

MARCH 9 1978

Boston Edison Company
M/C Nuclear
ATTN: Mr. G. Carl Andognini
800 Boylston Street
Boston, Massachusetts 02199

Gentlemen:

In response to your application dated August 23, 1977, and letter dated December 15, 1977, we have issued the enclosed Amendment No. 29 to Facility Operating License No. DPR-35. The amendment incorporates changes to the Technical Specifications for the facility to provide limiting conditions for operation and surveillance requirements for existing fire protection equipment and administrative controls for fire protection.

These changes to the Pilgrim Unit No. 1 Technical Specifications are supported by the Safety Evaluation issued with our letter of November 25, 1977, except for those changes which were proposed in your letter dated December 15, 1977, and other minor changes. All substantive changes to our proposed technical specifications of November 25, 1977, are discussed herein:

1. Specification 4.12.A has been modified by referencing NFPA Code 72 A rather than 72 D, Class A. The modification was made because Pilgrim has no NFPA Code 72D, Class A circuits. Since this change requires conformance with the applicable NFPA Code, we find the change acceptable.
2. Specification 4.12.C. 3 eliminates the word "air" from the staff's proposed "air flow test". The modified wording does not weaken the testing requirement and is acceptable.
3. Specification 4.12.E.3 provides Boston Edison the option of replacing hoses every three years with hydro tested hoses rather than testing the hoses in place. This option provides equivalent assurance of fire hose integrity and is acceptable.

- 4. Specification 6.4.C concerning fire brigade training requires that the training program meet or exceed the NFPA Code-1975, Section 27. This imposes a requirement that training be conducted monthly. However, our letter of August 19, 1977, forwarded a copy of "Nuclear Plant Fire Protection Functional Responsibilities, Administrative Controls and Quality Assurance", which indicated that fire brigade training (drills) shall be conducted at least each three (3) months. We have therefore modified this specification to require training (drills) at quarterly intervals.

The related Safety Evaluation was enclosed with our November 25, 1977 letter.

A Copy of the Notice of Issuance is enclosed.

Sincerely,

Original signed by
 George Lear, Chief
 Operating Reactors Branch #3
 Division of Operating Reactors

Enclosures:

- 1. Amendment No. 29to DPR-35
- 2. Notice

cc w/enclosures: See next page

DISTRIBUTION:

Docket	PO'Connor	ORB #3 Reading
NRC PDR	Twambach	JHannon
L PDR	TAbernthay	BJones (4)
VSTELLO	JBuchanan	DEisenhut
Goller,K	ACRS (16)	OFA (Chilts)
RDiggs/SSheppard		
OELD	CMjles	
OI&E (5)		
BSharf (15)		
JMMcGough		
BHarless		

OFFICE >	ORB#3&2:DOR	ORB#2:DOR	ORB#3:DOR	ORB#2:DOR	OELD	ORB#3:DOR
SURNAME >	RDiggs	PO'Connor	JHannon	Twambach	LBrenner	GLear
DATE >	2/22/78	2/22/78	2/27/78	2/27/78	3/1/78	3/13/88

Boston Edison Company

- 3 -

cc w/enclosures:

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* also w/cy of BECO filing dtd. 12/15/77



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. 29
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 August 23, 1977, as amended by filing dated December 15, 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.

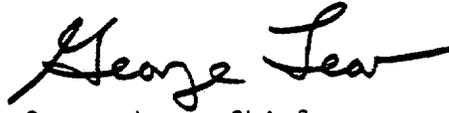
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 3.B of Facility License No. DPR-35 is hereby amended to read as follows:

"3.B Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No.29, 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, except that the provisions of Technical Specifications 6.4.C and 6.8.D shall become effective 90 days from the date of issuance of this amendment.

FOR THE NUCLEAR REGULATORY COMMISSION



George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 3, 1978

ATTACHMENT TO LICENSE AMENDMENT NO. 29

FACILITY OPERATING LICENSE NO. DPR-35

DOCKET NO. 50-293

Replace the following pages of the Technical Specifications contained in Appendix A of the above indicated license with the attached pages. The change areas on revised pages are reflected by a marginal line.

Remove existing Page

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-	206e
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1.0 DEFINITIONS (cont'd)

- U. Surveillance Frequency - Unless otherwise stated in these specifications, periodic surveillance tests, checks, calibrations, and examinations shall be performed within the specified surveillance intervals. These intervals may be adjusted plus or minus 25%. The operating cycle interval as pertaining to instrument and electrical surveillance shall never exceed 15 months. In cases where the elapsed interval has exceeded 100% of the specified interval, the next surveillance interval shall commence at the end of the original specified interval.
- V. Surveillance Interval - The surveillance interval is the calendar time between surveillance tests, checks, calibrations and examinations to be performed upon an instrument or component when it is required to be operable. These tests may be waived when the instrument, component, or system is not required to be operable, but the instrument, component, or system shall be tested prior to being declared operable.
- W. Fire Suppression Water System - A Fire Suppression Water System shall consist of: a water source(s); gravity tank(s) or pump(s); and distribution piping with associated sectionalizing control or isolation valves. Such valves shall include hydrant post indicator valves and the first valve ahead of the water flow alarm device on each sprinkler, hose standpipe or spray system riser.
- X. Staggered Test Basis - A Staggered Test Basis shall consist of: (a) a test schedule for n systems, subsystems, trains, or other designated components obtained by dividing the specified test interval into n equal subintervals; (b) the testing of one system, subsystem, train or other designated components at the beginning of each subinterval.

3.12 FIRE PROTECTIONA. Fire Detection Instrumentation

The fire detection instrumentation for each fire detection zone shown in Table 3.12-1 shall be OPERABLE.

APPLICABILITY:

At all times when equipment in that fire detection zone is required to be OPERABLE.

ACTION:

With the number of OPERABLE fire detection instruments less than required by Table 3.12.1;

- a. Within 1 hour, establish a fire watch patrol to inspect the zone with the inoperable instrument(s) at least once per hour; and
- b. Restore the inoperable instrument(s) to OPERABLE status within 14 days, or prepare and submit a report to the Commission within the next 30 days outlining the action taken, the cause of the malfunction and the plans for restoring the instrument(s) to OPERABLE status.

B. Fire Suppression Water System

The FIRE SUPPRESSION WATER SYSTEM shall be OPERABLE with:

1. Two (2) fire system pumps with their discharge aligned to the fire suppression header.
2. Separate water supplies containing a minimum of 240,000 gallons each.
3. An OPERABLE flow path capable of taking suction from Tank 107A and Tank 107B and transferring the water through distribution

4.12 FIRE PROTECTIONA. Fire Detection Instrumentation

1. Each of the fire detection instruments noted in Table 3.12-1 including the NFPA Code 72A supervised circuitry shall be demonstrated OPERABLE by a functional test at least once per 6 months.
2. The non-supervised circuitry shall be demonstrated OPERABLE at least once per month.

B. Fire Suppression Water System

1. The FIRE SUPPRESSION WATER SYSTEM shall be demonstrated OPERABLE:

- a. at least once per 7 days by verifying the water supply volume.
- b. at least once per month
 - 1) on a staggered test basis by starting each pump and operating it for 20 minutes on recirculation flow

pipng with OPERABLE section-
alizing control or isolation
valves to the hydrant post
indicator valves and the
front valve ahead of the
water flow alarm device on
each sprinkler, hose stand-
pipe or spray system riser.

4. Automatic initiation logic
for each fire pump.

APPLICABILITY: At all times.

ACTION:

- a. With less than the above re-
quired equipment, restore the
inoperable equipment to
OPERABLE status within 7 days
or prepare and submit a
report to the Commission
within the next 30 days
outlining the plans and pro-
cedures to be used to provide
for the loss of redundancy in
this system.
- b. With no FIRE SUPPRESSION WATER
SYSTEM OPERABLE, within 24 hrs.
 1. Establish the backup Fire
Suppression Water System.
 2. Notify the Commission and
prepare and submit a
report to the Commission
within the next 14 days
outlining the cause of
the malfunctions, the
action taken, and the
plans for restoring the
system to OPERABLE
status.

- 2) by verifying that each
valve (manual, power
operated or automated)
in the flow path is in
its correct position.

- c. at least once per year by
cycling each testable valve
in the flow path through
at least one complete
cycle of full travel.

- d. at least once per operating
cycle

- 1) by performing a system
functional test which
includes simulated
automatic actuation of
the system throughout its
operating sequence and
verifying that the fire
pump diesel engine starts
from ambient conditions
on the auto-start signal
and operates for at
least 20 minutes while
loaded with the fire
pump.

- 2) by verifying that each
pump starts and delivers
at least 2000 gpm while
maintaining a system
pressure of at least
125 psig.

- 3) by verifying that each
automatic (deluge) valve
in the flow path actuates
to its correct position.

- 4) by cycling each valve in
the flow path that is not
testable during plant
operation through at
least one complete cycle
of full travel.

- e. At least once per 3 years by performing a flow test of the system in accordance with Chapter 5, Section 11, "Test of Water Supplies" of the Fire Protection Handbook, 14th edition, published by the National Fire Protection Association.
2. The fire pump diesel shall be demonstrated OPERABLE:
 - a. at least once per month by verifying that the fuel storage tank contains at least 175 gallons of fuel.
 - b. at least once per 3 months by verifying that a sample of diesel fuel from the fuel storage tank, obtained in accordance with ASTM D270-65, is within the acceptable limits specified in Table 1 of ASTM D975-74 with respect to viscosity, water content, and sediment.
 - c. at least once per operating cycle by subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with the manufacturer's recommendations for the class of service.
 - d. by demonstrating that the diesel starting 24-volt battery bank and charger are OPERABLE as follows:
 - 1) at least once per week by verifying that the electrolyte level of each battery is above the plates and battery voltage is at least 24 volts.

C. Spray and/or Sprinkler Systems

The spray and/or sprinkler systems located in the following areas shall be OPERABLE:

1. Diesel Generator Day Tanks
2. Diesel Fire Pump Day Tank

APPLICABILITY

At all times when equipment in the spray/sprinkler protected area is required to be OPERABLE.

ACTIONS:

- a. With a spray and/or sprinkler system inoperable, establish a continuous fire patrol with backup fire suppression equipment for the unprotected area(s) within 1 hour.
- b. Restore the system to OPERABLE status within 14 days or prepare and submit a report to the Commission within the next 30 days outlining the action taken, the cause of inoperability and the plans for restoring the system to OPERABLE status.

2) at least once per 3 months by verifying that the specific gravity is appropriate for continued service of the battery.

3) at least once per operating cycle by verifying that the batteries, all plates, and battery racks show no visual indication of physical damage or abnormal deterioration and the battery-to-battery and terminal connections are clean, tight, free of corrosion, and coated with anti-corrosion material.

C. Spray and/or Sprinkler Systems

The spray and/or sprinkler systems shall be demonstrated to be OPERABLE:

1. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
2. At least once per cycle:
 - a. By performing a system functional test which includes simulated automatic actuation of the system and verifying that the automatic (deluge) valves in the flow path actuate to their correct positions.
 - b. By inspection of spray headers to verify their integrity.
 - c. By inspection of each nozzle to verify no blockage.
3. At least once per 3 years by performing a flow test through each open head spray/sprinkler header and verifying each open head spray/sprinkler nozzle is unobstructed.

D. CO₂ SYSTEM

The following CO₂ systems shall be OPERABLE with a minimum level of 60% and a minimum pressure of 275 psig in the associated storage tank(s).

1. Cable Spreading Room
2. 37' elevation switchgear room
3. 23' elevation switchgear room

APPLICABILITY:

At all times when the equipment in the area is required to be OPERABLE.

ACTION:

- a. With a CO₂ system inoperable, establish a continuous fire patrol with backup fire suppression equipment for the unprotected area(s) within 1 hour.
- b. Restore the system to OPERABLE status within 14 days or prepare and submit a report to the Commission within the next 30 days outlining the action taken, the cause of inoperability and the plans for restoring the system to OPERABLE status.

