

June 15, 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

SUBJECT: ISSUANCE OF AMENDMENT NO. 164 TO FACILITY OPERATING LICENSE NO. DPR-35, PILGRIM NUCLEAR POWER STATION (TAC NO. M91551)

Dear Mr. Boulette:

The Commission has issued the enclosed Amendment No. 164 to Facility Operating License No. DPR-35 for the Pilgrim Nuclear Power Station. This amendment is in response to your application dated February 9, 1995.

This amendment revises the reactor high water level trip level setting for the Group 1 isolation. This change will allow an increase to the main steam isolation valve high water level isolation setpoint.

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-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-293

- Enclosures: 1. Amendment No.164 to License No. DPR-35
- 2. Safety Evaluation

cc w/encls: See next page

Distribution: See attached sheet

DOCUMENT NAME: G:\PILGRIM\PI91551.AMD

To receive a copy of this document, indicate in the box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

OFFICE	LA:PDI-1	PM:PDI-1	<input checked="" type="checkbox"/> NRR:HICB	<input checked="" type="checkbox"/> E	PM:PDI-1	<input checked="" type="checkbox"/> R. Bachmann	D:PDI-1
NAME	SLittle	KCotton:smm	JWernick	REaton	R. Bachmann	LMarsh	
DATE	05/09/95	05/23/95	06/08/95	06/14/95	06/19/95	06/15/95	

OFFICIAL RECORD COPY

9506280206 950615
PDR ADOCK 05000293
P PDR

NRC FILE CENTER COPY

CP-1

DFO11



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 15, 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

SUBJECT: ISSUANCE OF AMENDMENT NO. 164 TO FACILITY OPERATING LICENSE NO.
DPR-35, PILGRIM NUCLEAR POWER STATION (TAC NO. M91551)

Dear Mr. Boulette:

The Commission has issued the enclosed Amendment No. 164 to Facility Operating License No. DPR-35 for the Pilgrim Nuclear Power Station. This amendment is in response to your application dated February 9, 1995.

This amendment revises the reactor high water level trip level setting for the Group 1 isolation. This change will allow an increase to the main steam isolation valve high water level isolation setpoint.

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,

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

Ronald B. Eaton, Senior Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-293

Enclosures: 1. Amendment No.164 to
License No. DPR-35
2. Safety Evaluation

cc w/encls: See next page

E. Thomas Boulette

Pilgrim Nuclear Power Station

cc:

Mr. Leon J. Olivier
Vice President of Nuclear
Operations & Station Director
Pilgrim Nuclear Power Station
RFD #1 Rocky Hill Road
Plymouth, MA 02360

Mr. Alan Shiever
Licensing Division Manager
Boston Edison Company
600 Rocky Hill Road
Plymouth, MA 02360-5599

Resident Inspector
U. S. Nuclear Regulatory Commission
Pilgrim Nuclear Power Station
Post Office Box 867
Plymouth, MA 02360

Mr. Robert V. Fairbanks
Manager, Reg. Affairs Dept.
Pilgrim Nuclear Power Station
RFD #1 Rocky Hill Road
Plymouth, MA 02360

Chairman, Board of Selectmen
11 Lincoln Street
Plymouth, MA 02360

Mr. David F. Tarantino
Nuclear Information Manager
Pilgrim Nuclear Power Station
RFD #1, Rocky Hill Road
Plymouth, MA 02360

Chairman, Duxbury Board of Selectmen
Town Hall
878 Tremont Street
Duxbury, MA 02332

Mr. Thomas Rapone
Secretary of Public Safety
Executive Office of Public Safety
One Ashburton Place
Boston, MA 02108

Office of the Commissioner
Massachusetts Department of
Environmental Protection
One Winter Street
Boston, MA 02108

Mr. David Rodham, Director
Massachusetts Emergency Management
Agency
400 Worcester Road
P.O. Box 1496
Framingham, MA 01701-0317
Attn: James Muckerheide

Office of the Attorney General
One Ashburton Place
20th Floor
Boston, MA 02108

Chairmen, Citizens Urging
Responsible Energy
P. O. Box 2621
Duxbury, MA 02331

Mr. Robert M. Hallisey, Director
Radiation Control Program
Massachusetts Department of
Public Health
305 South Street
Boston, MA 02130

Citizens at Risk
P. O. Box 3803
Plymouth, MA 02361

Regional Administrator, Region I
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

W. S. Stowe, Esquire
Boston Edison Company
800 Boylston St., 36th Floor
Boston, MA 02199

Chairman
Nuclear Matters Committee
Town Hall
11 Lincoln Street
Plymouth, MA 02360

