

JUL 23 1976

Docket No. 50-293

Boston Edison Company
M/C NUCLEAR
ATTN: Mr. J. E. Larson
Nuclear Licensing
Administrator - Operations
800 Boylston Street
Boston, Massachusetts 02199

Gentlemen:

In response to your request dated October 10, 1975, the Commission has issued the enclosed Amendment No. 17 to Facility Operating License No. DPR-35 for the Pilgrim Nuclear Power Station Unit No. 1.

This amendment modifies the allowable total leak rate specification for testable penetrations and isolation valves to conform with the requirements of 10 CFR 50, Appendix J.

Four other changes relating to Appendix J were also requested by your October 10 letter. These changes are being reviewed on a generic basis by the NRC staff along with a number of similar requests. Action on these items is being deferred until our generic review is completed.

Copies of the related Safety Evaluation and the Commission's Notice of Issuance are also enclosed.

Sincerely,

Original signed by
Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors

Enclosures:

1. Amendment No. 17 to DPR-35
2. Safety Evaluation
3. Notice of Issuance

OR:ORB #4
MFairfile
7/18/76

7/20/76
Subject to conditions -
many accompanying
in packet - a Hatched sheet

OFFICE →	OR:ORB #2	OR:ORB #2	OR:PSB	OELD	OR:ORB #2
SURNAME →	RMDiggs	PWConnor:ro	WButler	BLAS	DLZiemann
DATE →	7/19/76	7/21/76	7/12/76	7/12/76	7/23/76

JUL 23 1976

cc w/enclosures:

Mr. J. A. Smith
Pilgrim Station Manager
Boston Edison Company
RFD #1, Rocky Hill Road
Plymouth, Massachusetts 02360

Anthony Z. Roisman, Esquire
Roisman, Kessler and Cashdan
1712 N Street, N. W.
Washington, D. C. 20036

Henry Herrmann, Esquire
Massachusetts Wildlife Federation
151 Tremont Street
Boston, Massachusetts 02111

Plymouth Public Library
North Street
Plymouth, Massachusetts 02360

Mr. David F. Tarantino
Chairman, Board of Selectmen
11 Lincoln Street
Plymouth, Massachusetts 02360

cc w/enclosures and cy of BECo
filings dtd. 12/14/73 & 10/10/75:

Mr. Henry Kolbe, M. D.
Acting Commissioner of Public Health
Massachusetts Department of
Public Health
600 Washington Street
Boston, Massachusetts 02202

BOSTON EDISON COMPANY

DOCKET NO. 50-293

PILGRIM NUCLEAR POWER STATION UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 17
License No. DPR-35

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The portion of the application for amendment by the Boston Edison Company (the licensee) dated October 10, 1975, relating to modification of the allowable total leak rate specification for testable penetrations and isolation valves, 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.

OFFICE						
SURNAME						
DATE						

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 the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by
Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: JUL 23 1976

OFFICE ➤						
SURNAME ➤						
DATE ➤						

ATTACHMENT TO LICENSE AMENDMENT NO. 17

FACILITY OPERATING LICENSE NO. DPR-35

DOCKET NO. 50-293

Replace the existing pages 154 and 155 of the Technical Specifications with the attached revised pages. Changes on these pages are shown by a marginal line.

OFFICE >						
SURNAME >						
DATE >						

4.7.A Primary Containment (Cont'd)

c. Corrective Action for IPCLT

Methods A and B

If leak repairs are necessary to meet the allowable operational leak rate, the integrated leak rate test need not be repeated provided local leakage measurements are conducted and the leak rate differences prior to and after repairs, when corrected to the test pressure and deducted from the integrated leak rate measurements, yield a leakage rate value not in excess of the allowable operational leak rate.

d. Frequency for IPCLT

Methods A and B

After the initial pre-operational leakage rate test, two integrated leak rate tests shall be performed at approximately equal intervals between the major shutdowns for inservice inspection conducted at ten-year intervals. In addition, an integrated leakage rate test shall be performed at the end of the ten-year interval, which may coincide with the inservice inspection shutdown period.

