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Docket No. 50-293

AUG 16 1976

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 April 1, 1975 and supplements thereto dated March 1, 1976 and May 13, 1976, the Commission has issued the enclosed Amendment No. 1[illegible] to Facility Operating License No. DPR-35 for the Pilgrim Nuclear Power Station Unit No. 1.

This amendment (1) corrects errors in the letter designations identifying various inspection categories of Table 4.6.1 - "In-service Inspection Requirements for Pilgrim Nuclear Power Station", (2) deletes a requirement to examine a specific percentage of various components during each refueling outage, (3) specifies that portions of the vessel closure studs and vessel closure stud bushings that are not accessible for inspection need be inspected only when they are exposed during the inspection interval, (4) corrects an error in the original specification by redesignating certain piping welds from Category F-3 to Category J, and (5) deletes inspection requirements for welds that were on sections of piping that have been removed from the reactor.

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

Sincerely,

Original Signed by:
Dennis L. Ziemann

Cleared w/Stello's Office 8/13/76

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

Enclosures:
1. Amendment No. [illegible] to DPR-35
2. Safety Evaluation
3. Notice of Issuance

DOR:OT/EB
LShao
8/5/76

| OFFICE ➤ | cc w/enclosures: | see next page | DOR:ORB #2 | DOR:ORB #2 | OELD | DOR:ORB #2 |
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| SURNAME ➤ | | | PWO'Connor:ah | RMDiggs | W.O. Paton | DLZiemann |
| DATE ➤ | | | 7/24/76 | 7/26/76 | 8/12/76 | 8/16/76 |

Form AEC-318 (Rev. 9-53) AECM 0240 ☆ U. S. GOVERNMENT PRINTING OFFICE: 1974-526-166

cc w/enclosures:
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Pilgrim Station Manager
Boston Edison Company
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Plymouth, Massachusetts 02360

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Roisman, Kessler and Cashdan
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Plymouth Public Library
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Mr. David F. Tarantino
Chairman, Board of Selectmen
11 Lincoln Street
Plymouth, Massachusetts 02360

cc w/enclosures and cy of BECo
filings dtd. 4/1/75, 3/1/76
and 5/13/76:
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. 19
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 April 1, 1975 and supplements thereto dated March 1, 1976 and May 13, 1976, comply 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.

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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: AUG 16 1976

| | | | | | | |
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| OFFICE➤ | | | | | | |
| SURNAME➤ | | | | | | |
| DATE➤ | | | | | | |

ATTACHMENT TO LICENSE AMENDMENT NO. 18

FACILITY OPERATING LICENSE NO. DPR-35

DOCKET NO. 50-293

The following changes relate to the Appendix A portion of the Pilgrim Unit No. 1 Technical Specifications. The changed areas on the revised pages are shown by marginal lines.

| Remove Pages | Insert Pages |
|---|---|
| 127a | 127A |
| 127A | 127B |
| 129 | 129 |
| 130 | 130 |
| 131 | 131 |
| 132 | 132 |
| 133 | 133 |
| 134 | 134 |
| 135 | 135 |
| 149 | 149 |
| 150 | 150 |

NOTE: The revised pages are printed on one side only. Therefore, the existing page in the Technical Specifications should not be destroyed if the reverse side contains an unrevised page.

3.6.G Structural Int( ity (Con't)

Edition (ASME Code, Section XI). In the interim until the nuclear system piping inspection evaluation level criteria of the ASME Boiler and Pressure Vessel Code, Section XI, 1974 Edition, are completed, the applicable evaluation level provisions of the ASME Boiler and Pressure Vessel Code, Section XI, 1971 Summer Addenda shall be used in the Inservice Inspection of nuclear piping. Components of the primary system boundary whose in-service examination reveals the absence of flaw indications not in excess of the allowable indication standards of this code are acceptable for continued service. Plant operation with components which have in-service examination flaw indication(s) in excess of the allowable indication standards of the Code shall be subject to NRC approval.

a. Components whose in-service examination reveals flaw indication(s) in excess of the allowable indication standards of the ASME Code, Section XI, are unacceptable for continued service unless the following requirements are met:

   (i) An analysis and evaluation of the detected flaw indication(s) shall be submitted to the NRC that demonstrate that the component structural integrity justifies continued service. The analysis and evaluation shall follow the procedures outlined in Appendix A, "Evaluation of Flaw Indications," of ASME Code, Section XI.

