

ENCLOSURE

NOTICE OF VIOLATION

Boston Edison Company
Pilgrim Nuclear Power Station

Docket No. 50-293
License No. DPR-35
EA 96-271

During an NRC inspection conducted July 8-12, 1996 and July 22-26, 1996, for which a telephonic exit meeting was held on September 3, 1996, two violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG 1600, the violations are listed below:

- A. Technical Specification Section 3.7.A., "Primary Containment Integrity," requires, in part, that the primary containment integrity shall be maintained at all times when the reactor is critical.

Contrary to the above, for an indeterminate but extended period prior to April 9, 1996, primary containment integrity was not maintained in that two electrical containment penetrations (Nos. Q105A and Q105B) were not properly protected due to improper trip-settings on the circuit breakers for the two affected electrical-penetrations. Specifically, under certain high-impedance electrical fault conditions during a postulated design basis accident, the trip settings for the circuit breaker, which were set too high, could allow excessive current to pass through the electrical penetration circuits, damaging the penetration seals, and causing the primary containment to lose its integrity. (IFS 01013)

- B. 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures shall be established to assure conditions adverse to quality such as deficiencies, deviations, and nonconformances are promptly identified and corrected.

Contrary to the above, prior to April 9, 1996, measures were not established to assure that conditions adverse to quality were promptly identified and corrected. Specifically, a condition existed, at a minimum, from 1988 (and possibly as far back as the before initial startup in 1972) in which 12 circuit breakers (magnetic-trip-only breakers) for two electrical penetrations (Nos. Q105A and Q105B) had been set improperly, and the licensee did not identify this condition adverse to quality until 1996. The condition adverse to quality involved the failure to maintain primary containment integrity in that under certain high-impedance electrical fault conditions during a postulated design basis accident, the trip-settings of the circuit breakers, which were set too high, could allow excessive current to pass through the electrical penetration circuits and damage the electrical penetration seals, causing a loss of primary containment integrity. The licensee had at least three opportunities to identify and correct this condition prior to 1996, but did not do so, as described below:

1. In July 1991, during a self-assessment that the licensee performed of Pilgrim's electrical distribution system, the licensee identified that electrical penetration protection for potential electrical faults within the primary containment had not been addressed for Pilgrim Station. Although the licensee performed an operability evaluation to address this problem at that time, the evaluation was based on an incorrect assumption that the 1300 percent thermal overload of the motor starters (for the motors powered by the 12 affected electrical circuits) could provide adequate protection of the circuits. Therefore, the incorrect breaker trip setting problem was not corrected at that time.
2. In 1992, while performing calculation PS-119 for the purpose of evaluating electrical penetrations under normal plant operation, the licensee noted that some of the circuits protected from overload by thermal relays, were not adequately protected from short-circuits because the settings of the magnetic-trip-only circuit breakers exceeded National Electric Code (NEC) limits. The licensee failed to pursue this further to identify that the circuit breaker manufacturer's technical manual required adherence to the NEC limits. Therefore, the licensee again failed to correct the improper trip setting of the breakers.
3. In July 1993, the licensee initiated action to resolve the 1991 self-assessment findings by developing plans to replace the magnetic-trip-only breakers. However, licensee staff mischaracterized the corrective actions as enhancements, and therefore, the affected circuit breakers were not replaced until 1996. (IFS 01023)

These violations represent a Severity Level III problem (Supplement I).

Pursuant to provisions of 10 CFR 2.201, Boston Edison Company is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region I, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other actions as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at King of Prussia, Pennsylvania
this 21 day of October 1996