e. Local Leak Rate Tests (LLRT)

Methods A and B

- (1) Primary containment testable penetrations and isolation valves shall be tested at a pressure ≥ 45 psig, except for the main steam line isolation valves which shall be tested at a pressure ≥ 23 psig, each operating cycle. Bolted double-gasketed seals shall be tested whenever the seal is closed after being opened and at least once each operating cycle.
- (2) Personnel air lock door seals shall be tested at a pressure ≥ 10 psig each operating cycle.

f. Acceptance Criteria and Corrective Action for LLRT

Method A

If the total leakage rates listed below are exceeded, repairs and re-tests shall be performed to correct the conditions.

- (1) Double-gasketed seals 10% $L_{T0}(45)$
- (2) All testable penetrations and isolation valves 60% $L_p(45)$
- (3) Any one penetration or isolation valve except main steam line isolation valves 5% $L_{T0}(45)$

Amendment No. 17

4.7.A Primary Containment (Cont'd)

(4) Any one main steam line isolation valve 11.5 scf/hr @23 psig.

METHOD B

If the total leakage rates listed below as adjusted to a test pressure of 23 psig are exceeded, repairs and retests shall be performed to correct the condition.

- (1) Double-gasketed seals - $10\%L_{t0}(23)$
- (2) (a) Testable penetrations and isolation valves $60\% L_p(23)$
(b) Any one penetration or isolation valve except steam line isolation valves $5\%L_{t0}(23)$
(c) Any one main steam line isolation valve 11.5 scf/hr @23 psig

Leak rates measured at 45 psig shall be adjusted to a test pressure of 23 psig according to:

$$LLRT(23)_{adj} = LLRT_{meas} \times \frac{L_m(23)}{L_m(45)}$$

g. Continuous Leak Rate Monitor

When the primary containment is inerted, the containment shall be continuously monitored for gross leakage by review of the inerting system makeup requirements. This monitoring system may be taken out of service for maintenance but shall be returned to service as soon as practicable.

h. Drywell Surfaces

The interior surfaces of the drywell and torus above water line shall be visually inspected each operating cycle for evidence of deterioration.

Amendment No. 17



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 17 TO FACILITY OPERATING LICENSE NO. DPR-35

BOSTON EDISON COMPANY

PILGRIM UNIT NO. 1

DOCKET NO. 50-293

INTRODUCTION

In response to our August 5, 1975 letter, Boston Edison (BECo) compared the Pilgrim Unit No. 1 Technical Specifications with the requirements of 10 CFR 50 Appendix J, "Primary Containment Leakage Testing for Water Cooled Power Reactors." As a result of that comparison, BECo requested by letter dated October 10, 1975, changes to the Pilgrim Unit No. 1 Technical Specifications and exemptions to the provisions of Appendix J. The proposed technical specification changes and exemptions involve the following:

1. A change in the allowable total leak rate for testable penetrations and isolation valves to correct previous error
2. A revision to Section 3.7 of the Technical Specifications to utilize the terminology of Appendix J and to eliminate surveillance requirements not included in Appendix J,
3. Exemption from the requirement for a Type C leak test of four check valves,
4. Exemption to permit main steam line isolation valve testing at 23 psig, and
5. Exemption to permit testing the airlock door seal at 10 psig.

Items 2 through 5 associated with Appendix J are being reviewed on a generic basis. We have not completed this review, therefore, action on these items is being deferred. This action pertains to item 1 only which is not a part of the generic review.

DISCUSSION

Appendix J to 10 CFR 50 establishes the acceptance criteria by which the performance of primary containment surveillance tests are to be judged. Appendix J requires that the combined leakage rate of all penetrations and valves subject to local leak rate tests shall be less than 60% of the maximum allowable leakage rate specified in the Technical Specifications for the preoperational integrated leakage test. Appendix J further requires that an operational integrated leakage limit of 75% of the preoperational leakage limit be met for the periodic integrated leakage tests performed during the life of the facility.