   (ii) Prior to the resumption of service, the NRC shall review the analysis and evaluation and either approve resumption of plant operation with the affected components or require that the component be repaired or replaced.

b. For components approved for continued service in accordance with paragraph a, above, reexamination of the area containing the flaw indication(s) shall be conducted during each scheduled successive in-service inspection. An analysis and evaluation shall be submitted to the NRC following each in-service inspection. The analysis and evaluation shall follow the procedures outlined in Appendix A, "Evaluation of Flaw Indications," of ASME Code, Section XI, and shall reference prior analyses submitted to the NRC to the extent applicable. Prior to resumption of service following each in-service inspection, the NRC shall review the analysis and evaluation and either approve resumption of plant operation with the affected components or require that the component be repaired or replaced.

c. Repair or replacement of components, including re-examinations, shall conform with the requirements of the ASME Code, Section XI. In the case of repairs, flaws shall be either removed or repaired to the extent necessary to meet the allowable indication standards specified in ASME Code, Section XI.

| LIMITING CONDITIONS FOR OPERATION | SURVEILLANCE REQUIREMENTS |
|---|---|
| 3.6.H High Energy Piping (outside containment) | 4.6.H High Energy Piping (outside containment) |
| 1. The high energy line sections identified in Table 4.6.2 shall be maintained free of visually observable through-wall leaks.<br><br>2. If a leak is detected by the surveillance program of 4.6.H, efforts to identify the source of the leak shall be started immediately.<br><br>3. If the source of leakage cannot be identified within eight hours of detection or if the leak is found to be from a break in the sections identified in Table 4.6.2, the leak shall be isolated or the reactor shall be in a cold shutdown condition within 48 hours.<br><br>4. When the modifications, described in FSAR Amendment No. 34, to provide protection against high energy line breaks outside of the primary containment have been completed, Technical Specifications 3.6.H and 4.6.H will no longer be required. | The inspections listed in Table 4.6.2 shall be performed as specified to verify the structural integrity of the specified high energy line sections. The standards of Section XI of the ASME Boiler and Pressure Vessel Code, 1974, Article IWB 3000 shall be used in these inspections. |

## TABLE 4.6.1

## IN-SERVICE INSPECTION REQUIREMENTS FOR PILGRIM NUCLEAR POWER STATION

| CATEGORY | EXAMINATION AREA | EXAM METHOD | INSPECTION INTERVAL | EXTENT OF EXAMINATION |
|---|---|---|---|---|
| A | Longitudinal and circumferential shell welds in core region. | Volumetric | At or near end of ten year interval. | Ten percent of length of longitudial and five percent of length of circumferential welds. |
| B | Longitudinal and circumferential shell welds and meridional and circumferential seam welds in bottom and closure heads other than those in categories A and C. | Volumetric | At or near end of ten year interval. | Ten percent of length of longitudinal and meridional and five percent of length of circumferential welds. Bottom head welds not accessible with present design and selected lengths only of longtudinal and circumferential shell welds are accessible. |
| C | Shell-to-flange and closure head-to-flange circumferential welds. | Volumetric | Cumulative 100 percent coverage at end of ten years. | Cumulative 100% coverage at end of 10 years. The number and extent of areas examined during each individual examination of a circumferential weld shall provide a representative sampling of the entire weld. |
| D | Primary nozzle-to-shell welds and nozzle inner radii. | Volumetric | Cumulative 100 percent coverage of nozzle-to-shell welds and nozzle inner radii at end of ten years. | 1) Nozzle Welds<br><br>Recirculation Outlet (2) - one every five years.<br><br>Recirculation Inlet (10) - three every three years<br><br>Core Spray (2) - one every five years<br><br>Steam (4) - two every five years<br><br>Feedwater (4) - two every five years<br><br>CRD Return (1) - one every ten years. |

