

BOSTON EDISON COMPANY
800 BOYLSTON STREET
BOSTON, MASSACHUSETTS 02199

December 6, 1984

BECO 84-203
Proposed Change
84-14

License DPR-35
Docket 50-293

WILLIAM D. HARRINGTON
SENIOR VICE PRESIDENT
NUCLEAR

Mr. Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

Primary Containment Oxygen Concentration
Technical Specification Changes

Dear Sir:

Pursuant to the provisions of 10CFR50.90, the Boston Edison Company hereby proposes the attached modifications to Appendix A of Operating License No. DPR-35. These proposed modifications have been provided to conform with the recommendations of Criteria one (1) of Generic Letter No. 84-09 which was issued May 8, 1984.

Submittal of this first of three criteria of the Generic Letter will enable us to respond to the additional requisites which we feel will obviate the need for hydrogen recombiners at Pilgrim Station.

Very truly yours,

W.D. Harrington

ERM/ns

Attachment

3 signed originals and 40 copies

Commonwealth of Massachusetts)
County of Suffolk)

Then personally appeared before me W. D. Harrington, who, being duly sworn, did state that he is Senior Vice President - Nuclear of the Boston Edison Company, the applicant herein, and that he is duly authorized to execute and file the submittal contained herein in the name and on behalf of the Boston Edison Company and that the statements in said submittal are true to the best of his knowledge and belief.

My Commission expires: JUNE 20, 1991

Sarah M. Lopez
Notary Public

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Proposed Amendments to
Technical Specifications
Primary Containment Oxygen Concentration

A. Narrative

On May 8, 1984, NRC issued Generic Letter 84-09 which concluded that recombiner capability is not required in BWR plants with Mark I containment for which notices on the construction permits were published before November 5, 1970, if certain criteria were met. The criteria enumerated were as follows: 1) The plant has Technical Specifications (limiting conditions for operation) requiring that the containment atmosphere be less than four percent oxygen when the containment is required to be inerted, and 2) The plant has only nitrogen or recycled containment atmosphere for use in all pneumatic control systems within containment, and 3) There are no potential sources of oxygen in containment other than that resulting from radiolysis of the reactor coolant.

B. Reason for Change

The present Technical Specification for Pilgrim Station provides an oxygen concentration level of less than 5% oxygen by volume in containment during reactor power operation within LCO boundaries.

In order to respond to the Generic Letter, the LCO for this Technical Specification must be changed to less than 4% oxygen by volume. The plant has no problem meeting this criteria since the normal operating containment oxygen concentration levels are less than 4% by volume.

C. Safety Considerations

These changes do not present an unreviewed safety question as defined in 10CFR50.59. They have been reviewed and approved by the Operations Review Committee and reviewed by the Nuclear Safety Review and Audit Committee.

D. Significant Hazards Consideration

The NRC has provided guidance concerning the application of standards for determining whether license amendments involve significant hazards considerations by providing certain examples (48FR14870). The change of the Technical Specification LCO to limit even further the oxygen concentration level in primary containment is an example of an amendment which is considered not likely to involve a significant hazards consideration, and provides, "(ii) a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications: for example, a more stringent oxygen concentration level in containment, which in the main conforms to the Standard Technical Specification example, and negates the possibility of hydrogen combustion or detonation under conditions of excess hydrogen."

The BWR containment for Mark I plants is provided with an inerted atmosphere. The only source of oxygen generation during a LOCA is due to radiolysis. The amount of oxygen generated during this event is minimal.

Therefore, since the volume of oxygen is maintained below 4%, the possibility of a hydrogen combustion event is precluded.

E. Schedule of Change

This amendment will be effective upon receipt of approval from NRC.

F. Application Fee

Pursuant to 10CFR170.12, Boston Edison classifies this change as a Class III amendment. Boston Edison identified this change as one covered by check #87853 submitted under separate cover inclusively with two past submittal fees and referenced in our November 11, 1984 letter to Ms. Reba M. Diggs, Facilities Program Coordinator, U.S. Nuclear Regulatory Commission.