By letter dated December 14, 1973, Boston Edison requested that the Pilgrim Unit No. 1 Technical Specifications be changed to specify that the combined leakage from all local leakage tests be 60% of the allowable operational leakage limit (L_{to}). The purpose of this change was to make the Pilgrim Unit No. 1 Technical Specifications consistent with Appendix J. This change which based the acceptance criteria for local leak tests on the operational leakage specification (L_{to}) rather than the preoperational leakage specification (L_p) was conservative relative to Appendix J and was issued by the Commission on February 6, 1974, as Change No. 3 to the Pilgrim Unit No. 1 Technical Specifications.

By letter dated October 10, 1975, Boston Edison proposed a modification to the Pilgrim Unit No. 1 Technical Specifications that would change the combined leakage rate limit for all testable penetrations and isolation valves from 60% of the operational leakage specification (L_{to}) to 60% of the preoperational leakage specification (L_p).

EVALUATION

We have evaluated the proposed change to the Pilgrim Unit No. 1 Technical Specifications and have determined that it is in conformance with the provisions of 10 CFR Part 50, Appendix J, Section III.C.3, and is consistent with the requirements in other recently issued technical specifications at similar facilities and with the Commission's Standard Technical Specifications. We conclude that this consistency is desirable from the standpoint of establishing uniform requirements for the purpose of enforcing the requirements of Appendix J.

Note: In the Pilgrim Unit No. 1 Technical Specifications, the term L_p is equivalent to the term L_a used in Appendix J.

We have further concluded that because the limit established for the preoperational leakage specification, L_p , remains unchanged at 1.0% of the contained air by weight and the operational leakage specification, L_{to} , which includes all leakage from testable penetrations and isolation valves, remains unchanged at $0.75 L_p$, that the protection provided by the containment remains unchanged.

ENVIRONMENTAL CONSIDERATION

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR §51.5(d)(4) that an environmental statement, negative declaration, or environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) because the changes do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the changes do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: JUL 23 1976

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-293

BOSTON EDISON COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 17 to Facility Operating License No. DPR-35, issued to Boston Edison Company (the licensee), which revised Technical Specifications for operation of Unit No. 1 of the Pilgrim Nuclear Power Station (the facility) located near Plymouth, Massachusetts. The amendment is effective as of its date of issuance.

The amendment modified the allowable total leak rate specification for testable penetrations and isolation valves to conform with the requirements of Appendix J of 10 CFR Part 50.

The portion of the application for the amendment relating to modification of the allowable total leak rate specification for testable penetration and isolation valves complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

OFFICE ➤						
SURNAME ➤						
DATE ➤						

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental statement, negative declaration or environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated October 10, 1975, (2) Amendment No.17 to License No. DPR-35, and (3) the Commission's concurrently issued related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the Plymouth Public Library on North Street in Plymouth, Massachusetts 02360.

A single copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this *23rd day of July, 1976.*

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by
Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors

OFFICE ➤						
SURNAME ➤						
DATE ➤						

July 20, 1976

Note to Paul Connor
Project Manager, Pilgrim 1

CONCURRENCE SUBJECT TO CONDITIONS ON PILGRIM 1 LICENSE AMENDMENT NO. 17
FOR THE PURPOSE OF AMENDING TECH SPECS TO ESTABLISH ALLOWABLE TOTAL LEAK
RATE SPECIFICATION FOR TESTABLE PENETRATION AND ISOLATION VALVES.

I concur, subject to conditions, in amendment no. 17 which modifies the
Technical Specifications to accurately reflect the allowable total leak
rate specifications for testable penetration and isolation valves. I
condition my concurrence on the following:

1. On page 2 of the Safety Evaluation Report, paragraph 4,
following "Appendix J" the following is added "Section
III.C.3."
2. A footnote is to be made on page 2, third paragraph following
"(Lp)." The footnote would read as follows:

"In the Pilgrim Unit No. 1 Technical Specifications the
term (Lp) is equivalent to ~~the~~ term (La) used in Appendix
J."

Barry A. Smith

Barry Smith
Attorney, OELD

mjs