TABLE 4.6.1

IN-SERVICE INSPECTION REQUIREMENTS FOR PILGRIM NUCLEAR POWER STATION

| CATEGORY | EXAMINATION AREA | EXAM METHOD | INSPECTION INTERVAL | EXTENT OF EXAMINATION |
|---|---|---|---|---|
| D | Primary nozzle-to-head welds and head nozzle inner radii. | Visual and Volumetric | Cumulative 100 percent coverage of nozzle-to-head welds and nozzle inner radii at end of ten years. | 2) Nozzle-to-closure head welds head instrumentation (2) - one every five years<br>Head spray inlet (1) - one every ten years |
| E-2 | Vessel bottom head penetrations, core differential pressure and shell instrumentation nozzles. | Hydrostatic test | At or near end of ten year interval. | Test pressure and test duration to be as follows:<br>$P_t$ = Po (Syt/Syo)<br>$P_t$ = System hydrostatic test pressure, psig.<br>Po = System nominal operating pressure at rated power, psig<br>Syt = Yield stress at test temperature as specified in the yield strength tables of ASME Section III for primary membrane material.<br>Syo = Yield stress at temperature corresponding to operating pressure Po, as specified in the yield strength tables of ASME Section III for primary membrane material.<br>Test Duration: Begin inspection after four hours at test pressure. |

## TABLE 4.6.1

## IN-SERVICE INSPECTION REQUIREMENTS FOR PILGRIM NUCLEAR POWER STATION

| CATEGORY | EXAMINATION AREA | EXAM METHOD | INSPECTION INTERVAL | EXTENT OF EXAMINATION |
|---|---|---|---|---|
| E-2 | | Visual Check | Every three years | A visual check shall be made every three years, with insulation and shielding in place, for evidence of drainage, leakage or signs of distress. |
| F | Primary nozzle to safe-end welds | Visual, surface and volumetric | Cumulative 100 percent at end of ten year interval. | 1) Stainless steel safe-ended nozzles<br>Recirculation Outlet (2) - one every five years<br>Recirculation Inlet (10) - three every three years<br>Core Spray (2) - one every five years<br>CRD Return (1) - one every ten years<br>Jet Pump Instrumentation (2) - one every five years |
| | | Visual Check | 100 percent every three years | A visual check shall be made every three years, with insulation and shielding in place, for evidence of drainage, leakage or signs of distress. |

## TABLE 4.6.1

### IN-SERVICE INSPECTION REQUIREMENTS FOR PILGRIM NUCLEAR POWER STATION

| CATEGORY | EXAMINATION AREA | EXAMINATION METHOD | INSPECTION INTERVAL | |
|---|---|---|---|---|
| | | | | |
| G-1 | Vessel closure studs and nuts | Volumetric<br><br>Visual or Surface | Cumulative 100 percent at end of ten years.<br>Cumulative 100 percent at end of 10 years of nuts and portions of studs exposed during that period. | 1) Cumulative 100 percent at the end of ten years. Each examination shall include a representative sample of vessel closure studs and nuts. Visual or surface inspection of studs will only be performed on the unexposed stud portions if the studs are removed for some other purpose. |
| G-1 | Ligaments between vessel flange stud holes. | Volumetric | Cumulative 100 percent at the end of ten years. | The ligaments shall be examined at the same time as the flange welds of Category C. |
| G-1 | Vessel closure washers<br><br>Vessel stud bushings | Visual<br><br>Visual | Cumulative 100 percent at the end of ten years.<br><br>Cumulative 100 percent of all bushings exposed during the ten-year period. | Cumulative 100 percent at the end of ten years. Each examination shall include a representative sample of vessel closure washers. |



Amendment No. 19

TABLE 4.6.1

IN-SERVICE INSPECTION REQUIREMENTS FOR PILGRIM NUCLEAR POWER STATION

| CATEGORY | EXAMINATION AREA | EXAM METHOD | INSPECTION INTERVAL | EXTENT OF EXAMINATION |
|---|---|---|---|---|
| G-2 | All other pressure retaining bolting. | Visual and volumetric on bolts ≥2" in diameter and visual only on bolts <2" in diameter. | Cumulative 100 percent at the end of ten years. | Bolting shall be examined when bolting is removed or when the bolted connection is broken or disassembled. For bolting which is not removed, or the bolted connection is not broken, the inspection will consist of a visual examination to detect signs of distress or evidence of leaking. Examination of threads in base material of flanges or bushings shall be performed from the face of the flange (flange base material between threaded stud hole ligaments shall be included). |
| H | Integrally welded vessel external supports | Volumetric | Cumulative ten percent at end of ten years. | Approximately two lineal feet of vessel support skirt weld every three years. |
| I-1 | Closure head cladding | Visual and surface or volumetric | 100 percent of selected areas during the ten year interval. | During the ten year period, at least six patches (each 36 sq. in.) evenly distributed in the closure head shall be inspected. At each closure head nozzle a narrow ring of the closure head is not clad. During the ten year period at least six points will be measured for thickness to determine the corrosion rate at each of the three unclad areas. |

## TABLE 4.6.1

## IN-SERVICE INSPECTION REQUIREMENTS FOR PILGRIM NUCLEAR POWER STATION

| CATEGORY | EXAMINATION AREA | EXAM METHOD | INSPECTION INTERVAL | EXTENT OF EXAMINATION |
|---|---|---|---|---|
| I-1 | Vessel cladding | Visual | 100 percent of related areas during the ten year interval. | During the ten year period at least six patches (each 36 sq. in.) evenly distributed in accessible sections of the shell shall be examined to provide a reasonable representative sample of the condition of the cladding. |
| J | Primary nozzle to safe-end welds | Visual and volumetric | Cumulative 100 percent at end of ten year interval. | 2) Carbon steel safe-ended nozzles.<br>Steam (4) - two every five years<br>Feedwater (4) - two every five years |
| | | Visual Check | 100 percent every three years | A visual check shall be made every three years, with any insulation or shielding in place, for evidence of leakage, drainage or signs of distress. |
| J | Circumferential and longitudinal pipe welds. | Visual and volumetric | By the end of the ten year interval, a cumulative 25 percent of the circumferential groove welds in the piping systems will be examined, including one foot of any longitudinal weld on either side of the circumferential groove welds.<br><br>In addition, the Group I welds on main feedwater RHR, HPCI steam and main steam lines (see below for weld number identification) shall be inspected in each ten year interval. | (see below) |

| System | Pipe Size | Total Welds |
|---|---|---|
| Main Steam | 20" | 56 |
| | 6" | 18 |
| HPCI | 10" | 22 |
| | 14" | 4 |
| RCIC | 3" | 19 |
| | 4" | 2 |
| RHR | 20" | 26 |
| | 18" | 31 |
| | 4" | 32 |
| Reactor Water Cleanup | 6" | 44 |



Amendment No. 19

TABLE 4.6.1

IN-SERVICE INSPECTION REQUIREMENTS FOR PILGRIM NUCLEAR POWER STATION

| CATEGORY | EXAMINATION AREA | EXAM METHOD | INSPECTION INTERVAL | EXTENT OF EXAMINATION |
|---|---|---|---|---|
| | | | Group I welds<br><br>Feedwater pipe weld numbers: 6-N4A-7, 6-N4A-9, 6-N4A-10, 6-N4A-11, 6-N4A-12, 6-N4A-13, 6-N4B-8, 6-N4B-7, 6-N4C-8, 6-N4C-9, 6-N4D-8, 6-N4D-10, 6-N4D-11, 6-N4D-12, 6-N4D-13, 6-N4D-14, 6-N4D-9, 6-N4A-8<br><br>Main steam pipe weld numbers:<br><br>1-A-9, 1-A-8, 1-A-7, 1-B-9, 1-B-8, 1-C-9, 1-C-8, 1-D-9, 1-D-8, 1-D-7.<br><br>HPCI steam pipe weld numbers:<br><br>23-0-9, 23-0-10, 23-0-14<br><br>RHR return pipe weld numbers:<br><br>10-1A-5, 10-1B-5<br><br>RHR outlet pipe weld numbers:<br><br>10-0-6, 10-0-7, 10-0-8, 10-0-9 | Pipe Size / Total Welds<br>CRD Return 3" 21<br>Core Spray 10" 38<br>Feedwater 18" 27<br>12" 48<br>Reactor Recirculating 28" 33<br>22" 10<br>12" 50<br>4" 8 |
| K-1 | Piping, valve and pump supports integrally welded to pressure retaining component. | Visual and volumetric | 25 percent cumulative in each ten year inspection interval. | The examination shall include the weld metal and base metal beneath the weld zone and along the support attachment member for a distance of two wall thicknesses. |
| K-2 | Support members and structures for piping, valves and pumps whose structural integrity is relied upon to | Visual | Cumulative 100 percent during the ten year interval | Support settings of constant and variable spring type hangers, snubbers and shock absorbers shall be inspected to verify proper |

BASES:

3.6.G and 4.6.G

Structural Integrity

A preservice inspection of accessible components listed in Table 4.6.1 will be conducted before initial fuel loading to assure the system is free of gross defects and as a reference base for later inspections. Construction orientated nondestructive testing is being conducted as systems are fabricated to assure applicable code requirements are met. Prior to operation, the primary system boundary will be free of gross defects. In addition, the facility has been designed such that gross defects should not occur throughout the life of the station. The inspection program given in Table 4.6.1 is based on the requirements of Section IS-242; Table IS-261, Components, Parts and Methods of Examination, and Table IS-251, Examination Categories, all of Section XI of the 1970 ASME Boiler and Pressure Vessel Code, except where accessibility for inspection was not provided and where it was impractical to modify the original design. The interim use of Section XI of the Summer Addenda of the 1971 ASME Boiler and Pressure Vessel Code for the evaluation levels required for inspection of the nuclear piping system, until the appropriate sections of the 1974 code are completed, assures that a more recent code than Section III of the 1968 edition of the ASME Code which would otherwise be applicable, is in effect. The biological shielding surrounding the vessel was modified by providing openings in specific locations to permit access to selected lengths of the reactor vessel shell welds. Also, modifications were made to vessel nozzle insulation and nozzle block-out removable shielding designs with the intent to make the inspection areas more accessible by reducing the personnel radiation exposure required for inspection utilizing available equipment.

The inspection program and the modifications described above were developed by the Boston Edison Company with assistance from its contractors. The services of Southwest Research Institute were retained to aid in developing the inspection program, provide advice on practical modifications to existing designs for improved inspectability and to perform the preservice inspection. It is not possible, however, to make all changes that might be desired to insure literal compliance with all areas of the current inspection code. The areas of exclusion and reasons for this exclusion are discussed below.

Category A

Accessibility has been provided to perform the required examinations as stated in Table 4.6.1 of selected lengths only of these welds. The shielding and insulation designs were modified to permit access to these areas and minimize personnel exposure. The Boston Edison Company recognizes the importance of this testing program and has and will continue to make every reasonable effort to comply. Although it is believed the flexibility provided by the design will permit the inspections to be performed with presently available equipment, if experience reveals these examinations to be impractical because of high radiation exposure to personnel, an evaluation will be submitted to the AEC for approval of any variance from the specified program. It is the intent of the Boston Edison Company to continue with its consultants to develop examination techniques to lessen the radiation exposure to personnel during the examinations.

BASES:

3.6.G and 4.6.G

Structural Integrity

Category B

In addition to the exclusion bases stated for Category A welds, at the present time there is no practical way to volumetrically inspect welds in the bottom head because of the combination of insulation and control rod and in-core monitor housings configuration on the outside of the vessel and jet pumps and core shroud on the inside of the vessel.

Category D

In addition to the exclusion bases stated for Category A welds, definitive volumetric examination by ultrasonic methods from external locations on nozzle internal radii is expected to be limited to ten percent of its perimeter (those portions of the nozzle inner radius lying perpendicular to the reactor vessel centerline). However, these are believed to be the most highly stressed areas on the nozzle inner radii. Modifications were made to the shielding and insulation designs around the nozzles with the intent to permit the inspections to be performed with minimal radiation exposure to personnel using presently available equipment.

It is the intent of the Boston Edison Company to continue with its consultants in the development and implementation, if practicable, of new techniques so as to include any excluded areas within the inspection program.

Category E-2

At the present time there is no practical way to volumetrically or visually inspect the bottom head penetrations or drain nozzle weld because of the combination of insulation and control rod and in-core monitor housings configuration. Also, the design of core differential pressure and shell instrumentation nozzles is such that present day volumetric inspection techniques are not practical to utilize. The combination of hydrostatic test and visual checks to be performed do provide reasonable assurance these examination areas are free of gross defects.

Category L-2

It is the intent that no internal examination be performed on the recirculation pumps unless they are disassembled for maintenance because of the high personnel radiation exposures which would be involved.

