UNITED STATES NUCLEAR REGULATORY COMMISSION

BOSTON EDISON COMPANY

DOCKET NO. 50-293

ENVIRONMENTAL ASSESSMENT AND FINDING OF

NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of exemptions from certain requirements of 10 CFR Part 50, Appendix C, to the Boston Edison Company (BECo/licensee) for the Pilgrim Nuclear Power Station located at the licensee's site in Plymouth County, Massachusetts.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action:

The proposed action would grant an exemption from certain requirements of Appendix R of 10 CFR Part 50. The exemption is needed from Section III.G.2.a to the extent that it requires separation of cables and equipment and associated non-safety circuits of redundant trains by a fire barrier having a three hour rating.

The Need for the Proposed Action:

The exemption is needed because of plant specific circumstances described in the licensee's Fire Protection Engineering Evaluations (FPSE) provided in its submittal regarding three hour fire barriers. The FPEEs have demonstrated that equivalent protection is provided by the existing fire barriers for the fire hazards they are exposed to in all but two areas. These two areas have fire detection and suppression in addition to the existing fire barriers which provide adequate protection for the existing fire hazard. Use of the existing fire barriers and fire detection and suppression in the two areas are the most

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practical means for meeting the intent of Appendix R and literal compliance would not significantly enhance fire protection capability.

Environmental Impacts of the Proposed Action:

The proposed exemption, based on the existing physical plant design and fire protection features, will provide a degree of fire protection that is equivalent to that required by Appendix R for the affected areas of the plant such that there is no increase in the risk of fires at this facility.

Consequently, the probability of fires has not been increased and the post-fire radiological releases will not be greater than previously determined, nor do the proposed exemptions otherwise affect radiological plant effluents. Therefore, the Commission concludes that there are no significan: radiological environmental impacts associated with this proposed exemption.

With regard to potential non-radiological impacts, the proposed exemption involves features located entirely within the restricted area as defined in 10 CFR Part 20. They do not affect non-radiological plant effluents and have no other environmental impact. Therefore, the Commission concludes that there are no significant non-radiological environmental impacts associated with the proposed exemption.

Alternative to the Proposed Action:

Since the Commission has concluded there are no measurable environmental impacts associated with the proposed exemption, any alternatives with equal or greater environmental impact need not be evaluated. The principal alternative to the exemption would be to require rigid compliance with the applicable portions of Section III.G.2.a of the Appendix R requirements. Such action would not enhance the protection of the environment and would result as unjustified costs for the licensee.

Alternative Use of Resources:

This action does not involve the use of any resources not considered previously in the Final Environmental Statements related to the operation of Pilgrim Nuclear Power Station.

Agencies and Persons Consulted:

The NRC staff reviewed the licensee's request and did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed exemption. Based upon the foregoing environmental assessment, the NRC staff concludes that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this proposed action, see the licensee's letter dated August 6, 1988. The letter is available for public inspection at the Commission's Public Document Room, Gelman Building, Lower Level, 2120 L Street, N.W., Washington, D.C. and at the Plymouth Public Library, 11 North Street, Plymouth, Massachusetts.

Dated at Rockville, Maryland this (to day of Celebra

, 1988.

FOR THE NUCLEAR REGULATORY CUMMISSION

Richard H. Wessman, Director Project Directorate I-3

Division of Reactor Projects I/II