Docket File

Docket No. 50-293

SEP 25 1973

Boston Edison Company
ATTN: Mr. James M. Carroll
Vice President and
General Counsel
800 Boylston Street
Boston, Massachusetts 02199

CHANGE No. 2

Gentlemen:

In the course of a meeting with the Regulatory staff on May 24, 1973, your representatives proposed a revision to the Technical Specifications of Facility Operating License DPR-35 for the Pilgrim Nuclear Power Station to extend the maximum permissible operating times for certain containment isolation valves. The proposed changes would reflect the operating experience acquired during station startup testing and surveillance testing since the facility license was issued. On Monday, September 17, 1973, your representative requested by telephone that we expedite a revision to the Technical Specifications directed at extending the maximum permissible operating times for the two reactor water sample line isolation valves, listed as item 3 in Table 3.7.1 on page 161 of the Technical Specifications. Specifically, this request would extend the maximum operating time for these two valves (valve numbers 220-44 and 220-45) from 5 seconds to 10 seconds.

We have reviewed your request and reason for the change, and the safety consequences of extending the permissible maximum operating times for these two valves to the values you have proposed. The controlling basis for setting the maximum operating time of the valves to close was the expected performance of the valve rather than the valve closure time needed to control an assumed discharge of primary coolant outside of the primary containment such that the resulting radiological doses are significantly within 10 CFR Part 100 guidelines. Operating experience with these valves has shown that the actual operating times may equal or exceed the existing maximum operating time of 5 seconds although the valve may be operating normally and reliably. We, therefore, conclude the extended maximum operating time of 10 seconds that you have requested for these two valves will provide the additional margin needed over the actual operating times and still permit identification of degraded valve performance prior to exceeding the design closure times.

OFFICE ▶						L:LWR C:P.
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DATE ▶						

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Further, we conclude that extension of the maximum operating time for these two reactor water sample line isolation valves from 5 seconds to 10 seconds results in an insignificant increase in any radiological release that might occur in the course of an accident requiring closure of these valves, and that these radiological releases would be a small fraction of the limits specified in 10 CFR 100. We have concluded that your request can be authorized and determined that the proposed change does not involve significant hazards considerations and that there is reasonable assurance that the health and safety of the public will not be endangered by this change.

Pursuant to Section 50.59 of 10 CFR Part 50, the Technical Specifications appended as Appendix A to Facility Operating License DPR-35 are hereby changed to substitute "10" for "5" in the column Maximum Operating Time (sec.) applicable to the reactor water sample line isolation valves of Table 3.7.1, Primary Containment Isolation Valves, on page 161 of the Technical Specifications.

Sincerely,

Original signed by
Voss A. Moore

Voss A. Moore, Assistant Director
for Boiling Water Reactors
Directorate of Licensing

cc: Dale G. Stoodley, Counsel
Boston Edison Company
800 Boylston Street
Boston, Massachusetts 02199

J. Edward Howard, Superintendent
Nuclear Engineering Department
Boston Edison Company
800 Boylston Street
Boston, Massachusetts 02199

Mr. R. C. Haynes
Pilgrim Division Head
Boston Edison Company
RFD #1, Rocky Hill Road
Plymouth, Massachusetts 02360

Plymouth Public Library
North Street
Plymouth, Massachusetts 02360

Mr. L. D. Weislogel
Quality Assurance & Reliability
Manager
RFD #1 Rocky Hill Road
Plymouth, Massachusetts 02360

OGC concurs subject to preparation of memorandum supporting 50.59 finding and submittal of memo to OGC

OFFICE ▶	L:BWR-2	L:BWR-2	OGC	L:BWR	RO: Verbal to SBB
SURNAME ▶	SBurwell:ew	JFStolz		VAMoore	S. Bryan.
DATE ▶	9/18/73	9/18/73	9/21/73	9/24/73	9/25/73

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BWR Branch Chiefs
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W. O. Miller
S. Kari
ACRS (16)

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UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

SEP 21 1973

Docket No. 50-293

Supports Change (2)
issued 9-25-73

Memo to File

REGARDING PROPOSED CHANGE TO TECH SPEC. IN PILGRIM NUCLEAR POWER STATION (PNPS)

The supporting safety evaluation to the change in the maximum operating time of the two Reactor Water Sample line isolation valves from 5 seconds to 10 seconds (Table 3.7.1 page 161 of the PNPS Tech Specs) is described below.

The model for analysis is similar to the case considered for an assumed instrument line break into the secondary containment which has been analyzed for other plants like Quad Cities, Vermont Yankee, and Newbold Island. The instrument line of 1" diameter was assumed to blow down primary coolant to the reactor building outside of the primary containment using very conservative assumptions and was found not to be a safety problem as the resultant doses were well below AEC Part 100 guidelines. Blowdown rates through the one-inch sample valves assuming full reactor pressure of 1000 psig is about 32.5 lbs/sec. The incremental release for the additional 5 seconds is about 160 lbs, which is several orders of magnitude lower than the coolant release assumed for the instrument line break. Therefore, we conclude that the proposed change in the Technical Specification for PNPS will not involve a significant safety problem.

John F. Stolz, Chief
Boiling Water Reactors Branch 2
Directorate of Licensing

cc: Fred Gray, OGC
S. Burwell
Paul O'Connor
Voss A. Moore
Don Skovholt

Cys. sent to Hdqtrs. PLR & Local PLR, DR