DATED: June 15, 1995

**AMENDMENT NO. 164 TO FACILITY OPERATING LICENSE NO. DPR-35-PILGRIM NUCLEAR
POWER STATION**

Docket File

PUBLIC

PDI-1 Reading

S. Varga, 14/E/4

J. Zwolinski, 14/H/3

L. Marsh

S. Little

K. Cotton

R. Eaton

OGC

D. Hagan, T-4 A43

G. Hill (2), T-5 C3

C. Grimes, 11/E/22

ACRS (4)

OPA

OC/LFDCB

PD plant-specific file

J. Linville, Region I

J. Wermiel

cc: Plant Service list



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. 164
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 February 9, 1995, 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.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 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: June 15, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 164

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

3/4.1-2

3/4.2-7

3/4.2-9

Insert

3/4.1-2

3/4.2-7

3/4.2-9



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 164 TO FACILITY OPERATING LICENSE NO. DPR-35
BOSTON EDISON COMPANY
PILGRIM NUCLEAR POWER STATION
DOCKET NO. 50-293

1.0 INTRODUCTION

By letter dated February 9, 1995, the Boston Edison Company (BECO or the licensee) submitted a request for changes to the Pilgrim Nuclear Power Station Technical Specifications (TSs). The requested changes would increase the reactor high water level trip level setting for the Group 1 isolation. This change will allow an increase to the main steam isolation valve (MSIV) high water level isolation setpoint.

2.0 EVALUATION

The purpose of the change is to increase the operating margin associated with the MSIV isolation. The increased operating margin will allow the operator to control the reactor water level and pressure more effectively during a controlled shutdown. It will also reduce the likelihood of spurious isolations.

The proposed change will increase the reactor water level at which the MSIV isolation signal occurs. The isolation signal is provided to minimize reactor vessel inventory loss in the event of a pressure regulator failure and to prevent gross moisture carryover.

General Electric analyzed a rapid depressurization caused by a pressure regulator malfunction at low reactor power. MSIV closure was initiated by low reactor pressure approximately 30 seconds into the event. No credit is taken for MSIV closure on high level. The resulting reactor water level swell was not sufficient to reach the main steam lines. The revised analytical limit is 52 inches below the bottom elevation of the main steam lines.

The proposed change will increase the reactor high water level trip level setting for the Group 1 isolation. The change will allow the licensee to increase the MSIV high water level isolation setpoint. The remaining high water level trip signals (high-pressure coolant injection, reactor core isolation coolant, etc.) will not be changed. The MSIV high water level isolation parameters are summarized below:

	Existing Values	Proposed Values
Analytical Limit:	+48 inches indicated	+60 inches indicated
Trip Level Setting: (TS allowable value)	+48 inches indicated	+55.4 inches indicated
Setpoint:	+45 inches indicated	+55 inches indicated

This change will also result in a new calibration range for the following instruments:

LT263-57A and B	LS263-57A-1 and B-1
LT263-58A and B	LS263-58A-1 and B-1
LIS263-57A and B	LS263-57A-2 and B-2
LIS263-58A and B	LS263-58A-2 and B-2

The calibration range will be increased from "-50 to + 50 inches indicated" to "-50 to + 60 inches indicated".

This, in turn, will result in a change in the TS allowable value for the reactor low level trip level setting. The allowable value will change from ">= 11.7 inches" to ">= 11.6 inches." The increase in the calibration range will also result in a change in the TS allowable value for the reactor low low water level trip level setting. The allowable value will change from ">= -46.3 inches indicated level" to ">= -46.4 inches indicated level." These changes will not impact plant safety.

The changes were evaluated in accordance with the guidance provided in Regulatory Guide 1.105 and Generic Letter 91-04, "Change in Technical Specification Surveillance Intervals to Accommodate a 24 Month Fuel Cycle."

Operation of the station in accordance with the proposed trip level setting will not significantly increase the probability or consequences of an accident previously evaluated. The MSIV high water level isolation signal is provided to protect against rapid depressurization due to a pressure regulator malfunction during plant startup. The high water level isolation signal is not functional when the mode switch is in the RUN position. A high water level in the reactor vessel indicates that fuel is covered.

Increasing the trip level setting will have minimal effect on moisture carryover in the event of a pressure regulator failure at low reactor power. MSIV closure (Group 1) is initiated by low reactor pressure (810 psig) approximately 30 seconds into the event. The resulting reactor water level swell is not sufficient to reach the bottom elevation of the main steam lines.

The proposed TS allowable value for the reactor low level trip level setting and the reactor low low water level trip level setting does not involve a significant increase in the probability or consequences of an accident.

The proposed change does not affect the Group 1 isolation safety function. The proposed change is consistent with the Final Safety Analysis Report and TS basis associated with reactor vessel inventory control and main steam line flooding.

The proposed change to the instrument calibration range does not affect the margin of safety for systems or components affected by the change. Operating Pilgrim in accordance with the proposed trip level setting does not involve a significant reduction in the margin of safety.

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. 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 14017). 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. Cotton

Date: June 15, 1995