

DEC 29 1988

Mr. Ralph G. Bird
Senior Vice President - Nuclear
Boston Edison Company
800 Boylston Street
Boston, Massachusetts 02199

Dear Mr. Bird:

SUBJECT: ISSUANCE OF EXTENSION TO THE EXEMPTION TO 10 CFR PART 50, APPENDIX E,
SECTION IV.F.3, FOR THE PILGRIM NUCLEAR POWER STATION

The Nuclear Regulatory Commission has granted the enclosed Exemption regarding the conduct of a full-participation emergency preparedness exercise for the Pilgrim Nuclear Power Station in 1987. The Exemption was granted in response to your letter of December 8, 1988, requesting an extension to the Exemption granted on May 11, 1988.

We find that granting the Exemption extension is authorized by law, will not present an undue risk to the public health and safety, is consistent with the common defense and security, and meets the special circumstances described in 10 CFR 50.12(a)(2)(v).

The Exemption has been forwarded to the Office of the Federal Register for publication.

Sincerely,

15/

Steven A. Varga, Director
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Enclosure:
Exemption extension

cc w/enclosure:
See next page

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Mr. Ralph G. Bird
Boston Edison Company

Pilgrim Nuclear Power Station

cc:

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Braintree, Massachusetts 02184

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	}	
Boston Edison Company	}	Docket No. 50-293
(Pilgrim Nuclear Power Station)	}	

EXEMPTION

I.

Boston Edison Company (the licensee) is the holder of Facility Operating License No. DPR-35 which authorizes operation of Pilgrim Nuclear Power Station (the facility) at steady-state reactor power levels not in excess of 1998 megawatts thermal. The license provides, among other things, that it is subject to all rules, regulations, and Orders of the Nuclear Regulatory Commission (the Commission or NRC) now or hereafter in effect. The facility consists of a boiling-water reactor located at the licensee's site in Plymouth, Massachusetts. The facility is currently shut down for refueling and modifications.

Section 50.54(q) of 10 CFR Part 50 requires a licensee authorized to operate a nuclear power reactor to follow and maintain in effect emergency plans that meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR Part 50. Section IV.F.3 of Appendix E requires that each licensee at each site shall exercise with offsite authorities such that the State and local government emergency plans for each operating reactor site are exercised biennially, with full or partial participation by State and local governments, within the plume exposure pathway emergency planning zone (EPZ).

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The NRC may grant exemptions from the requirements of the regulations which, pursuant to 10 CFR 50.12(a), are (1) authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security; and (2) present special circumstances. Section 50.12(a)(2)(v) of 10 CFR indicates that special circumstances exist when an exemption would provide only temporary relief from the applicable regulation and the licensee has made good faith efforts to comply with the regulation.

II.

By letter dated September 17, 1987, the licensee requested a one-time exemption from the schedule requirements of Section IV.F.3 of Appendix E. The last biennial emergency preparedness exercise was a full-participation exercise conducted at the Pilgrim Nuclear Power Station on September 5, 1985. The licensee requested that an exemption be granted to allow the next biennial exercise to be deferred from 1987 to the second quarter of 1988.

The licensee stated that the Commonwealth of Massachusetts, the local governments within the EPZ, and the two emergency reception center communities were in the process, with the assistance of the licensee, of implementing numerous improvements in their offsite emergency preparedness programs. These improvements included revision of the emergency plans of the local governments and the Commonwealth, the development of associated procedures, the development

and implementation of training programs for officials and emergency personnel, and the upgrading of Emergency Operations Centers. The licensee expected the work to continue through early 1988. The licensee informed the NRC that, in view of the extensive ongoing efforts, the Commonwealth and the local governments indicated that they were not able to fully participate in an exercise during calendar year 1987.

On December 16, 1987, the Commission published a Federal Register notice approving the exemption, stipulating that the exercise be conducted before June 30, 1988. By letter dated April 14, 1988, the licensee requested an extension of the June 30, 1988, exemption deadline to permit conduct of the exercise before the end of 1988. The licensee stated that, although substantial progress had been made to improve emergency preparedness since the original exemption request, the extensive emergency planning efforts had taken longer than anticipated. The licensee requested an extension of the exemption for the same special circumstances as existed at the time of the original exemption request. On May 18, 1988, the Commission published a Federal Register notice approving the exemption, stipulating that the exercise be conducted before the end of 1988.

By letter dated December 8, 1988, Boston Edison requested an additional extension of the exemption. Boston Edison stated that since the previous extension was granted, substantial additional planning progress had been made, including the submission to the Federal Emergency Management Agency (FEMA) for informal technical review the draft plans, the implementing procedures, and associated supporting documentation for five of the seven EPZ and reception center

communities; the submission to FEMA of the draft Massachusetts Civil Defense Agency (MCDA) Area-II plan for review; the completion of most of the renovation work for the town Emergency Operations Centers; and the completion of a new set of evacuation time estimates. Boston Edison further stated that efforts are now under way, with the approval of the Commonwealth, to prepare for the conduct of a full-participation offsite exercise.

Boston Edison indicated that the scheduling of both pre-exercise drills and the exercise itself could now be undertaken; however, the Commonwealth, as stated in a letter to the licensee from the Director of the MCDA dated November 21, 1988, believes that "it is inappropriate to discuss an exercise drill schedule at this time." The licensee further indicated that the Commonwealth has agreed to participate in discussions regarding the exercise objectives and scenario but believes that an exercise should not be held until the planning process is completed. As the Commonwealth's participation in pre-exercise drills and its acceptance of the proposed objectives and scenario are exercise prerequisites, Boston Edison requested an extension of the exercise exemption until 120 days after the completion of the power ascension program.

Boston Edison advances several reasons why the requested extension is appropriate. First, the power ascension program represents a highly controlled testing regimen during which NRC personnel will maintain an increased monitoring presence at the plant. Second, extension of the exemption until several months after the completion of the power ascension program will enable licensee personnel to devote full attention to the power ascension program and permit such emergency

preparedness exercise activities as the conduct of a "dry run" to take place after the power ascension program is complete. Finally, the requested extension provides an opportunity for the completion of those planning tasks deemed to be exercise prerequisites by the Commonwealth.

III.

Onsite emergency preparedness has continued to be evaluated by the NRC during inspections and exercises, including the most recent onsite exercise conducted on December 13, 1988. The 1988 exercise included notification of the Commonwealth and local town response organizations via the recently installed Digital Notification Network. The NRC staff's preliminary evaluation of the 1988 exercise indicates that no emergency preparedness weaknesses were identified and Boston Edison's emergency response actions were adequate to provide protective measures for the health and safety of the public. The NRC inspection findings and the licensee's exercise performance provide assurance that the licensee has maintained a satisfactory capability to respond to an emergency at Pilgrim.

Since the last full-participation biennial exercise at Pilgrim (in September 1985), the Commonwealth has participated on a limited basis with the licensee in the annual onsite exercises conducted in 1986, 1987, and 1988. The towns within the EPZ have also cooperated in the full-scale siren test conducted by FEMA in September 1986 and again on December 7, 1988. The

Commonwealth has also participated in full-participation exercises at the Yankee-Rowe Nuclear Power Station in April 1988 and at the Vermont Yankee Nuclear Power Station in December 1987, and in a partial-participation exercise at Vermont Yankee in August 1988. The exercises demonstrate the Commonwealth's ability to exercise command and control, to interface with other agencies, and to assess and respond to conditions requiring actions to protect the health and safety of the public.

The requested exemption extension is necessary because ongoing emergency preparedness efforts will not be completed for several months. The licensee has made a good faith effort to comply with the regulation by assisting in the ongoing improvements to the Commonwealth and local offsite emergency response programs. The licensee has expended approximately ten million dollars and expects to spend five million dollars more to improve the offsite response programs. The Commonwealth, whose participation is essential, has stated that it is not prepared to participate in an exercise until the planning process is completed. The exemption is only for a temporary period until the planning approval process is sufficiently complete to permit the Commonwealth to participate. The Commonwealth has not stated when it expects to be ready to participate in an exercise; however, the licensee's request for an exercise to be conducted within 120 days after completion of the power ascension program (which is expected to take 4-5 months) appears to be a reasonable time estimate. This situation constitutes special circumstances as described in 10 CFR 50.12(a)(2)(v).

In granting the original exemption, the NRC stated its belief that the public health and safety would be better served by the conduct of a full-participation exercise following the completion of efforts to improve the Commonwealth and local government emergency response programs. That rationale is still appropriate, and the staff believes that the required exercise should be carried out at such time as the Commonwealth is prepared to participate.

The staff recommended that the Commission approve restart of the Pilgrim plant, and this approval was granted by the Commission on December 21, 1988. In its discussion with the Commission, the staff informed the Commission that it has reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency and that there also was reasonable assurance that the plant could resume operations without undue risk to public health and safety. The following considerations form the basis for these conclusions:

- a. There have been a number of significant improvements in facility hardware and a significant improvement in the focus of Boston Edison management on safety issues so that the facility is substantially safer today than it was before it was shut down in April 1986.
- b. The emergency planning problems pointed out by FEMA in August 1987 related to certain planning deficiencies rather than to exercise performance. The NRC staff has concluded that the emergency planning deficiencies identified by FEMA have been sufficiently resolved,

based on the staff's review and observations of the current status of the improvements in emergency plans and procedures. There has been general agreement that overall emergency planning for the Pilgrim facility has been substantially upgraded, even though various procedures have not yet been completed.

- c. The licensee's capability to respond in an emergency has been demonstrated in full-participation exercises conducted in 1982, 1983, and 1985, and in annual onsite exercises conducted in 1986, 1987, and 1988.

- d. The Commonwealth's capability to respond in a nuclear power plant emergency has been recently tested during full-participation exercises at the Yankee-Rowe facility in April 1988 and at the Vermont Yankee facility in December 1987, and during a partial-participation exercise at Vermont Yankee in August 1988.

- e. The capability of the local response organizations was satisfactorily demonstrated in the full-participation exercises conducted in 1982, 1983, and 1985, and the infrastructure to respond to emergencies which was demonstrated in these exercises is still largely in place. In addition, the emergency planning improvements at Pilgrim are, by and large, the result of very significant efforts by the local emergency response personnel who are responsible for implementing such plans and procedures in the event of an emergency. These personnel are

thoroughly familiar with the improved plans and, although improved emergency response training is still under way, sufficient training has taken place to assure that emergency response personnel will perform adequately in the event of an emergency.

The staff, therefore, has determined that there is reasonable assurance that adequate protective action can and will be taken in the event of a radiological emergency at the Pilgrim plant even considering the lack of a recent full-participation exercise. Furthermore, the status of emergency preparedness is expected to continue to improve as the Commonwealth of Massachusetts and local officials continue to improve the plans in preparation for a full-participation exercise.

IV.

For these reasons, the Commission has thus determined that, pursuant to 10 CFR 50.12, the Exemption extension requested by the licensee's letter of December 8, 1988, as previously discussed, is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security.

Accordingly, the Commission hereby approves the following Exemption:

"The Pilgrim Nuclear Power Station is exempt from the requirements of 10 CFR 50, Appendix E, Section IV.F.3, for the conduct of an offsite full-participation emergency

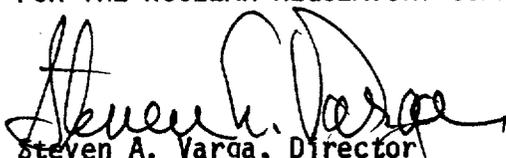
preparedness exercise within 2 years of the last such exercise in September 1985, provided that such an exercise be conducted within 120 days after the completion of the power ascension program."

Pursuant to 10 CFR 51.32, the Commission had determined that the granting of this Exemption extension would have no significant effect on the quality of the human environment (53 FR 52528, December 28, 1988). A copy of the licensee's request for Exemption extension, dated December 8, 1988, is available for public inspection at the Commission's Public Document Room, in the Gelman Building, Lower Level, 2120 L Street, NW, Washington, DC, and at the Plymouth Public Library, 11 North Street, Plymouth, Massachusetts 02360. Copies may be obtained upon written request addressed to the U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Director, Division of Reactor Projects I/II.

This Exemption extension is effective upon issuance.

Dated at Rockville, Maryland, this ^{29th} day of December 1988.

FOR THE NUCLEAR REGULATORY COMMISSION



Steven A. Varga, Director
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation