

June 17, 1985

Docket No. 50-293

Mr. William D. Harrington
Senior Vice President, Nuclear
Boston Edison Company
800 Boylston Street
Boston, Massachusetts 02199

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Dear Mr. Harrington

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION RELATIVE TO
GL83-28, ITEM 1.1 (POST-TRIP REVIEW)

By letter dated November 7, 1983, you responded to Generic Letter 83-28 with regard to required actions based on generic implications of the Salem ATWS events. We have reviewed your response with respect to Item 1.1 (post-trip review) and find that it does not fully meet our guidelines in the following areas:

- C. The methods and criteria for comparing the event with expected plant performance.
- D. The criteria for the need of independent assessment of the event.
- E. A systematic safety assessment program to assess unscheduled reactor trips.

The guidelines for the above areas and further details relative to our request for information are provided in the enclosure. Please respond within 60 days of receiving this letter.

The reporting and/or recordkeeping requirements of this letter affect fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

Original signed by/

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

Enclosure:
As stated

cc w/enclosure:
See next page

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Mr. William D. Harrington
Boston Edison Company
Pilgrim Nuclear Power Station

cc:

Mr. Charles J. Mathis, Station Mgr.
Boston Edison Company
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Resident Inspector's Office
U. S. Nuclear Regulatory Commission
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Plymouth, Massachusetts 02360

Mr. David F. Tarantino
Chairman, Board of Selectman
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Plymouth, Massachusetts 02360

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Massachusetts Department of
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Office of the Attorney General
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Mr. Robert M. Hallisey, Director
Radiation Control Program
Massachusetts Department of
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Thomas A. Murley
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Mr. A. Victor Morisi
Boston Edison Company
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Braintree, Massachusetts 02184

REQUEST FOR ADDITIONAL INFORMATION
PILGRIM NUCLEAR POWER STATION
SALEM ATWS ITEM 1.1 - POST-TRIP REVIEW

I. Review Guidelines

The following review guidelines were developed after initial evaluation of various utility responses to Item 1.1 of Generic Letter 83-28 and incorporate the best features of these submittals. As such, these review guidelines in effect represent a "good practices" approach to post-trip review:

- A. The Boston Edison Company (licensee) should have systematic safety assessment procedures established that will ensure that the following restart criteria are met before restart is authorized.
- The post-trip review team has determined the root cause and sequence of events resulting in the plant trip.
 - Near term corrective actions have been taken to remedy the cause of the trip.
 - The post-trip review team has performed an analysis and determined that the major safety systems responded to the event within specified limits of the primary system parameters.
 - The post-trip review has not resulted in the discovery of a potential safety concern (e.g., the root cause of the event occurs with a frequency significantly larger than expected).
 - If any of the above restart criteria are not met, then an independent assessment of the event is performed by the Plant Operations Review Committee (PORC), or another designated group with similar authority and experience.
- B. The responsibilities and authorities of the personnel who will perform the review and analysis should be well defined.
- The post-trip review team leader should be a member of plant management at the shift supervisor level or above and should hold or should have held a Senior Operator license on the plant. The team leader should be charged with overall responsibility for directing the post-trip review, including data gathering and data assessment and he/she should have the necessary authority to obtain all personnel and data needed for the post-trip review.

- A second person on the review team should be a Shift Technical Adviser (STA) or should hold a relevant engineering degree with special transient analysis training.
 - A team leader and the STA (Engineer) should be responsible to concur on a decision/recommendation to restart the plant. A nonconcurrence from either of these persons should be sufficient to prevent restart until the trip has been reviewed by the Plant Operations Review Committee (PORC) or equivalent organization.
- C. The licensee should indicate that the plant response to the trip event will be evaluated and a determination made as to whether the plant response was within acceptable limits. The evaluation should include:
- A verification of the proper operation of plant systems and equipment by comparison of the pertinent data during the post-trip review to the applicable data provided in the Final Safety Analysis Report (FSAR).
 - An analysis of the sequence of events to verify the proper functioning of safety-related and other important equipment. Where possible, comparisons with previous similar events should be made.
- D. The licensee should have procedures to ensure that all physical evidence necessary for an independent assessment is preserved.
- E. Each licensee should provide in its submittal, copies of the plant procedures which contain the information required in Items A through D. As a minimum, these should include the following:
- The criteria for determining the acceptability of restart
 - The qualifications, responsibilities and authorities of key personnel involved in the post-trip review process
 - The methods and criteria for determining whether the plant variables and system responses were within the limits as described in the FSAR
 - The criteria for determining the need for an independent review

II. Additional Information Requested

We have reviewed the licensee's November 7, 1984 submittal against the above guidelines and we found the information responsive to areas I.A. and I.B. However, the following information is needed for completion of our review in areas I.C., I.D., and I.E.:

- C. The methods and criteria for comparing the event information with known or expected plant behavior should be addressed. We recommend that the pertinent data obtained during the post-trip review be compared to the applicable data in the FSAR. Where possible, comparisons with previous similar events should be made.
- D. The licensee has established procedures to ensure that all physical evidence necessary for an independent assessment is preserved. The licensee has also indicated that if the cause of the trip is unknown, an independent assessment conducted by the operations Review Committee is required for the event. We find this insufficient and recommend that an independent assessment should be performed if any of the restart criteria are not met.
- E. The licensee should develop, and provide for our review, a systematic safety assessment program to assess unscheduled reactor trips.