E. Fire Hose Stations

The fire hose stations shown in Table 3.12-2 shall be OPERABLE.

APPLICABILITY:

At all times when the equipment in the area protected by the fire hose station is required to be operable.

ACTION:

With a hose station inoperable, route an additional equivalent capacity hose to the unprotected area from an OPERABLE hose station within 1 hour.

D. CO₂ SYSTEM

The CO₂ System shall be demonstrated OPERABLE:

1. At least once per 7 days by verifying the CO₂ storage tank level and pressure.
2. At least once per cycle by verifying the system valves and associated ventilation dampers actuate automatically and manually to a simulated actuation signal. A brief flow test shall be made to verify flow from each nozzle. ("Puff Test").

E. Fire Hose Stations

Each fire hose station shall be verified to be OPERABLE:

1. at least once per month by visual inspection of the station to assure all equipment is available.
2. at least once per cycle by removing the hose for inspection, replacing degraded coupling gaskets, and re-racking.
3. at least once per 3 years by
 - a. partially opening each hose station valve to verify valve operability and no blockage.

F. Penetration Fire Barrier

All fire barrier penetration fire seals protecting safety related areas shall be functional.

APPLICABILITY: At all times

ACTION:

With a penetration fire barrier not functional, a continuous fire patrol shall be established on at least one side of the affected penetration within 1 hour.

- b. by conducting a hydrostatic test of each hose
 - 1) at a pressure 50 psig greater than the maximum available pressure at that hose station, or
 - 2) annually at the applicable service test pressure as listed in Table 821 of the "Standard for Care, Maintenance and Use of Hose," NFPA No. 198-1972, or
- c. by replacing each hose with a new or used hose which has been hydrostatically tested in accordance with the pressures specified in 4.12.E.3.b.

F. Fire Barrier Penetration Fire Seals

- 1. Penetration fire barriers shall be verified to be functional by a visual inspection at least once per operating cycle and subsequent to any installation, modification, or maintenance.

TABLE 3.12-1

FIRE DETECTION INSTRUMENTS

INSTRUMENT LOCATION	MINIMUM INSTRUMENTS OPERABLE	
	HEAT	SMOKE
1. Cable Spreading	N/A	9
2. Computer Room	N/A	1
3. Switchgear Room		
Elevation 37'	N/A	9
Elevation 23'	N/A	11
4. Station Battery Rooms		
Elevation 37'	N/A	2
Elevation 23'	N/A	2
5. Turbine/Generator	7	7
6. Diesel Generator		
A	1	1
B	1	1
7. Safety Related Pumps		1
RCYC	N/A	1
HPCI	N/A	1
8. Recir. M.G. Sets		
A	N/A	3
B	N/A	3
9. A.O.G.	N/A	4

TABLE 3.12-2

FIRE HOSE STATIONSReactor BuildingSta. #

1	RCIC Quadrant, El. 2'-9"
2	RHR Quadrant, Loop B, El. 2'-9"
3	RHR Quadrant, Loop A, El. 2'-9"
4	CRD Quadrant, El. 2'-9"
5	West Wall, RCIC Stairway, El. 23'
6	West Wall, RHR Loop B Stairway, El. 23'
7	North Wall Decontamination Room, El. 23'
8	Outside M.G. Room, West Wall, El. 51'
9	North Wall, El. 51'
10	Fuel Pool Heat Exchanger Area, El. 74'
11	North Wall, El. 74'
12	Standby Liquid Control System Area, El. 91'
13	North Wall, El. 91'
14	South Wall, El. 117'
15	North Wall, El. 117'
21	Reactor Building Access Lock, El. 23'

Reactor Aux. Bay

16	Boiler Room, El. 23'
17	Condenser Transfer Pump Area, El. 3'
19	Sample Sink #2 Area, El. 23'
27	RBCCW Loop B Area, El. 23'

