July 8, 1988

Docket No.: 50-293

Mr. Ralph G. Bird
Senior Vice President - Nuclear
Boston Edison Company
Pilgrim Nuclear Power Station
RFD #1, Rocky Hill Road
Plymouth, Massachusetts 02360

SUBJECT: ISSUANCE OF AMENDMENT NO. 119 TO FACILITY OPERATING LICENSE NO. DPR-35 (TAC#60465) PILGRIM NUCLEAR POWER STATION

Dear Mr. Bird:

The Commission has issued the enclosed Amendment No. 119 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 December 23, 1985 as supplemented on February 22, 1988.

This amendment adds equipment allowable out of service times for calibration and testing of the Reactor Protection System (RPS) and Primary Containment Isolation System (PCIS). Note 1 to Table 3.1.1 and Note 1 to Table 3.2.A have been revised to add time limits for keeping RPS and PCIS equipment out of service during testing and calibration.

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,

/S/

Daniel G. McDonald, Senior Project Manager
Project Directorate I-3
Division of Reactor Projects I/II

Enclosures:
1. Amendment No. 119to DPR-35
2. Safety Evaluation

cc: w/enclosures:
See next page

OFC	:PDI-3	:PDI-3	:OGC	:DIR/PDI-3	:	:	:
NAME	:MRushbrook	:DMcDonald:pw:	RBachmann	:RWeissman	:	:	
DATE	:6/2/88	6/21/88	6/29/88	7/8/88	:	:	:

OFFICIAL RECORD COPY

modify FRN as noted

DF01
1/1

8807180160 880708
PDR ADOCK 05000293
P PNU

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

July 8, 1988

Docket No.: 50-293

Mr. Ralph G. Bird
Senior Vice President - Nuclear
Boston Edison Company
Pilgrim Nuclear Power Station
RFD #1, Rocky Hill Road
Plymouth, Massachusetts 02360

SUBJECT: ISSUANCE OF AMENDMENT NO. 119 TO FACILITY OPERATING LICENSE NO. DPR-35 (TAC#60465) PILGRIM NUCLEAR POWER STATION

Dear Mr. Bird:

The Commission has issued the enclosed Amendment No. 119 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 December 23, 1985 as supplemented on February 22, 1988.

This amendment adds equipment allowable out of service times for calibration and testing of the Reactor Protection System (RPS) and Primary Containment Isolation System (PCIS). Note 1 to Table 3.1.1 and Note 1 to Table 3.2.A have been revised to add time limits for keeping RPS and PCIS equipment out of service during testing and calibration.

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,

Daniel G. McDonald, Senior Project Manager
Project Directorate I-3
Division of Reactor Projects I/II

Enclosures:
1. Amendment No. 119 to DPR-35
2. Safety Evaluation

cc: w/enclosures:
See next page

cc:

Mr. K. L. Highfill
Station Director
Pilgrim Nuclear Power Station
RFD #1 Rocky Hill Road
Plymouth, Massachusetts 02360

Resident Inspector's Office
U. S. Nuclear Regulatory Commission
Post Office Box 867
Plymouth, Massachusetts 02360

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

Office of the Commissioner
Massachusetts Department of
Environmental Quality Engineering
One Winter Street
Boston, Massachusetts 02108

Office of the Attorney General
1 Ashburton Place
20th Floor
Boston, Massachusetts 02108

Mr. Robert M. Hallisey, Director
Radiation Control Program
Massachusetts Department of
Public Health
150 Tremont Street, 2nd Floor
Boston, Massachusetts 02111

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

Mr. James D. Keyes
Regulatory Affairs and Programs Group
Leader
Boston Edison Company
25 Braintree Hill Park
Braintree, Massachusetts 02184

Mr. Ralph G. Bird
Senior Vice President - Nuclear
Boston Edison Company
Pilgrim Nuclear Power Station
RFD#1, Rocky Hill Road
Plymouth, Massachusetts 02360

Mr. Richard N. Swanson, Manager
Nuclear Engineering Department
Boston Edison Company
25 Braintree Hill Park
Braintree, Massachusetts 02184

Ms. Elaine D. Robinson
Nuclear Information Manager
Pilgrim Nuclear Power Station
RFD #1, Rocky Hill Road
Plymouth, Massachusetts 02360

Charles V. Barry
Secretary of Public Safety
Executive Office of Public Safety
One Ashburton Place
Boston, Massachusetts 02108

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. 119
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 December 23, 1985 as supplemented on February 22, 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. 119 , 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 the date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 8, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 119
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.

