

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 172 TO FACILITY OPERATING LICENSE NO. DPR-35

BOSTON EDISON COMPANY

PILGRIM NUCLEAR POWER STATION

DOCKET NO. 50-293

1.0 INTRODUCTION

By letter dated November 26, 1996, the Boston Edison Company (BECo or the licensee) submitted a request for changes to the Pilgrim Nuclear Power Station (PNPS) Technical Specifications (TSs). The requested changes would revise TS Definition 1.M, "Primary Containment Integrity," Note 6 on Table 3.2.A for the high flow main steam line instrumentation, Table 3.2.D for a typographical error, Table 3.2.F to reflect a change made in instrument type for the suppression chamber water temperature instrumentation, Table 3.2.F to reflect modifications made to suppression chamber bulk and local temperature instrumentation, Bases Section 3/4.6G to remove an obsolete reference to Group I welds, and Bases Section 3/4.7.A to remove "high radiation" from the description of Primary Containment Group 1 initiation signals. In addition, by letter dated March 7, 1997, changes were made to the Bases Section 3.10, "Core Alterations."

2.0 EVALUATION

The licensee requested a change to the PNPS TSs in accordance with 10 CFR 50.90. The proposed revisions are described and evaluated below:

(1) DEFINITION 1.M. "PRIMARY CONTAINMENT INTEGRITY"

Definition 1.M, "Primary Containment Integrity," will be modified to include the phrase "all instrument line flow check valves" to make this definition consistent with Limiting Condition for Operation (LCO) 3/4.7.A.2.a.4. The staff has reviewed the change and concurs that the addition of the phrase "all instrument line flow check valves" to the definition of primary containment integrity is consistent with LCO 3/4.7.A.2.a.4 and does not change the meaning of the definition. This change brings consistency between the definition and the LCO regarding primary containment integrity and is administrative in nature. Based on the above, the staff concludes that the proposed TS change is acceptable.

(2) NOTE 6 ON TABLE 3.2.A

Note 6 on Table 3.2.A for the high flow main steam line instrumentation that initiates primary containment isolation will be reworded for added clarity. The current wording of "Two [channels per trip system] required for each steam line" could be misinterpreted to mean a total of 8 instrument channels are needed. Actually, the four main steam lines have two instrument trip channels for each of the two trip systems. Therefore, 4 instruments per main steam line must be operable unless the line is isolated. Boston Edison had issued a memorandum to ensure proper understanding of this TS requirement. To further clarify this issue, BECo has proposed this change to reword the note in the TS. The staff has concluded that the revised note more clearly defines the plant configuration and, therefore, the proposed TS change is acceptable.

(3) TABLE 3.2.D

Table 3.2.D of the TS contains a typographical error. There are two notes labeled number 1. This change labels the second note as number 2. The staff concludes that this change is administrative in nature and, therefore, the proposed TS change is acceptable.

(4) TABLE 3.2.F

BECo has proposed to modify Table 3.2.F as a result of a change made in instrument type for the suppression chamber water temperature instrumentation. The instrument numbers and indication type have been changed for Instruments TI-5021-01A and TI 5022-01B. TI-5021-01A and TI 5022-01B have been physically changed and renumbered to TI-5021-02A and TI 5022-02B. Originally TI-5021-01A and TI-5022-01B were dual indicators. The original instruments indicated both suppression chamber bulk and local temperatures. A plant change replaced the dual instruments with individual instruments measuring bulk temperature only. This was acceptable as instrument requirements of TS 3.7.A.l.e through h only require bulk temperature. The TS Table will be modified to reflect that only bulk temperature is measured. TRU 5021-01A and TRU 5022-01B are multipoint recorders and have been renumbered to TRU 5021-1A and TRU 5022-1B. New instrument TI-5021-2A is the indicator for recorder TRU-5021-1A and new instrument TI-5022-2B is the indicator for recorder TRU-5022-1B. The staff has reviewed these changes and conclude they are administrative in nature and. therefore, the proposed change is acceptable.

The instruments for the drywell/torus differential pressure, drywell pressure and torus pressure instrumentation were changed. The nomenclature for these instruments will be changed to reflect this modification. The staff has reviewed these changes and conclude they are administrative in nature and, therefore, the proposed change is acceptable.

(5) BASES SECTION 3/4.6.G

An obsolete reference to Group I welds in Section 3/4.6G Bases will be removed. This Group I designation pre-dates the current ASME XI Code and should have been removed when the TSs were revised in Amendment No. 149, dated September 28, 1993. The ASME XI Code requirement is to assure high-stress welds are included in the weld selection process for inspection. The current PNPS Inservice Inspection Program includes this requirement; however, BECo no longer includes the Group I welds in the ISI Program unless they meet or exceed the code stress criteria. The Bases section has been updated to reflect the above.

(7) BASES SECTION 3/4.7.A

The description of Primary Containment Group 1 initiation signals in Bases 3/4.7.A is being revised to remove the words "high radiation." The main steam high radiation signal was removed from TSs in Amendment No. 154 dated June 21, 1994. This Bases reference change was inadvertently overlooked for that amendment and will be corrected by this submittal.

(8) BASES SECTION

By letter dated March 7, 1997, BECo informed the staff of a change to Bases Section 3.10, "Core Alterations." During last cycle, Pilgrim operated with some control rods completely inserted to suppress indications of a damaged fuel pin. During the current refueling outage, BECo removed the suspect fuel bundles early to begin inspection and reconstitution of the damaged bundle. Because a spiral unloading pattern of the fuel was planned, a change to the "Core Alterations" Bases was necessary to allow removal of the suspect fuel bundles out of the planned sequence. BECo has performed a 50.59 and concluded that removing fuel from five cells out of sequence is acceptable provided the fuel bundles removed do not completely surround and isolate a source range monitor from the rest of the core. This Bases Section will be modified to reflect the above.

The staff has concluded that these changes correct typographical errors, add clarity and consistency, modify instrument numbers due to plant modifications and update the Bases. These changes are administrative in nature and have no effect on plant design, safety limit settings, or plant system operation. The staff reviewed the request by BECo to revise the TS and Bases Section of the PNPS and based on the review, conclude that these revisions are administrative in nature and are acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Massachusetts State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (62 FR 6568). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Date: May 28, 1997