



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. 117
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 January 25, 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:

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(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 117, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective 30 days after the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard H. Wessman, Director
Project Directorate 1-3
Division of Reactor Projects I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 23, 1988

ATTACHMENT TO LICENSE AMENDMENT NO.117
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. The corresponding overleaf pages are provided to maintain document completeness.

Remove Pages

27
29
30

Insert Pages

27
29
30

TABLE 3.1.1 REACTOR PROTECTION SYSTEM (SCRAM) INSTRUMENTATION REQUIREMENT

Minimum Number Operable Inst. Channels per Trip(1) System	Trip Function	Trip Level Setting	Modes in Which Function Must Be Operable			Action(1)
			Refuel (7)	Startup/Hot Standby	Run	
1	Mode Switch in Shutdown		X	X	X	A
1	Manual Scram		X	X	X	A
3	IRM					
3	High Flux	≤120/125 of full scale	X	X	(5)	A
3	Inoperative		X	X	(5)	A
2	APRM					
2	High Flux	* (14) (15)	(17)	(17)	X	A or B
2	Inoperative	(13)	X	X(9)	X	A or B
2	High Flux (15%)	≤15% of Design Power	X	X	(16)	A or B
2	High Reactor Pressure	≤1085 psig	X(10)	X	X	A
2	High Drywell Pressure	≤2.5 psig	X(8)	X(8)	X	A
2	Reactor Low Water Level	≥9 In. Indicated Level	X	X	X	A
2	High Water Level in Scram Discharge Tank	≤39 Gallons	X(2)	X	X	A
2	Turbine Condenser Low Vacuum	≥23 In. Hg Vacuum	X(3)	X(3)	X	A or C
2	Main Steam Line High Radiation	≤7X Normal Full Power Background (18)	X	X	X(18)	A or C
4	Main Steam Line Isolation Valve Closure	≤10% Valve Closure	X(3)(6)	X(3)(6)	X(6)	A or C
2	Turb. Cont. Valve Fast Closure	≥150 psig Control Oil Pressure at Acceleration Relay	X(4)	X(4)	X(4)	A or D
4	Turbine Stop Valve Closure	≤10% Valve Closure	X(4)	X(4)	X(4)	A or D

*APRM high flux scram setpoint $\leq (.58W + 62\%) \left[\begin{array}{c} \text{FRP} \\ \text{MFLPD} \end{array} \right]$ Two recirc. pump operation

NOTES FOR TABLE 3.1.1 (CONT'D)

10. Not required to be operable when the reactor pressure vessel head is not bolted to the vessel.
11. Deleted
12. Deleted
13. An APRM will be considered inoperable if there are less than 2 LPRM inputs per level or there is less than 50% of the normal complement of LPRM's to an APRM.
14. W is percent of drive flow required to produce a rated core flow of 69 Mlb/hr. Trip level setting in percent of design power (1998 MWt).
15. See Section 2.1.A.1.
16. The APRM (15%) high flux scram is bypassed when in the run mode.
17. The APRM flow biased high flux scram is bypassed when in the refuel or startup/hot standby modes.
18. Within 24 hours prior to the planned start of hydrogen injection test 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 test. The background radiation level and associated trip setpoints may be adjusted during the test 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 establishing reactor power levels below 20% rated power.

TABLE 4.1.1
REACTOR PROTECTION SYSTEM (SCRAM) INSTRUMENTATION FUNCTIONAL TESTS
MINIMUM FUNCTIONAL TEST FREQUENCIES FOR SAFETY INSTR. AND CONTROL CIRCUITS

	Group (2)	Functional Test	Minimum Frequency (3)
Mode Switch in Shutdown	A	Place Mode Switch in Shutdown	Each Refueling Outage
Manual Scram	A	Trip Channel and Alarm	Every 3 Months
RPS Channel Test Switch (5)	A	Trip Channel and Alarm	Each Refueling Outage
IRM			
High Flux	C	Trip Channel and Alarm (4)	Once Per Week During Refueling and Before Each Startup
Inoperative	C	Trip Channel and Alarm	Once Per Week During Refueling and Before Each Startup
APRM			
High Flux	B	Trip Output Relays (4)	Once/Week (7)
Inoperative	B	Trip Output Relays (4)	Once/Week
Flow Bias	B	Calibrate Flow Bias Signal	Once/Month (1)
High Flux (15%)	B	Trip Output Relays (4)	Once Per Week During Refueling and Before Each Startup
High Reactor Pressure	D	Trip Channel and Alarm (4)	(1)
High Drywell Pressure	D	Trip Channel and Alarm (4)	(1)
Reactor Low Water Level (6)	D	Trip Channel and Alarm (4)	(1)
High Water Level in Scram Discharge Tanks	D	Trip Channel and Alarm (4)	Every 3 Months
Turbine Condenser Low Vacuum	D	Trip Channel and Alarm (4)	(1)
Main Steam Line High Radiation	B	Trip Channel and Alarm (4)	Once/Week
Main Steam Line Isolation Valve Closure	A	Trip Channel and Alarm	(1)
Turbine Control Valve Fast Closure	A	Trip Channel and Alarm	(1)
Turbine First Stage Pressure Permissive	D	Trip Channel and Alarm (4)	Every 3 Months
Turbine Stop Valve Closure	A	Trip Channel and Alarm	(1)
Reactor Pressure Permissive	D	Trip Channel and Alarm (4)	Every 3 Months