Remove Pages	Insert Pages
28	28
46	46

NOTES FOR TABLE 3.1.1

1. There shall be two operable or tripped trip systems for each function. An instrument channel may be placed in an inoperable status for up to 6 hours for required surveillance without placing the trip system in the tripped condition provided at least one OPERABLE channel in the same trip system is monitoring that parameter. If the minimum number of operable instrument channels per trip system cannot be met for both trip systems, the appropriate actions listed below shall be taken.

   A. Initiate insertion of operable rods and complete insertion of all operable rods within four hours.

   B. Reduce power level to IRM range and place mode switch in the startup/ hot standby position within 8 hours.

   C. Reduce turbine load and close main steam line isolation valves within 8 hours.

   D. Reduce power to less than 45% of design.

2. Permissible to bypass, with control rod block, for reactor protection system reset in refuel and shutdown positions of the reactor mode switch.

3. Permissible to bypass when reactor pressure is <600 psig.

4. Permissible to bypass when turbine first stage pressure is less than 305 psig.

5. IRM's are bypassed when APRM's are onscale and the reactor mode switch is in the run position.

6. The design permits closure of any two lines without a scram being initiated.

7. When the reactor is subcritical, fuel is in the reactor vessel and the reactor water temperature is less than 212°F, only the following trip functions need to be operable:

   A. Mode switch in shutdown

   B. Manual scram

   C. High flux IRM

   D. Scram discharge volume high level

   E. APRM (15%) high flux scram

8. Not required to be operable when primary containment integrity is not required.

9. Not required while performing low power physics tests at atmospheric pressure during or after refueling at power levels not to exceed 5 MW (t).

NOTES FOR TABLE 3.2.A

1. Whenever Primary Containment integrity is required by Section 3.7, there shall be two operable or tripped trip systems for each function. An instrument channel may be placed in an inoperable status for up to 6 hours for required surveillance without placing the trip system in the tripped condition provided at least one OPERABLE channel in the same trip system is monitoring that parameter; or, where only one channel exists per trip system, the other trip system shall be operable.

2. Action

   If the first column cannot be met for one of the trip systems, that trip system shall be tripped. If the first column cannot be met for both trip systems, the appropriate action listed below shall be taken.

   A. Initiate an orderly shutdown and have the reactor in Cold Shutdown Condition in 24 hours.

   B. Initiate an orderly load reduction and have Main Steam Lines isolated within eight hours.

   C. Isolate Reactor Water Cleanup System.

   D. Isolate Shutdown Cooling.

3. Instrument set point corresponds to 128.26 inches above top of active fuel.

4. Instrument set point corresponds to 77.26 inches above top of active fuel.

5. Not required in Run Mode (bypassed by Mode Switch).

6. Two required for each steam line.

7. These signals also start SBGTS and initiate secondary containment isolation.

8. Only required in Run Mode (interlocked with Mode Switch).

9. Within 24 hours prior to the planned start of hydrogen injection with the reactor power at greater than 20% rated power, the normal full power radiation background level and associated trip setpoints may be changed based on a calculated value of the radiation level expected during the injection of hydrogen. The background radiation level and associated trip setpoints may be adjusted based on either calculations or measurements of actual radiation levels resulting from hydrogen injection. The background radiation level shall be determined and associated trip setpoints shall be set within 24 hours of re-establishing normal radiation levels after completion of hydrogen injection and prior to withdrawing control rods at reactor power levels below 20% rated power.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 119
TO FACILITY OPERATING LICENSE NO. DPR-35
BOSTON EDISON COMPANY
PILGRIM NUCLEAR POWER STATION
DOCKET NO. 50-293

1.0 INTRODUCTION

By letter (BECo 88-026) dated December 23, 1985 the Boston Edison Company (BECO) submitted a proposed change to the Pilgrim Nuclear Power Station (PNPS) Technical Specifications (TS). The proposed change adds equipment allowable out of service times for calibration and testing of the Reactor Protection System (RPS) and the Primary Containment Isolation System (PCIS).

At present the PNPS TS do not provide a formal time limit for keeping RPS and PCIS equipment out of service for calibration and testing. BECO requested a six hour inoperable status for RPS and PCIS equipment based on the General Electric Licensing Topical Report NEDC-30851P.

In a NRC Safety Evaluation for General Electric Company Topical Report; NEDC-30844P, "BWR Owners Group Response to Generic Letter 83-28," and NEDC-30851P, "Technical Specification Improvements for BWR RPS," dated July 15, 1987, the NRC accepted the six hour out of service concept, however each licensee must show specific applicability of this report to their plant. BECO had not adequately shown specific applicability of NEDC-30851P to PNPS.

The licensee submitted supplemental information in a letter (BECO 87-026) dated February 22, 1988, addressing the applicability of NEDC-30851P to PNPS. This clarification as to the applicability of the topical report did not affect the substance of the proposed amendment as noticed.

2.0 EVALUATION

The staff reviewed the BECO proposed TS changes in accordance with section 7 of the Standard Review Plan.

As a result of the staff's review of the BECO submittals, the following has been noted:

1) Present PNPS TS do not provide a formal time limit for keeping RPS and PCIS equipment out of service for testing and calibration.

2) The standard allowable out of service time for testing and calibration is two hours. BECO has requested six hours based on GE Licensing Topical Report NEDC-30851P.

3) Safety Evaluation Report (SER), dated July 15, 1987 reviewed NEDC-30851P and conditionally accepted the Topical Report for use by GE Owner's Group Licensees. Each licensee is required by the SER to show applicability of the Topical Report to their particular plants.

4) In licensee letter BECO 87-026, dated February 22, 1988, BECO submitted an applicability review of PNPS to the Topical Report NEDC-30851P. The staff reviewed this submittal and has concluded that adequate similarity of PNPS to systems analyzed by NEDC-30851P justifies the use of the recommended six hour out of service time for testing and calibration.

5) The staff agrees with the licensee's contention that the addition of an allowable out of service time for testing and calibration is a TS improvement. This change requires action by the licensee in a finite time, which precludes excessive periods of time before compensatory measures or restoration of a safety system are implemented. Defining an allowable out of service time limit will also reduce the potential for disputes on what constitutes a reasonable time for an instrument channel to remain intentionally inoperable during normal maintenance activities.

6) The staff believes this TS change will not increase the probability or consequences of an accident previously evaluated. In fact, by specifying an allowable out of service time (6 hours) versus an indefinite period of time, this should actually be a decrease in the probability of an accident.

7) This proposed TS change does not create the possibility of a new or different kind of accident from any previously evaluated. The TS change does not change setpoints, plant operation, or plant configuration and therefore, cannot create a different kind of accident from any previously evaluated.

The staff finds the specifying of an allowable out of service time for testing and calibration to be an overall PNPS TS improvement. Based on the GE Licensing Topical Report NEDC-30851P and the acceptability of PNPS submittal to this Topical Report, the staff finds the use of a six hour allowable out of service time for testing and calibration to be acceptable.

3.0 ENVIRONMENTAL CONSIDERATIONS

This amendment involves a change in the installation or use of a facility component 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.

4.0 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.

5.0 Acknowledgment

Principal Contributor: R. Lasky

Dated: July 8, 1988

AMENDMENT NO. 119 TO FACILITY OPERATING LICENSE DPR-35-
PILGRIM NUCLEAR POWER STATION

DISTRIBUTION: w/enclosures:

Docket No. 50-293
NRC PDR
Local PDR
PDI-3 r/f
RWessman
MRushbrook
DMcDonald
OGC-15B-18
T. Barnhart (4)
E. O. Jordan
B. Grimes
D. Hagan
ACRS (10)
E. Butcher
Wanda Jones
OPA
LFMB
Tech. Review Branch - R. Lasky, SICB

DF01
1/1