

FEB 19 1974

Docket No. 50-293

Boston Edison Company  
ATTN: Mr. Maurice J. Feldmann  
Vice President  
Operations and Engineering  
800 Boylston Street  
Boston, Massachusetts 02199

Change No. 4  
License No. DPR-35

Gentlemen:

Your letter dated January 24, 1974, submitted the General Electric Licensing Report NEDO-20103 providing generic technical bases for Pilgrim Reload 1 fuel and constitutes your initial licensing submittal for this fuel.

The staff has reviewed your submittal and has determined that no significant hazards consideration is presented by the loading of the proposed Pilgrim Reload 1 fuel and that the health and safety of the public will not be endangered by such action. A copy of our related staff Safety Evaluation is enclosed. Accordingly, pursuant to Section 50.59 of 10 CFR 50, the Technical Specifications appended to Facility Operating License No. DPR-35 are hereby changed by deleting Technical Specification 5.2.A and replacing it with the following specification:

- "A. The core shall consist of not more than 580 fuel assemblies with fuel rods in either a 7 x 7 or 8 x 8 array."

The staff has further determined that the submittal does not provide adequate information specifically evaluating Pilgrim Nuclear Power Station 8 x 8 fuel performance parameters and operational transients to permit the staff to complete the review for subcritical testing utilizing more than one control rod or operation with 8 x 8 fuel

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assemblies in the core. Your letter of January 24, 1974, stated that additional information will be submitted by mid February 1974. Accordingly, if 8 x 8 fuel is loaded into the reactor, subcritical testing utilizing more than one control rod or operation of the reactor is not authorized.

Sincerely,

*KSJ*

Donald J. Skovholt  
Assistant Director for  
Operating Reactors  
Directorate of Licensing

Enclosure:  
Safety Evaluation

cc w/enclosure: See next page

Distribution

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- SKari, L:RP
- SVarga, L:RP
- BScharf, DRA (15)

*Notified Grant Boston of BECs  
at 3:15 pm that change No 4 has been  
signed.*

*PWOC*

OFFICE → X7403	L:ORB #2 <i>PWO</i>	L:ORB #2	L:ORB #2	L:ORB #2	OCC	L:ORB
SURNAME →	PWO'Connor:sh	RMDiggs	DLZiemann	RWReid	<i>R. Kinsey</i>	DJSkovholt
DATE →	2/19/74	2/19/74	2/19/74	2/19/74	2/19/74	2/19/74

February 19, 1974

cc w/enclosures:

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UNITED STATES ATOMIC ENERGY COMMISSION

SAFETY EVALUATION BY THE DIRECTORATE OF LICENSING

BOSTON EDISON COMPANY

DOCKET NO. 50-293

PILGRIM NUCLEAR POWER STATION

FACILITY OPERATING LICENSE NO. DPR-35

Introduction

By letter dated January 24, 1974, Boston Edison Company (BECO) submitted the General Electric Licensing Report NEDO-20103, "General Design Information for General Electric Boiling Water Reactor Reload Fuel Commencing in Spring 1974". This report provides generic technical bases for Pilgrim Reload 1 fuel and constitutes the initial licensing submittal for use of this fuel in the Pilgrim reactor. Additional information providing specific evaluation of operating parameters relating to the use of this fuel in the Pilgrim Nuclear Power Station will be submitted in mid-February as a supplemental report to NEDO-20103.

Discussion

In order to reduce the total outage time associated with the proposed reload of the Pilgrim Nuclear Power Station with Pilgrim Reload 1 fuel, Boston Edison has requested authorization to load 8 x 8 fuel assemblies prior to completion of the Regulatory staff's evaluation of operation with the reload fuel.

Evaluation

The Regulatory staff has evaluated the General Electric Licensing Report NEDO-20103, "General Design Information for General Electric Boiling Water Reactor Reload Fuel Commencing in Spring 1974" and has determined that the nuclear design parameters of the 8 x 8 fuel assemblies are similar to the 7 x 7 fuel assemblies previously loaded in the Pilgrim Nuclear Power Station and other boiling water reactors. The calculational methods previously used to predict the nuclear characteristics of the 7 x 7 fuel assemblies currently in use have been applied to the 8 x 8 assemblies and are considered adequately conservative to provide assurance that the 8 x 8 fuel can be accurately described as neutronicallly similar to the 7 x 7 assemblies.

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Conclusion

Based upon the above considerations, the staff concludes that no significant hazards consideration is involved in the loading of 8 x 8 fuel assemblies in the Pilgrim Nuclear Power Station provided that the reactor is maintained in the shutdown or refuel mode. The staff also concludes that the health and safety of the public will not be endangered by the loading of the Pilgrim Reload 1 fuel in the Pilgrim Nuclear Power Station.

Prior to subcritical testing utilizing more than one control rod or operation, the Regulatory staff's evaluation of operation of the reactor with 8 x 8 reload fuel in the core must be completed and a determination made that the health and safety of the public will not be endangered by such operation.

15/

Paul W. O'Connor  
Operating Reactors Branch #2  
Directorate of Licensing

15/

Dennis L. Ziemann, Chief  
Operating Reactors Branch #2  
Directorate of Licensing

Date: FEB 19 1974

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