

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. 65 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 August 30, 1982 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.
- 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. 65, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

8211300110 821110 PDR ADOCK 05000293 P PDR 3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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Domenic B. Vassallo, Chief Operating Reactors Branch #2 Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: November 10, 1982

## ATTACHMENT TO LICENSE AMENDMENT NO. 65

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## FACILITY OPERATING LICEMSE NO. DPR-35

# DOCKET NO. 50-293

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised page is identified by Amendment number and contains a vertical line indicating the area of change.

| Remove                   | Insert |
|--------------------------|--------|
| ALL DATE OF A STREET, ST |        |
| 1                        | 1      |
| 54                       | 54     |
| 55                       | 55     |
| 63                       | 63     |
| 84                       | 84     |
| 85                       | 85     |
| 86                       | 86     |
|                          |        |

| : • | TABLE OF CONTENTS  | Page No. |
|-----|--|----------|
| 111 | PERTURNE .   | 1        |
| 1.0 | DEFINITIONS  |          |
|     | SAFETY LIMITS LIMITING SAFETY SYSTEM SETTINGS  |          |
| 1.1 | FUEL CLADDING INTEGRITT 2.1  | 6        |
| 1.2 | REACTOR COOLANT SYSTEM INTEGRITY 2.2   | 22       |
|     | LIMITING CONDITIONS FOR OPERATION SURVEILLANCE REQUIREMENT                           |          |
| 3.1 | REACTOR PROTECTION SYSTEM 4.1  | 26       |
| 3.2 | PROTECTIVE INSTRUMENTATION 4.2   | 42       |
| 3.3 | REACTIVITY CONTROL 4.3   | 80       |
| 5.5 |  | 80       |
|     | A. Reactivity Limitations  | 81       |
|     | B. Control Rods  | 83       |
|     | C. Scram Insertion Times C<br>D. Control Rod Accumulators D                          | 84 1     |
|     | D. Concrea nee nee   | 85       |
|     | E. Reactivity Aboualles  | 85       |
|     | F. Alternate Requirements G  | 85       |
|     | G. Scram Discharge Volume  | 95       |
| 3.4 | STANDBY LIQUID CONTROL SYSTEM 4.4  | 95       |
|     | A. Normal System Availability  |          |
|     | B Operation with Inoperable Components D   | 96       |
|     | C. Sodium Pentaborate Solution C   | 97       |
|     | D. Alternate Requirements  | 97       |
|     |  | 103      |
| 3.5 | CORE AND CONTAINEDNI COULING PIPILE  | 103      |
|     | A. Core Spray and LPC1 Subsystems A  | 106      |
|     | B. Containment Cooling Subsystem B   |          |
|     | a upor fubruetem   | 107      |
|     | D DOTO Subeveram   | 108      |
|     | E. Automatic Depressurization System E   | 109      |
|     | F. Minimum Low Pressure Cooling System and   |          |
|     | F. Minimum Low rressure cooling of F   | 110      |
|     | Diesel Generator Availability  | 111      |
|     | G. (Deleted)<br>H. Maintenance of Filled Discharge Pipe H                            | 112      |
|     | PRIMARY SYSTEM BOUNDARY 4.6  | 123      |
| 3.6 |  | 123      |
|     | A. Thermal and Pressurization Limitations A  | 124      |
|     | B Contract Character B   | 125      |
|     | C. Coolant Leakage   | 126      |
|     | D. Safety and Relief Valves D  | 127      |
|     | E Tay Dumne  | 127      |
|     | F. Jet Fump Flow Mismatch F  | 127      |
|     |  |          |
|     | G. Structural Integrity<br>E. Righ Energy Pipin <sup>o</sup> (Outside Containment) E | 127B     |
|     | H. High Energy Fipin (Soubbers) I  | . 137a   |
|     | I. Shock Suppressors (Snubbers) I  |          |

Amendment No. 65

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1

|                 | PHI   | 25        |     |        |
|-----------------|-------|-----------|-----|--------|
| 1               | TABLE | 3.2.C     |     |        |
| INSTRIMENTATION | TAILT | INITIATES | ROD | BLOCKS |

| Hinimum / of<br>Operable Instrument<br>Channels For Trip Systems (1) | Instrument                                 | Trip Level Setting                   |
|--|--|--------------------------------------|
| 2  | APRH Upscale (Flow<br>Blaced)              | (0.65W + 42) [ PRP] (2)              |
| 2  | APRH Downscale                             | 2.5 indicated on scale               |
| : 1 (7)  | Rod Block Honitor<br>(Flow Blased)         | (0.65W + 42) [PRP] (2)<br>[HFI.PD] . |
| 1 (7)  | Rod Block Monitor<br>Downscale             | 5/125 of full scale                  |
|  | IRM Downscale (3)                          | 5/125 of full scale                  |
| 3  | INH Detector not in<br>Startup Position    | (8)                                  |
| ,  | INM Upscale                                | <108/125 of full scale               |
| 2 (5)  | SRM Detector not in<br>Startup Position    | (4)                                  |
| 2 (5) (6)  | SRM Upecale                                | <10 <sup>5</sup> counte/sec.         |
| 1.(9)  | Scram Discharge Volume<br>Water Level-High | <18 gallons ;                        |

Amendment No. 65

54

# NOTES FOR TABLE 3.2.C

3.

4.

