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June 9, 1982

BECO Ltr. #82-172

Mr. Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

License No. DPR-35
Docket No. 50-293

Additional Information on NUREG 0737 Items
In Response to NRC Generic Ltr 82-05 and 82-10

Dear Sir;

The subject letters requested dates for completion of specific NUREG 0737 modifications. Boston Edison responded to that request and stated we would provide dates for completion consistent with our integrated work plan currently under development with members of your staff. Additionally, we are now providing further clarification of our position as you have requested during a site visit by Ken Eccleston. Attachment A provides that response.

Should you have any questions or concerns on these NUREG items, please do not hesitate to contact us.

Very truly yours,

A. V. Morisi

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REFERENCES

- A. 81-200 Dated June 1, 1981
- B. 82-24 Dated Jan. 25, 1982
- C. 82-46 Dated Feb. 5, 1982
- D. 82-62 Dated Feb. 24, 1982
- E. 82-148 Dated May 24, 1982
- F. 82-105 Dated April 16, 1982

II.B.2 Plant Shielding

Boston Edison completed the Vital Area Accessibility Study for PNPS by January 1, 1982.

The study identified the need for the following modifications:

- (1) Remote Operation Capability for Post Accident Combustible Gas Control (Item 2.1.5a)
- (2) Post Accident Sampling System (Item II.B.3)
- (3) Containment H₂/O₂ Monitoring System (Item II.F.1.6)
- (4) Upgrade of existing TSC

Remote Operation Capability for Combustible Gas Control item 2.1.5a was completed prior to start-up from Refueling Outage #4.

The Post Accident Sampling and Containment H₂/O₂ Monitoring will be completed by December 30, 1983. These items are discussed in more detail under their respective NUREG 0737 task action plan task number, i.e. II.B.3 and II.F.1.6.

Upgrade of existing TSC has been delayed and a date cannot be provided at this time. Justification and compensatory measures have been outlined in Ref (A). Additionally all correspondence on this item will be addressed under NUREG 0737 item III.A.1.2 and will no longer be discussed in correspondence for item II.B.2.

Radiation Analyses to demonstrate Environmental Qualification of Electrical Equipment (IE-79-01B) will be complete by June 30, 1982. The results of this study on that issue will no longer be incorporated in correspondence in NUREG 0737 item II.B.2.

II.B.3 Post Accident Sampling

II.F.1.6 Containment H₂/O₂ Monitoring System

The subject NUREG Items have previously been scheduled for completion by February 1, 1983. At a meeting with members of your staff on February 19, 1982, Boston Edison described its concerns regarding the potential safety hazard of intense construction activity on modification work at PNPS #1. Subsequently, modification work was demobilized in mid March of 1982 in order to re-plan and integrate all activities with the intent to control the overall magnitude of construction work and provide adequate assurance for reducing potential safety hazards.

Currently, we plan to complete the subject items by December 30, 1983. We have provided justification and compensatory measures in Ref. B which are reiterated for your benefit.

Boston Edison Company's resources have been severely taxed in response to additional NRC concerns such as NRC I&E Bulletins 79-01B, 80-11, Fire Protection and Mark I containment integrity.

Our engineering effort was initially prioritized and sequenced to meet the construction schedule and preclude conflict with these concerns. During the Spring and Summer of 1981, as the engineering scope associated with these issues continued to evolve, a myriad of engineering resource constraints became apparent. Priorities were reassessed and adjusted, construction schedules were compressed, but the major scope of activities were forced into the 1981 refueling outage and occurred simultaneously with other refueling outage-related and modification projects. Construction progress against schedule was adversely affected by lost productivity due to labor disputes and subsequent lower efficiency during extended hours worked in attempting to compensate for the schedule delays, and because the work was performed during a major outage when plant support services were strained to capacity. Installation of these systems is a major construction effort involving hundreds of craftsmen and hundreds of thousands of manhours. Despite these complications, the design for these systems is complete and the installation is currently 60% complete.

Continued safe operation of Pilgrim Station without the new post-accident sampling system and H₂/O₂ monitoring systems is assured because the existing systems and interim procedures will

be adequate for events which would reasonably be expected to occur during the short period during which they are to be required for service.

Pilgrim Station has implemented interim procedures for obtaining primary containment gas samples and reactor water samples after an accident. There are presently one oxygen analyzer for measuring primary containment atmosphere oxygen content and two redundant hydrogen analyzers for measuring the drywell atmosphere hydrogen content. These analyzers have remote readout in the Main Control Room.

Primary containment integrity is assured following a LOCA because the operators are provided with numerous indications which would enable the primary containment conditions to be assessed. The Containment Atmosphere Dilution system would be implemented within 8 hours of a LOCA; thus, 4% hydrogen volume in the containment would not be reached.

II.K.3.27 Common Reference Level

Boston Edison provided justification and compensatory measures for relief from implementation in Ref. (C). The date for completion will be based on our integrated approach for satisfying NUREG Items I.C.1, I.D.1, I.D.2, and therefore cannot be provided at this time.

The primary reason for this approach is to change the control room indications only once. Each NUREG item can potentially result in changes to the water level indications for different reasons. If each position is addressed independently it could result in several changes to the control room indications and this may lead to confusion of the operators. A single revision factoring all aspects of NUREG-0737 pertaining to reactor water level would avoid this confusion.

We have incorporated an interim modification adding marker plates referencing instruments to the top of active fuel. Operator training is provided to assure an understanding of all water level instrument indications.

An operator's response will be no different whether marker plates or common scales are provided. He reacts to qualitative changes in instrument indication and therefore does not interpolate the data provided by marker plates or common scales.

It is our belief that the interim modification of providing marker plates is adequate and sufficient justification exists for our delaying implementation of this item.