Category M-2

There are several valves in the primary pressure boundary which cannot be inspected unless the reactor fuel is removed and reactor water level lowered to the level of the entrance to the jet pump mixer assembly resulting in high personnel radiation exposures from the loss of shielding from the water. Therefore, those valves which would require the reactor water level to be lowered below the low-low water level protection system trip point are excluded from the requirement of visual inspection of internals.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

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

BOSTON EDISON COMPANY

PILGRIM UNIT NO. 1

DOCKET NO. 50-293

## INTRODUCTION

By letter dated April 1, 1975 and supplements dated March 1, 1976 and May 13, 1976, the Boston Edison Company requested modifications to the Pilgrim Nuclear Power Station Unit No. 1 Technical Specifications which would:

1. Correct errors in the letter designations identifying the various inspection categories of Table 4.6.1,

2. Permit more flexibility in the performance of the individual in-service inspections within the overall inspection interval by deleting requirements for examining a fixed percentage of each component category during each inspection,

3. Specify that portions of the vessel closure studs and vessel closure stud bushings that are not accessible need be examined only when they are exposed during the inspection interval,

4. Corrects an error in the original specification by redesignating piping-to-safe-end welds as Category J inspections rather than Category F-3 inspections, and

5. Eliminates certain welds from Table 4.6.1 because the pipes on which they were located have been removed from the reactor.

EVALUATION

The NRC staff has reviewed the Boston Edison request for changes to Table 4.6.1 of the Technical Specifications. The results of our review of the above five items follow:

Item 1

The letter designations assigned to the various plant component inspection categories in the original Pilgrim Unit No. 1 Technical Specifications incorrectly identify the category designations. The proposed change would change these designations to agree with Section XI of the 1970 Edition of the ASME Boiler and Pressure Vessel Code by making the following changes:

Categories D-1 and D-2 are redesignated as Category D
Categories F-1 and F-3 are redesignated as Category F
Categories G-2 and G-3 are redesignated as Category G-1
Category G-4 is redesignated as Category G-2
Category I-2 is redesignated as Category I-1

We have determined that these changes conform to Section XI of the ASME Code and are editorial in nature and do not change the level of protection afforded by the Pilgrim Unit No. 1 In-service Inspection Program and are acceptable.

Item 2

This change would modify the "Extent of Examination" column of Table 4.6.1 to specify that each individual examination shall provide a representative sampling of the components in Categories C and G-1 with 100% coverage of all components within ten years. These categories presently require that 15% of each component category be examined during each refueling outage. This proposed change provides greater flexibility in performing in-service inspections yet provides the same level of protection as the existing specification and conforms with the 1970 Edition of Section XI. On this basis the proposed change is acceptable.

Item 3

Boston Edison has proposed a change to presently designated Categories G-1 and G-3 that would require unexposed portions of the vessel closure studs and vessel stud bushings be examined only if they are removed or otherwise exposed during the inspection interval. The proposed specification would continue to require examination of 100% of these components over the ten-year inspection interval. The 1970 Edition of Section XI requires that these components be inspected only when disassembled. Therefore, we have concluded that the proposed change conforms with the Code and is acceptable.

Item 4

The original Technical Specifications for Pilgrim Unit No. 1 incorrectly assigned 23 piping welds to Category F-3. To correct this error, the proposed change would place 4 main steam line welds, 1 control rod drive return line weld, 2 core spray line welds, 4 feedwater line welds, and 12 reactor recirculation line welds in Category J. These changes provide the level of inspection required by the ASME Code and are acceptable.

Item 5

During the 1976 refueling outage the 4 inch recirculation bypass lines on both A and B recirculation loops were removed. The proposed change would delete the in-service inspection requirements from Table 4.6.1 for the welds which were removed. Since these welds are no longer a part of the primary system piping, the deletion is acceptable.

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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: AUG 16 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. 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 (1) corrects errors in the letter designations identifying various inspection categories of Table 4.6.1 - "In-service Inspection Requirements for Pilgrim Nuclear Power Station", (2) deletes a requirement to examine a specific percentage of various components during each refueling outage, (3) specifies that portions of the vessel closure studs and vessel closure stud bushings that are not accessible for inspection need be inspected only when they are exposed during the inspection interval, (4) corrects an error in the original specification by redesignating certain piping welds from Category F-3 to Category J, and (5) deletes inspection requirements for welds that were on sections of piping that have been removed from the reactor.

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

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notice of the 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, 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 April 1, 1975 and supplements thereto dated March 1, 1976 and May 13, 1976, (2) Amendment No. 19 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 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 16 day of AUG 1976

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by:
Dennis L. Ziemann

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

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