

Docket No. 50-293

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Boston Edison Company APR 8 1977
M/C NUCLEAR
ATTN: Mr. G. Carl Andognini
800 Boylston Street
Boston, Massachusetts 02199

Gentlemen:

In response to your request dated March 11, 1977, the Commission has issued the enclosed Amendment No. 22 to Facility Operating License No. DPR-35 for the Pilgrim Nuclear Power Station Unit No. 1.

This amendment incorporates a change in the method utilized to assure the operability of the relief valves used in the Automatic Depressurization System.

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

Sincerely,

Original signed by

Don K. Davis
Don K. Davis, Acting Chief
Operating Reactors Branch #2
Division of Operating Reactors

Enclosures:

1. Amendment No. 22 to License No. DPR-35
2. Safety Evaluation
3. Federal Register Notice

cc w/enclosures:
See next page

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SURNAME	RMDiggs	PO'Connor:es	JMcGough	B. Sullivan	DKDavis
DATE	4/1/77	4/4/77	4/4/77	4/8/77	4/8/77

APR 8 1977

cc w/enclosures:

Mr. Paul J. McGuire
Pilgrim Station Acting Manager
Boston Edison Company
RFD #1, Rocky Hill Road
Plymouth, Massachusetts 02360

Anthony Z. Roisman, Esquire
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Henry Herrmann, Esquire
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North Street
Plymouth, Massachusetts 02360

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

Chief, Energy Systems
Analyses Branch (AW-459)
Office of Radiation Programs
U. S. Environmental Protection Agency
Room 645, East Tower
401 M Street, S. W.
Washington, D. C. 20460

U. S. Environmental Protection Agency
Region I Office
ATTN: EIS COORDINATOR
JFK Federal Building
Boston, Massachusetts 02203

cc w/enclosures and copy of BECo
filing dtd. 3/11/77:
Massachusetts Department of Public
Health
ATTN: Commissioner of Public Health
600 Washington Street
Boston, Massachusetts 02111

OFFICE >						
SURNAME >						
DATE >						



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

BOSTON EDISON COMPANY

DOCKET NO. 50-293

PILGRIM NUCLEAR POWER STATION UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 22
License No. DPR-35

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Boston Edison Company (the licensee) dated March 11, 1977, 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:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 22, 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 its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Don K. Davis, Acting Chief
Operating Reactors Branch #2
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 8, 1977

ATTACHMENT TO LICENSE AMENDMENT NO. 22

FACILITY OPERATING LICENSE NO. DPR-35

DOCKET NO. 50-293

Replace page 109 of Technical Specifications contained in Appendix A of the above indicated license with the attached page bearing the same number. The changed area on the revised page is reflected by a marginal line.

3.5.D Reactor Core Isolation Cooling
(RCIC) Subsystem (Cont'd)

2. From and after the date that the RCICS is made or found to be inoperable for any reason, continued reactor power operation is permissible only during the succeeding seven days provided that during such seven days the HPCIS is operable.
3. If the requirements of 3.5.D cannot be met, an orderly shutdown shall be initiated and the reactor pressure shall be reduced to or below 104 psig within 24 hours.

3.5.E Automatic Depressurization
System (ADS)

1. The Automatic Depressurization Subsystem shall be operable whenever there is irradiated fuel in the reactor vessel and the reactor pressure is greater than 104 psig and prior to a startup from a Cold Condition, except as specified in 3.5.E.2 below.

4.5.D Reactor Core Isolation Cooling
(RCIC) Subsystem (Cont'd)

- d. Flow Rate at 1000 psig Once/3 months
- e. Flow Rate at 150 psig Once/operating cycle

The RCIC pump shall deliver at least 400 gpm for a system head corresponding to a reactor pressure of 1000 to 150 psig.

2. When it is determined that the RCIC subsystem is inoperable, the HPCIS shall be demonstrated to be operable immediately and weekly thereafter.

4.5.E Automatic Depressurization
System (ADS)

1. During each operating cycle the following tests shall be performed on the ADS:
 - a. A simulated automatic actuation test shall be performed prior to startup after each refueling outage.
 - b. With the reactor at pressure, each relief valve shall be manually opened until a corresponding change in reactor pressure or main turbine bypass valve positions indicates that steam is flowing from the valve.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 22 TO FACILITY OPERATING LICENSE NO. DPR-35

BOSTON EDISON COMPANY

PILGRIM NUCLEAR POWER STATION UNIT NO. 1

DOCKET NO. 50-293

INTRODUCTION

By letter dated March 11, 1977, Boston Edison Company (BECo) requested an amendment to the Pilgrim Unit No. 1 Technical Specifications which would modify the existing method of testing the operability of the relief valves used in the automatic pressure relief subsystem at the facility. The modified surveillance techniques require observation of turbine bypass closure or control valve closure as verification of relief valve operation during testing. The previous method of testing required detection of an increase in temperature at the relief valve discharge caused by steam exiting from the relief valve.

BACKGROUND

The staff has recently become aware of a potential deficiency in the method being used to confirm valve operability during periodic testing of Boiling Water Reactor (BWR) safety-relief valves. This deficiency concerns the use of the safety-relief valve temperature indication as a positive method of confirmation that a safety-relief valve is open when manually actuated during surveillance testing.

We have found that an increased temperature indication may be obtained at the safety-relief valve exit with the safety-relief valve closed. This indicated temperature increase is the result of steam vented through the valve actuation mechanism during the surveillance test. In view of this finding, we have concluded that a temperature increase at the valve exit, by itself does not provide a positive means of verification that the safety-relief valve has opened.

When we became aware of the above deficiency in some BWR Technical Specifications, we requested BECo by our letter dated January 5, 1977, to propose a change to the Pilgrim Unit No. 1 Technical Specifications. We provided examples of acceptable methods that BECo could propose to provide assurance of satisfactory operation of the relief valves. In response to our request, BECo submitted their March 11, 1977 request for an amendment to License DPR-35.

EVALUATION

We have reviewed BECo's proposed change to the Technical Specifications for Pilgrim Unit No. 1. BECo has proposed to add a specification which requires observing either the reactor pressure decrease, or the change in turbine bypass valve position, that occurs concurrent with the opening of the relief valve and compensates for the diversion of steam to the suppression pool.

Boston Edison has proposed one of the acceptable methods identified in our January 5 letter. We have concluded that operation in accordance with BECo's proposed surveillance method will provide assurance that the relief valve has actually opened during surveillance testing and is therefore acceptable to the staff.

ENVIRONMENTAL CONSIDERATIONS

We have determined that the amendment does not involve 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 impact statement or negative declaration and 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 amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: April 8, 1977

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. 22 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 method utilized to assure the operability of the relief valves used in the Automatic Depressurization System of the facility.

The application for the amendment 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.

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 impact statement or negative declaration and 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 March 11, 1977, (2) Amendment No. 22 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 8th day of April, 1977.

FOR THE NUCLEAR REGULATORY COMMISSION



Don K. Davis, Acting Chief
Operating Reactors Branch #2
Division of Operating Reactors