- For the startup and run positions of the Reactor Mode Selector Switch, there shall be two operable or tripped trip systems for each function. 1. The SRM and IRM blocks need not be operable in "Run" mode, and the AFEM and REM rod blocks need not be operable in "Startup" mode. If the first column cannot be set for one of the two trip systems, this condition may exist for up to seven days provided that during that time the operable system is functionally tested imediately and daily thereafter; If this condition lasts longer than seven days, the system shall be tripped. If the first column cannot be pet for both trip systems, the systems shall be mipped.
- W is percent of drive flow required to produce a rated core flow of 69 M 1b/br. Trip level setting is in percent of design power (1998 MWt). 2.
- IRM downscale is bypassed when it is on its lowest range.
- This function is bypassed when the count rate is  $\geq 100$  cps.
- Cas of the four SRM inputs may be bypassed.
- This SRM function is bypassed when the IRM range switches are on 5. 6. Tange & or above.
- The trip is bypassed when the reactor power is < 30%.
- 7. This function is bypassed when the mode switch is placed in Rum.
- 8.
- If the number of operable channels is less than required by the minimum number of operable instrument channels per trip system requirement, pla 9. the inoperable channel in the tripped condition within one hour.

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PNPS TABLE 4.2.C HINING TEST AND CALIBRATICK FREQUENCY FOR CONTROL ROD BLOCKS ACTUATION

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|  | Instrument Channel   | Instrument Functiona!  | Calibration   | Instrument Check  |
|--|--|--|---|---|
| 2) API<br>3) IRJ<br>4) IRJ<br>5) RJ<br>6) RJ<br>6) RJ<br>7) SR<br>8) SR<br>9) IR | RM - Downscole<br>RM - Upscale<br>M - Upscale<br>M - Upscale<br>M - Upscale<br>M - Downscole<br>M - Downscole<br>M - Detector Not in Startup Position<br>M - Detector Not in Startup Position<br>ram Discharge Volume Water Level-High | Test<br>(1) (3)<br>(1) (3)<br>(2) (3)<br>(2) (3)<br>(1) (3)<br>(1) (3)<br>(2) (3)<br>(2) (3)<br>(2) (3)<br>(2) (3)<br>(2) (3)<br>(2) (3) | Unce/3 months<br>Once/3 months<br>Startup or Control Shutdown<br>Startup or Control Shutdown<br>Once/6 months<br>Once/6 months<br>Startup or Control Shutdown<br>Startup or Control Shutdown<br>Startup or Control Shutdown<br>Refuel | Once/day<br>Cnce/day<br>(2)<br>(2)<br>Once/day<br>Once/day<br>(2)<br>(2)<br>(2)<br>(2)<br>(2)<br>(2)<br>N/A |

# Logic System Functional Test (4) (6)

(1) System Logic Check

Once/6 Months

63

Amendment No. 65

#### LIMITING CONDITION FOR OPERATIONS

## 3.3.C Scram Insertion Time

 The average of the scram insertion times for the three fastest control rods of all groups of four control rods in a two by two array shall be no greater than:

| % Inserted<br>From Fully | Avg. Scram<br>Insertion |
|--------------------------|-------------------------|
| Withdrawn                | Time Sec.               |
| 10                       | .58                     |
| 30                       | 1.35                    |
| 50                       | 2.12                    |
| 90                       | 5.30                    |

 The maximum scram insertion time for 90% insertion of any operable control rod shall not exceed 7.00 seconds.

#### D. Control Rod Accumulators

At all reactors operating pressures, a rod accumulator may be inoperable provided that no other control rod in the ninerod square array aroung this rod has a:

1. Inoperable accumulator.

- Directional control valve electrically disarmed while in a non-fully inscrted position.
- Scram insertion time greater than the maximum permissible insertion time.

If a control rod with an inoperable accumulator is inserted "full-in" and its directional control valves are electrically disarmed, it shall not be considered to have an inoperable accumulator.

## SURVEILLANCE REQUIREMENT

## 4.3.C Scram Insertion Time

2. At 16 week intervals, 50% of the control rod drives shall be tested as in 4.3.C.1 so that every 32 weeks all of the control rods shall have been tested. Whenever 50% of the control rod drives have then scrap tested, an evaluation shall be made to provide reasonable assurance that proper control rod drive performance is being maintained.

#### D. Control Rod Accurulators

Once a shift, check the status of the pressure and level alarms for each accumulator.

#### LIMITING COMDITION FOR OPERATION

#### SURVEILLANCE REQUIREMENT

#### E. Reactivity Anoralies

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The reactivity equivalent of the difference between the actual critical rod configuration and the expected configuration during power operation shall not exceed 12  $\Delta K$ . If this limit is exceeded, the reactor will be shut down until the cause has been determined and corrective actions have been taken if such actions are appropriate.

- F. If Specifications 3.3.A through D above cannot be met, an orderly shutdown shall be initiated and the reactor shall be in the Cold Shutdown condition within 24 hours. Specifications 3.3.A through D above do not apply when there is no fuel in the reactor vessel.
- G. Scram Discharge Volume
  - The scram discharge volume drain & vent valves shall be operable whenever more than one operable control rod is withdrawn.
  - If any of the scram discharge volume drain or vent valves are made or found inoperable an orderly shutdown shall be initiated and the reactor shall be in Cold Shutdown within 24 hours.

### E. Reactivity Anomalies

During the startup test program and startups following refueiing outages, the critical rod configurations will be compared to the expected configurations at selected operating conditions. These comparisons will be used as base data for reactivity monitoring during subsequent power operation throughout the fuel cycle. At specific power operating conditions, the critical rod configuration will be compared to the configuration expected bared upon appropriately corrected past data. This comparison will be made at least every full power month.

### .G. Scram Discharge Volume

- The scram discharge volume drain and vent valves shall be verified open at least once per month. Each valve shall be cycled quarterly. These valves may be closed intermittently for testing under administrative control.
- During each refueling outage verify the scram discharge volume drain and vent valves;
  - a) Close within 30 seconds after receipt of a reactor scram signal and
  - b) Open when the scram is reset.

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