

March 8, 1995

Mr. E. Thomas Boulette, Ph.D  
Senior Vice President - Nuclear  
Boston Edison Company  
Pilgrim Nuclear Power Station  
RFD #1 Rocky Hill Road  
Plymouth, MA 02360

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**SUBJECT: ISSUANCE OF AMENDMENT NO. 159 TO FACILITY OPERATING LICENSE NO. DPR-35, PILGRIM NUCLEAR POWER STATION (TAC NO. M90995)**

Dear Mr. Boulette:

The Commission has issued the enclosed Amendment No. 159 to Facility Operating License No. DPR-35 for the Pilgrim Nuclear Power Station. This amendment is in response to your application dated November 22, 1994.

This amendment removes the requirement of Table 3.2.C.1, "Instrumentation that Initiates Control Rod Blocks" to have the "Scram Discharge Instrument Volume - Scram Trip Bypassed" operable in the Run and Startup modes. Also, the quarterly functional surveillances of Table 4.2.C are being revised to once/cycle to coincide with the period of time the instrumentation is required to be operable.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register Notice.

Sincerely,

Original signed by

Ronald B. Eaton, Senior Project Manager  
Project Directorate I-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-293

- Enclosures: 1. Amendment No.159 to License No. DPR-35
- 2. Safety Evaluation

cc w/encls: See next page

DOCUMENT NAME: A:\PI90995.AMD \*See previous concurrence

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 8, 1995

Mr. E. Thomas Boulette, Ph.D  
Senior Vice President - Nuclear  
Boston Edison Company  
Pilgrim Nuclear Power Station  
RFD #1 Rocky Hill Road  
Plymouth, MA 02360

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DPR-35, PILGRIM NUCLEAR POWER STATION (TAC NO. M90995)

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Sincerely,

A handwritten signature in black ink, appearing to read "Ronald B. Eaton".

Ronald B. Eaton, Senior Project Manager  
Project Directorate I-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-293

Enclosures: 1. Amendment No. 159 to  
License No. DPR-35  
2. Safety Evaluation

cc w/encls: See next page

E. Thomas Boulette

Pilgrim Nuclear Power Station

cc:

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Plymouth, MA 02360



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. 159  
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 November 22, 1994 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.

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3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Ledyard B. Marsh, Director  
Project Directorate I-I  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 8, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 159

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

3/4.2-20

3/4.2-35

Insert

3/4.2-20

3/4.2-35

PNPS  
TABLE 3.2.C.1 (Cont)

INSTRUMENTATION THAT INITIATES ROD BLOCKS

<u>Trip Function</u>	<u>Operable Instrument Channels per Trip Function</u>		<u>Required Operational Conditions</u>	<u>Notes</u>
	<u>Minimum</u>	<u>Available</u>		
SRM Detector not in Startup Position	3	4	Startup/Refuel, except trip is bypassed when SRM count rate is $\geq 100$ counts/second or IRMs on Range 3 or above	(1) (4)
SRM Downscale	3	4	Startup/Refuel, except trip is bypassed when IRMs on Range 3 or above	(1) (4)
SRM Upscale	3	4	Startup/Refuel, except trip is by- passed when the IRM range switches are on Range 8 or above (4)	(1)
SRM Inoperative	3	4	Startup/Refuel, except trip is by- passed when the IRM range switches are on Range 8 or above (4)	(1)
Scram Discharge Instrument Volume Water Level - High	2	2	Run/Startup/Refuel	(3)
Scram Discharge Instrument Volume-Scram Trip Bypassed	1	1	Refuel/Shutdown	(3)

PNPS  
TABLE 4.2.C

MINIMUM TEST AND CALIBRATION FREQUENCY FOR CONTROL ROD BLOCKS ACTUATION

<u>Instrument Channel</u>	<u>Instrument Functional Test</u>	<u>Calibration</u>	<u>Instrument Check</u>
APRM - Downscale	Once/3 Months	Once/3 Months	Once/Day
APRM - Upscale	Once/3 Months	Once/3 Months	Once/Day
APRM - Inoperative	Once/3 Months	Not Applicable	Once/Day
IRM - Upscale	(2) (3)	Startup or Control Shutdown	(2)
IRM - Downscale	(2) (3)	Startup or Control Shutdown	(2)
IRM - Inoperative	(2) (3)	Not Applicable	(2)
RBM - Upscale	Once/3 Months	Once/6 Months	Once/Day
RBM - Downscale	Once/3 Months	Once/6 Months	Once/Day
RBM - Inoperative	Once/3 Months	Not Applicable	Once/Day
SRM - Upscale	(2) (3)	Startup or Control Shutdown	(2)
SRM - Inoperative	(2) (3)	Not Applicable	(2)
SRM - Detector Not in Startup Position	(2) (3)	Not Applicable	(2)
SRM - Downscale	(2) (3)	Startup or Control Shutdown	(2)
IRM - Detector Not in Startup Position	(2) (3)	Not Applicable	(2)
Scram Discharge Instrument Volume Water Level-High	Once/3 Months	Refuel	Not Applicable
Scram Discharge Instrument Volume-Scram Trip Bypassed	Once/Operating Cycle	Not Applicable	Not Applicable
Recirculation Flow Converter	Not Applicable	Once/Operating Cycle	Once/Day
Recirculation Flow Converter-Upscale	Once/3 Months	Once/3 Months	Once/Day
Recirculation Flow Converter-Inoperative	Once/3 Months	Not Applicable	Once/Day
Recirculation Flow Converter-Comparator Off Limits	Once/3 Months	Once/3 Months	Once/Day
Recirculation Flow Process Instruments	Not Applicable	Once/Operating Cycle	Once/Day
<u>Logic System Functional Test (4) (6)</u>			
System Logic Check	Once/Operating Cycle		



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 159 TO FACILITY OPERATING LICENSE NO. DPR-35  
BOSTON EDISON COMPANY  
PILGRIM NUCLEAR POWER STATION  
DOCKET NO. 50-293

1.0 INTRODUCTION

By letter dated November 22, 1994, the Boston Edison Company (the licensee) submitted a request for changes to the Pilgrim Nuclear Power Station Technical Specifications (TSs). This amendment would revise the mode conditions under which the Scram Discharge Instrument Volume (SDIV) - Scram Trip Bypass in Table 3.2.C.1 is required to be operable and changes the associated functional test frequency from quarterly to once per operating cycle in Table 4.2.C.

2.0 EVALUATION

The SDIV-Scram Trip Bypass Switch is a manual keylock switch located in the control room which permits the operator to bypass the scram discharge volume high level scram trip if the mode switch is in SHUTDOWN or REFUEL. This bypass allows the operator to reset the reactor protection system so that the system is restored to operation while the operator drains the scram discharge volume. In addition to allowing the scram relays to reset, actuating the bypass initiates a control rod withdrawal block. Resetting the trip actuators opens the scram discharge volume vent and drain valves. An annunciator in the control room indicates the bypass condition.

The proposed change removes the requirement of Table 3.2.C.1 "Instrumentation that Initiates Control Rod Blocks" to have the "Scram Discharge Instrument Volume - Scram Trip Bypassed" operable in the Run and Startup modes. Operability for this instrumentation is applicable only in the Shutdown and Refuel modes. Also, the quarterly functional surveillances of Table 4.2.C are being revised to once/cycle to coincide with the period of time the instrumentation is required to be operable.

The proposed change to Table 3.2.C.1, and the associated change to Table 4.2.C, removes incorrect reactor modes listed for the SDIV - Scram Trip Bypass function. The Pilgrim control rod block logic for the SDIV Bypass is not operable nor is it required by design when in the Run and Startup modes. The control logic and the final safety analysis report (FSAR) (section 7.2.3.10) specifies SDIV - Scram Trip Bypass operability only in the Refuel and Shutdown modes.

This change will not result in any physical modification or operation of the control rod block system. The change conforms the TSs to the actual design of the SDIV Scram Trip Bypass as described in the FSAR. Changing the functional surveillance frequency from quarterly to once per operating cycle also conforms the TSs to the applicable mode for the function.

The change is classified as an administrative change because it corrects an administrative requirement that does not reflect the logic design. It improves safety by removing the need to install jumpers during reactor operations to perform unnecessary and potentially risky functional surveillances.

The NRC staff finds the amendment acceptable. This change is administrative in nature. The change will not result in the physical modification or operation of the control rod block system. The change conforms the TSs to the actual design of the SDIV Scram Trip Bypass as described in the FSAR.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Massachusetts State official was notified of the proposed issuance of the amendment. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC 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 issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (60 FR 3671). 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

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: K. R. Cotton

Date: March 8, 1995