Turbine BuildingSta. #

23	Radiation Chemical , El. 37'
25	Outside Standby Gas Room, El. 51'
26	Outside Microwave Room, El. 51'
28	WRC Board, El. 3'
29	Condensate Demin. Area Doorway, El. 3'
30	West End Train A Drain Cooler, El. 6'
31	South Wall Off-Gas Pipe Area, El. 6'
32	East Wall Train B Drain Cooler, El. 6'
33	South Wall Fast Condenser Area, El. 6'
37	Reactor Feed Pump Area, El. 51'
38	South Wall near VSF-102A, El. 51'
39	West Wall near A.R.F.P., El. 51'
40	South Wall near Lift Pump, El. 51'
41	East Wall near B-8 Load Center, El. 51'
42	South Wall near CIV #4, El. 51'
43	Water Box Scavenging Pump Area, El. 51'
44	Outside Fan Room #1, El. 51'
103	Recombiner Room Door, El. 23'

Machine Shop and Warehouse #1Sta. #

20	Access Control Area, El. 27'
22	Machine Shop Across From Lathe, El. 23'
24	Warehouse Room #1, South Wall, El. 37'
47	Warehouse Room #1, North Wall, El. 37'
48	Warehouse Room #1, El. 23'

TABLE 3.12-2 (Cont.)

FIRE HOSE STATIONSRetention BuildingSta. #

101	Retention Building, El. 23'
102	Retention Building, El. 6'

Radwaste AreaSta. #

18	Outside Radwaste Control Room, El. -1'
34	Monitor Tank Pump Area, El. -1'
35	Radwaste Area North Corner, El. -1'
45	Radwaste Stairway to Turbine Bldg., El. -1'

Warehouse #2

North End Section -1
Center Section
North End Section -2

Yard Hose CabinetsSta. #

1	Gate House Area
2	North Side Admin. Bldg.
3	South Side Admin. Bldg.
4	East Side of Turbine Bldg.
5	North Side of Screen House
6	N.E. Area at Machine Shop
7	North End Warehouse #2
8	South Side of Station #650
9	South End of Warehouse #2

3/4.12A FIRE DETECTION INSTRUMENTATION

OPERABILITY of the fire detection instrumentation ensures that adequate warning capability is available for the prompt detection of fires. This capability is required in order to detect and locate fires in their early stages. Prompt detection of the fires will reduce the potential for damage to safety related equipment and is an integral element in the overall facility fire protection program.

In the event that a portion of the fire detection instrumentation is inoperable, the establishment of continuous fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is returned to operability.

3/4.12B, C, D, E FIRE SUPPRESSION SYSTEMS

The OPERABILITY of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety related equipment is located. The fire suppression system consists of the water system, spray and/or sprinklers, CO₂ and fire hose stations. The collective capability of the fire suppression systems is adequate to minimize potential damage to safety related equipment and is a major element in the facility fire protection program.

In the event that portions of the fire suppression system are inoperable, alternate backup fire fighting equipment is required to be made available in the affected areas until the affected equipment can be restored to service.

In the event that portions of the fire suppression water system become inoperable, alternate backup fire fighting equipment is required to be made available in the affected areas until the affected equipment can be restored to service.

In the event that the fire suppression water system becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant. The requirement for a twenty-four hour report to the Commission provides for prompt evaluation of the acceptability of the corrective measures to provide adequate fire suppression capability for the continued protection of the nuclear plant.

3/4.12F FIRE BARRIER PENETRATION SEALS

The functional integrity of the fire barrier penetration seals ensures that fires will be confined or adequately retarded from spreading to adjacent portions of the facility. This design feature minimizes the possibility of a single fire rapidly involving several areas of the facility prior to detection and extinguishment. The fire barrier penetration seals are a passive element in the facility fire protection program and are subject to periodic inspection.

During periods of time when the seals are not functional, a continuous fire patrol is required to be maintained in the vicinity of the affected seal until the seal is restored to functional status.

6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

The Pilgrim Station Manager shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.

6.2 ORGANIZATION

A. OFFSITE

The Company organization for station management and technical support shall be as shown on Figure 6.2.1.

B. FACILITY

The Facility organization shall be as shown on Figure 6.2.2 and:

1. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2.1.
2. At least one licensed Operator shall be in the control room when fuel is in the reactor.
3. At least two licensed Operators shall be present in the control room during reactor startup, scheduled reactor shutdown and during recovery from reactor trips.
4. An individual qualified in radiation protection procedures shall be on site when fuel is in the reactor.
5. ALL CORE ALTERATIONS performed while fuel is in the reactor vessel after the initial fuel loading shall be directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
6. The organization of the administration of the Pilgrim I Fire Prevention and Protection Program shall be as shown on Figure 6.2.3. A Fire Brigade of 5 members including the Fire Chief shall be maintained on site at all times. This excludes 3 members of the minimum shift crew necessary for safe shutdown and any personnel required for other essential functions during a fire emergency.

6.3 FACILITY STAFF QUALIFICATIONS

The qualifications with regard to educational and experience backgrounds of the facility staff at the time of appointment to the active position shall meet the requirements as described in the American National Standards Institute N18.1-1971, "Selection and Training of Personnel for Nuclear Power Plants." In addition, the individual performing the function of Radiation Protection Manager shall meet or exceed the qualifications of Regulatory Guide 1.8, September, 1975.

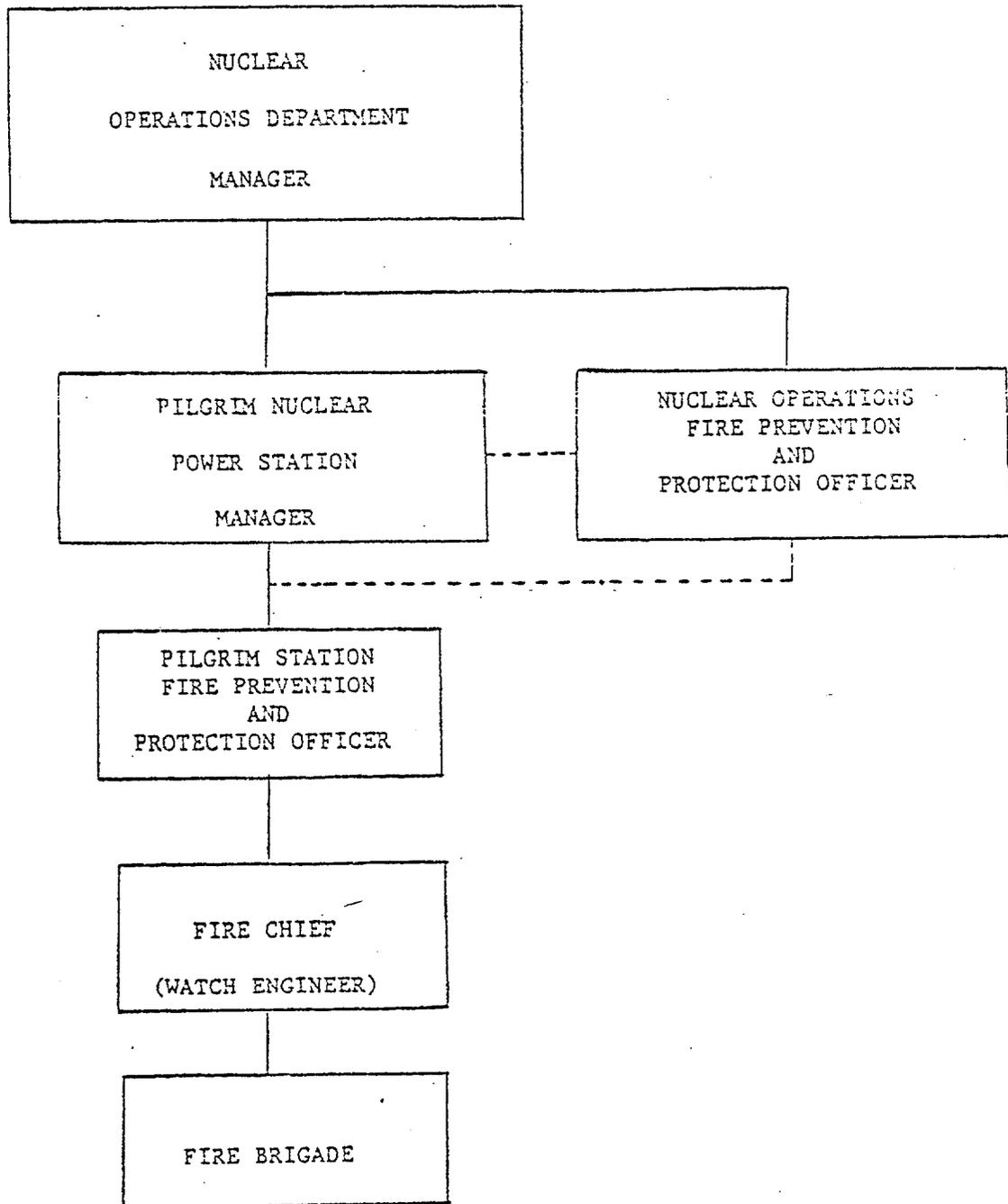
6.4 TRAINING

- A. A retraining and replacement training program for the facility staff shall be maintained under the direction of the Pilgrim Station Manager.

- B. A retraining program for the licensed operators shall be maintained under the direction of the Senior Nuclear Training Specialist and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix A of 10 CFR Part 55.
- C. A training program for the Fire Brigade shall be maintained under the direction of the Fire Protection and Prevention Officer and shall meet or exceed the requirements of Section 27 of the NFPA Code 1975. Training sessions will be held quarterly.

FIGURE 6.2.3

ADMINISTRATION OF THE PILGRIM NUCLEAR PLANT
FIRE PREVENTION AND PROTECTION PROGRAM



- f. Review of facility operations to detect potential safety hazards.
- g. Performance of special reviews and investigations and reports thereon as requested by the NSRAC Chairman.
- h. Review of the Station Security Plan and implementing procedures and changes to the plan and procedures.
- i. Review of the Emergency Plan and implementing procedures and changes to the plan and procedures.

7. AUTHORITY

The ORC shall:

- a. Recommend to the Pilgrim Station Manager written approval or disapproval of items considered under 6.S.A.6(a) through (d) above.
