a system leak tightness of less than 1 percent bypass leakage for the charcoal adsorbers and a HEPA filter efficiency of at least 99 percent removal of cold DOP particulates. The laboratory carbon sample test results should indicate a methyl iodide removal efficiency of at least 95 percent for expected accident conditions. The specified efficiencies for the charcoal and particulate filters is sufficient to preclude exceeding 10 CFR 100 guidelines for the accidents analyzed. The analysis of the loss of coolant accident assumed a charcoal adsorber efficiency of 95% and TID 14844 fission product source terms, hence, installing two banks of adsorbers and filters in each train provides adequate margin. A 14 kW heater maintains relative humidity below 70% in order to ensure the efficient removal of methyl iodide on the impregnated charcoal adsorbers. Considering the relative simplicity of the heating circuit, the test frequency of once per 18 months is adequate to demonstrate operability.

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.

Tests of impregnated charcoal identical to that used in the filters indicate that 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.

BASES:

3.7.B.1 and 4.7.B.1 (continued)

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 18 months 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 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 tested within 2 hours. This substantiates the availability of the operable system and justifies continued reactor or refueling operations.

If both trains of SBGTS are inoperable, the plant is brought to a condition where the SBGTS is not required.

BASES:

3.7.B.2. and 4.7.B.2. - Control Room High Efficiency Air Filtration System

The Control Room High Efficiency Air Filtration System is designed to filter intake air for the control room atmosphere during conditions when normal intake air may be contaminated. Following manual initiation, the Control Room High Efficiency Air Filtration System is designed to position dampers and start fans which divert the normal air flow through charcoal adsorbers before it reaches the control room.

High Efficiency Particulate Air (HEPA) filters are installed before the charcoal adsorbers to prevent clogging of the iodine adsorbers. The charcoal adsorbers are installed to reduce the potential intake of radioiodine to the control room. A second bank of HEPA filters is installed downstream of the charcoal filter.

The in-place test results should indicate a system leak tightness of less than 1 percent bypass leakage for the charcoal adsorbers and a HEPA efficiency of at least 99 percent removal of cold DOP particulates. The laboratory carbon sample test results should indicate a methyl iodide removal efficiency of at least 90 percent for expected accident conditions. Tests of impregnated charcoal identical to that used in the filters indicate that 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.

Determination of the system pressure drop once per operating cycle provides indication that the HEPA filters and charcoal adsorbers are not clogged by excessive amounts of foreign matter and that no bypass routes through the filters or adsorbers had developed. Considering the relatively short times the systems will be operated for test purposes, plugging is unlikely and the test interval of once per operating cycle is reasonable.

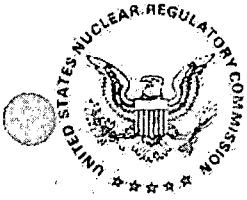
The test frequencies are adequate to detect equipment deterioration prior to significant defects, but the tests are not frequent enough to load the filters or adsorbers, thus reducing their reserve capacity too quickly. The filter testing is performed pursuant to appropriate procedures reviewed and approved 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.

BASES:

3.7.B.2. and 4.7.B.2. (Continued)

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 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 tested within 2 hours. 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.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 112
TO FACILITY OPERATING LICENSE NO. DPR-35
BOSTON EDISON COMPANY
PILGRIM NUCLEAR POWER STATION
DOCKET NO. 50-293

1.0 INTRODUCTION

By letter dated August 9, 1984 and supplemented by letters dated August 9, 1985, July 24, 1987, December 7, 1987, and January 14, 1988 Boston Edison Company transmitted a proposal to change the Pilgrim Technical Specifications (TS) concerning operability of the ESF air filtration systems. The requested changes will be implemented immediately upon approval by the staff.

The licensee specifically requested that the Pilgrim TS be amended to clarify Sections 3.7.B.1 and 4.7.B.1 for the Standby Gas Treatment System (SGTS) and Sections 3.7.B.2 and 4.7.B.2 for the Control Room High Efficiency Air Filtration System (CRHEAFS). The licensee's supplemental letter dated December 7, 1987 consolidated all previously proposed TS changes and corrected an inconsistency between the Bases and the previously proposed TS section changes. The first bases change deletes the reference to "...tested daily" which is to be deleted from Section 3.7.B.1.c. The second Bases change adds the sentence, "In the event one CRHEAF train is inoperable, the redundant system's active components will be tested within 2 hours". This change reflects a restriction added to Section 3.7.B.2.c.

2.0 EVALUATION

The SGTS is provided to filter the reactor building atmosphere exhausted to the vent stack during secondary containment isolation conditions. The system consists of two 100 percent capacity redundant units (4000 cfm each) to maintain a negative pressure in the reactor building of 0.25 inches of water. Each unit contains a charcoal adsorber, two HEPA filters and an electric heater.

The CRHEAFS is designed to provide adequate ventilation in the main control room to ensure habitability for control room operators and to pressurize the control room to prevent air infiltration during and following a design basis accident (LOCA). Two 1,000 cfm capacity redundant high efficiency (emergency) air filtration trains filter outside makeup air prior to introducing it to the main control room. Each train consists of a heating coil, prefilter, HEPA filter, charcoal adsorber, and final HEPA filter.

The licensee requested an amendment to the following Pilgrim TS sections concerning operation and surveillance of the SGTS and CRHEAFS.

2.1 Sections 3.7.B.1.a, 3.7.B.1.c, 3.7.B.1.e, 3.7.B.2.a, and 3.7.B.2.c

These sections are superscripted with an asterisk which refers to superseded and expired footnotes. (The footnotes concerned a conditional relief to the LCO during the startup for cycle 6 in early 1982). The proposed change clarifies the TS sections by deleting both the asterisks and footnotes. The staff finds this editorial change to be acceptable.

2.2 Sections 3.7.B.1.b(2) and 3.7.B.2.b.(2)

The proposed change to these sections is to add the following requirement for charcoal testing and similar language to the corresponding bases (TS pages 172 and 174):

The analysis results are to be verified as acceptable within 31 days after sample removal, or declare the train inoperable and take the actions specified in 3.7.B.1.c. (3.7.B.2.C.).

The staff finds the addition of the above requirement and the corresponding bases to be acceptable since it is in accordance with the guidelines of Generic Letter 83-13 which requested that a time limit be placed on ascertaining test results for charcoal adsorber samples in order to establish filter system operability.

2.3 Section 4.7.B.1.a.(3)

It was originally intended that the surveillance section of this TS address the DOP testing of HEPA filters and the halogenated hydrocarbon testing of the charcoal absorbers as specified in the guidelines of Regulatory Guide 1.52. However, as currently written, this section only references the carbon adsorber testing (Section 3.7.B.1.b.(2)) and does not include references to the DOP testing of HEPA filters (Section 3.7.B.1.b.(1)). The proposed change will revise this TS section to reference Section 3.7.B.1.b in its entirety and thereby include the HEPA filter testing. The staff finds this proposed change to be acceptable since it properly corrects the previous error and is in conformance with the guidelines of Regulatory Guide 1.52.

2.4 Section 3.7.B.1.c

As now specified, this section currently states:

"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 or fuel handling is permissible only during the succeeding seven days providing that within 2 hours and daily thereafter, all active components of the other standby gas treatment train shall be demonstrated to be operable."

The proposed change will modify this TS section to state:

"From and after the date that one train of the Standby Gas Treatment System is found to be inoperable for any reason, continued reactor operation, irradiated fuel handling, or new fuel handling over the spent fuel pool or core is permissible only during the succeeding seven days providing that within two hours, all active components of the other standby gas treatment train shall be demonstrated to be operable."

This change will clarify the specific fuel handling operation to which the LCO requirements apply, and delete the phrase "...and daily thereafter...". The licensee asserts, and the staff agrees, that daily testing does not necessarily add to the assurance that the remaining train is operable because excessive testing may degrade the equipment. The deletion is consistent with the corresponding standard technical specification guidelines identified in NURG-0123, Revision 3, "Standard Technical Specification for General Electric BWRs (STS)" and, therefore, the staff finds the above clarification and deletion to be acceptable.

2.5 Section 3.7.B.1.e

As now worded, this section currently states:

"Except as specified in 3.7.B.1.c, both trains of the standby gas treatment system shall be operable during fuel handling operations. If the system is not operable fuel movement shall not be started (any fuel assembly movement in progress may be completed)."

The proposed change will add the words "irradiated" and "new" to precede the word "fuel" and clarifying wording of the TS thereby changing the TS section to read:

"Except as specified in 3.7.B.1.c, both trains of the Standby Gas Treatment System shall be operable during irradiated fuel handling, or new fuel handling over the spent fuel pool or core. If the system is not operable, fuel movement shall not be started. Any fuel assembly movement in progress may be completed."

This change is consistent with the corresponding Sections 3.6.5.3.a and 3.6.5.3.b of the GE STS and, therefore, the staff finds these clarifications to be acceptable.

2.6 Section 4.7.B.2.c (Supplemental letter dated July 24, 1987)

As now specified, this section currently states:

"At least once every 18 months the following shall be demonstrated:

- 1) Operability of heaters at rated power."

The licensee's submittals of August 9, 1984 and August 9, 1985 proposed Section 4.7.B.2.c to state:

"At least once every 18 months demonstrate the ability of the heaters to perform their design function."

The staff requested that the proposed change be revised to read "At least once every 18 months demonstrate that the inlet heaters on each train are operable and capable of an output of at least 14 KW." This change was requested by the staff to clarify the requirement for CRHEAFS filter train heater operability, specify the design function rating, and is consistent with the requirements already specified in the current Pilgrim TS for the SGTS (Section 4.7.B.1.a.2), which contains the same requirements as the requested change, and the corresponding sections of the STS. Therefore, the staff finds the change to be acceptable.

2.7. Section 4.7.B.2.d

As now specified, this section does not contain a surveillance period for testing the humidistat which controls the heaters. This change provides such a surveillance period by adding "...once per 18 months" to the existing statement. The staff finds this change to be acceptable and it is consistent with the surveillance interval for the CRHEAF heaters, themselves.

2.8 Section 4.7.B.1.a.(2)

As now specified, this section requires the performance of an instrument functional test on the SGTS humidistats. The proposed change deletes this requirement since the humidistats are no longer used for SGTS heater control and the heaters are operable whenever the SGTS is operating. The proposed change does not compromise safety because the purpose of the humidistats, which are relative humidity sensors intended to control the relative humidity (RH) of the incoming gas stream by energizing the SBGTS heaters, is not essential. The humidity will continue to be adequately controlled by the SBGTS heaters, which will now be energized when the exhaust fans are energized. The heaters are protected from overheating by high temperature sensors, which deenergize the heaters prior to temperatures which could imperil the charcoal beds. Therefore, the system is capable of performing its designed function without the humidistats, and because of the unavailability of qualified humidistats, bypassing them enhances assurance of proper heater operation. This bypassing of course, removes the need to test the humidistats, and the need to have such a surveillance test in 4.7.B.1.a. The staff finds the proposed change to be acceptable since the humidistat controls are not required in order to ensure proper heater operation.

2.9 Section 3.7.B.2.c

As now specified, this section states:

"From and after the date that one train of the Control Room High Efficiency Air Filtration System is made or found to be incapable of supplying filtered air to the control room for any reason, reactor operation or refueling operations are permissible only during the succeeding 7 days."

The proposed change will provide an additional requirement consistent with proposed Section 3.7.B.1.c which reads:

"...during the succeeding 7 days providing that within two hours, all active components of the other CRHEAF train shall be demonstrated operable."

The staff finds this additional requirement to be acceptable for the same reasons given in Section 2.4 of this SER as it clarifies the operability requirements for the CRHEAF and is consistent with GE STS.

3.0 SUMMARY

Based on the above evaluation, the staff concludes that the proposed changes to the Pilgrim Technical Specifications concerning operability requirements for the SGTS and CRHEAFS are acceptable. The bases for the staff's acceptance are that the proposed changes provide adequate clarification and meet the appropriate guidelines of Regulatory Guide 1.52, and the GE STS (NUREG-0123, Revision 3, dated December 1980).

4.0 ENVIRONMENTAL CONSIDERATIONS

This amendment involves a change in the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously published a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR §51.22(c)(9). Pursuant to 10 CFR §51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0. CONCLUSION

We have concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of this amendment will not be inimical to the common defense - - - and security or to the health and safety of the public.

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