

Proposed Change to Fire Protection  
Technical Specification

Proposed Change

The proposed change involves Pilgrim Nuclear Power Station Technical Specifications (T.S.), Appendix A, Section 4.12, Fire Protection, Table 3.12-1, "Fire Detection Instruments", and the Bases for 3/4.12A.

The changes are described in the narrative below and are contained in the amended T.S. pages attached to this submittal.

4.12A.1

This section currently references NFPA Code 72A. The proposed change substitutes NFPA Code 72D. This change reflects the more conservative requirements of NFPA Code 72D which are to be applied to Pilgrim's fire detection instrumentation.

4.12A.2

This section currently discusses surveillance requirements for fire detection instrumentation supervised circuitry associated with detector alarms. The proposed change substitutes "...non-supervised circuitry"... This reflects the fact that section 4.12A.1 addresses supervised circuitry, and the change imposes a shorter surveillance period for non-supervised circuitry than that imposed in 4.12A.1 for supervised circuitry.

Table 3.12-1

This change reflects the addition of fire detection instrumentation at Pilgrim, and places such instrumentation under the purview of applicable T.S. Limiting Condition of Operation and Surveillance requirements.

Bases

Currently, the second paragraph of the Bases for 3/4 12A states:

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.

The revision shall state:

In the event..., increasing the frequency of fire watch patrols in the affected areas...

This change is consistent with Standard Technical Specifications and conforms to Pilgrim Station procedures and definitions.

### Reason for Change

These technical specification changes are being proposed to address plant design changes made to address Amendment 35 to Pilgrim's Operating License.

### Safety Considerations

These changes do not present an unreviewed safety question as defined in 10 CFR 50.59. They have been reviewed and approved by the Operations Review Committee and reviewed by the Nuclear Safety Review and Audit Committee.

### Significant Hazards Considerations

It has been determined that the amendment request involves no significant hazards consideration. Under the NRC's regulations in 10 CFR 50.92, this means that operation of the Pilgrim Nuclear Power Station in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The NRC has provided guidance concerning the application of standards for determining whether license amendments involve significant hazards considerations by providing certain examples (48 FR 14870). One example of an amendment that is considered not likely to involve a significant hazards consideration is "... (ii) A change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications: for example a more stringent surveillance requirement..." Proposed technical specifications of this type are those described above that add restrictions to address plant design changes or conformance to NFPA standards.

### Schedule of Change

As stated in our letter of May 13, 1983, we expect the NRC to issue the proposed fire protection technical specification changes as a single amendment. This amendment will be effective upon our receipt of approval from the NRC.

### Fee Determination

Pursuant to 10 CFR 170.12, the Boston Edison Company proposes these changes as one segment of the fire protection submittal, which, when taken as a whole will be classified as a Class III amendment. The appropriate fee of \$4,000 will be provided as part of a number of fees under a separate cover. That cover will be identified with our final fire protection submittal, the consolidation package.

## 3.12 FIRE PROTECTION

### A. 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.

## 4.12 FIRE PROTECTION

### A. Fire Detection Instrumentation

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

BASES:

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, increasing the frequency of fire watch 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, CO<sub>2</sub> 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.

Table 3.12 -1

FIRE DETECTION INSTRUMENTS				
<u>Building/ Fire Area</u>	<u>Elevation</u>	<u>Local Panel No. Zone No.</u>	<u>Total No. Detectors In Zone</u>	<u>Minimum Detectors Operable In Zone</u>
Reactor Building RHR - Core Spray "A"	(-)17'6"	C224/4A	3	3
Reactor Building RHR - Core Spray "B"	(-)17'6"	C223/3C	3	3
Reactor Building	(-)17'6"	C223/3D	2	1
HPCI		C223/3E	2	1
Reactor Building	(-)17'6"	C223/3A	2	1
RCIC		C223/3B	2	1
Reactor Building	23'	C224/4E	12	10
CRD - East		C224/4F	7	6
		C224/4C	9	8
		C224/4D	9	8
		C224/4B	8	7
Reactor Building	23'	C223/3F	19	16
CRD - West		C223/3G	10	8
		C223/3H	11	9
		C223/3I	2	2
Reactor Building	51'	C225/ 5A1	18	16
		C225/ 5A2	6	5
		C225/ 5A3	2	2
		C225/ 5A4	4	3
Reactor Building	74'3"	C225/ 5B2	8	7
Fuel Pool Heat Exchanger Area				
Reactor Building	74'3"	C225/ 5B1	18	16
North Side		C225/ 5B3	2	2
Reactor Building	91'3"	C225/ 5C3	6	5
Standby Liquid Control System Tank Area				
Reactor Building	91'3"	C225/5C1	25	22
North Side				

TABLE 3.12-1

## FIRE DETECTION INSTRUMENTS

<u>Building/Fire Area</u>	<u>Elevation</u>	<u>Local Panel No. Zone No.</u>	<u>Total No. Detectors In Zone</u>	<u>Minimum Detectors Operable In Zone</u>
Reactor Building Clothes Change Area	91'3"	C225/ 5 C-2	2	2
Reactor Building RBCCW "A"	3'0"	C222/ 2A	11	9
Reactor Building RBCCW "B"	3'0"	C222/B	13	11
Reactor Building Recirc. Pump M.G. Set Room	51'0"	C96/A/B	8	7
Turbine Building Switchgear Room "A"	37'	C94/3	11	9
Turbine Building Switchgear Room "B"	23'	C221/B	7	6
		C94/2	9	8
Turbine Building Battery Room "A"	37'	C94/7	2	2
Turbine Building Battery Room "B"	23'	C94/8	2	2
Off Gas Retention Building	23'	C113/1	4	4
Control Room Cabinets	37'	C221/3	3	3
		C221/4	3	3
		C221/5	3	3
		C221/6	3	3
		C221/7	3	3
		C221/8	3	3
Vital M.G. Set Room	23'	C221/1	5	4