- b. Render determinations in writing with regard to whether or not each item considered under 6.S.A.6(a) through (e) above constitutes an unreviewed safety question.
- c. Provide immediate written notification to the Nuclear Operations Manager and the Nuclear Safety Review and Audit Committee of disagreement between the ORC and the Pilgrim Station Manager, however, the Station Manager shall have responsibility for resolution of such disagreements pursuant to 6.1 above.

8. RECORDS

The ORC shall maintain written minutes of each meeting and copies shall be provided to the Nuclear Operations Manager and NSRAC Chairman.

B. NUCLEAR SAFETY REVIEW AND AUDIT COMMITTEE (NSRAC)

1. FUNCTION

The NSRAC shall function to provide independent review and audit of designated activities in the areas of:

- 1. nuclear power plant operations;
- 2. nuclear engineering;
- 3. chemistry and radiochemistry;
- 4. metallurgy;
- 5. instrumentation and control;
- 6. radiological safety;
- 7. mechanical and electrical engineering;
- 8. quality assurance practices
- 9. fire protection

2. COMPOSITION

The NSRAC Chairman and other members shall be appointed by the Vice President - Nuclear, or such other person as he shall designate. Each NSRAC member shall have at least a bachelor's degree in engineering or physical science and a minimum of five years of professional experience. Experience may be substituted for the degree requirement on the two for one year basis.

- g. All events which are required by regulation or Technical Specifications to be reported to the NRC in writing within 24 hours.
- h. Any other matter involving safe operation of the nuclear plant which NSRAC deems appropriate for consideration or which is referred to NSRAC by the onsite operating organization or by other functional organizational units within Boston Edison.
- i. Reports and meeting minutes of the Operations Review Committee.

8. AUDITS

Audits of facility activities shall be performed under the cognizance of the NSRAC. These audits shall encompass:

- a. The conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions at least once per year.
- b. The training and qualifications of the entire facility staff at least once per year.
- c. The results of all actions required by deficiencies occurring in facility equipment, structures, systems or method of operation that affect nuclear safety at least once per six months.
- d. The performance of all activities required by the Quality Assurance Program to meet the criteria of Appendix "B", 10 CFR 50, at least once per two years.
- e. The Emergency Plan and implementing procedures at least once per two years.
- f. The Station Security Plan and implementing procedures at least once per two years.
- g. Any other area of facility operation considered appropriate by the NSRAC or the Vice President - Nuclear.
- h. The Fire Protection Program and implementing procedures at least once per ~~two~~ years.

9. AUTHORITY

The NSRAC shall report to and advise the Vice President-Nuclear on those areas of responsibility specified in Section 6.5.B.7 and 6.5.B.8.

10. RECORDS

Records of NSRAC activities shall be prepared, approved and distributed as indicated below:

- a. Minutes of each NSRAC meeting shall be prepared, approved and forwarded to the Vice President- Nuclear, NSRAC members, and others the Chairman may designate, within 14 days following each meeting.

- B. Each procedure and administrative policy of 6.8. above, and changes thereto, shall be reviewed by the ORC and approved by the Station Manager prior to implementation and periodically as set forth in station procedures.
- C. Temporary changes to procedures of 6.8:A above may be made provided:
 - 1. The intent of the original procedure is not altered.
 - 2. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator's license on the unit affected.
 - 3. The change is documented, reviewed subsequently by the ORC, and approved by the Station Manager within 7 days of implementation.
- D. Written procedures to implement the Fire Protection Program shall be established, implemented and maintained.

6.9 REPORTING REQUIREMENTS

In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following identified reports shall be submitted to the Director of the appropriate Regional Office of Inspection and Enforcement unless otherwise noted.

A. Routine Reports

- 1. Startup Report. A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant. The report shall address each of the tests identified in the FSAR and shall in general include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

6/ No approval schedules currently available for this equipment. Equipment must be evaluated by testing or on basis of available test information.

7/ Only for shaven faces.

NOTE 1: Protection factors for respirators, as may be approved by the U. S. Bureau of Mines according to approval schedules for respirators to protect against airborne radionuclides, may be used to the extent that they do not exceed the protection factors listed in this Table. The protection factors in this Table may not be appropriate to circumstances where chemical or other respiratory hazards exist in addition to radioactive hazards. The selection and use of respirators for such circumstances should take into account approvals of the U. S. Bureau of Mines in accordance with its applicable schedules.

NOTE 2: Radioactive contaminants for which the concentration values in Appendix B, Table I of this part are based on internal dose due to inhalation may, in addition, present external exposure hazards at higher concentrations. Under such circumstances, limitations on occupancy may have to be governed by external dose limits.

6.14 Fire Protection Program

The following inspections and audits shall be performed:

1. An independent fire protection inspection and audit shall be performed annually utilizing either qualified off-site licensee personnel or an outside fire protection firm.
2. An inspection and audit by an outside qualified fire consultant shall be performed at intervals no greater than 3 years.

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-293BOSTON EDISON COMPANYNOTICE OF ISSUANCE OF AMENDMENT TO FACILITY
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 29 to Facility Operating License No. DPR-35, issued to Boston Edison Company (the licensee), which revised Technical Specifications for operation of the Pilgrim Nuclear Power Station (the facility) located near Plymouth, Massachusetts. The amendment is effective as of its date of issuance, except that certain procedures will not be effective until 90 days after its date of issuance.

The amendment incorporates fire protection Technical Specifications on the existing fire protection equipment and adds administrative controls related to fire protection at the facility. This action is being taken pending completion of the Commission's overall fire protection review of the facility.

The application, as amended, 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 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.

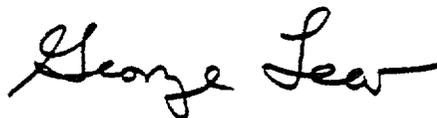
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The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal 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 August 23, 1977, as amended by filing December 15, 1977, (2) Amendment No. 29 to License No. DPR-35, and (3) the Commission's related Safety Evaluation dated November 25, 1977 and letter to the licensee of the same date. 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's Public Document Room, 2055, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland this 3rd day of March 1978.

FOR THE NUCLEAR REGULATORY COMMISSION



George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors