

UNITED STATES NUCLEAR REGULATORY COMMISSIONBOSTON EDISON COMPANYDOCKET NO. 50-293NOTICE OF ENVIRONMENTAL ASSESSMENT ANDFINDING OF NO SIGNIFICANT IMPACT

The U. S. Nuclear Regulatory Commission (the Commission) is considering issuance of an exemption from the technical requirements of Appendix R to 10 CFR 50 to Boston Edison Company (the licensee), for the Pilgrim Nuclear Power Station, located in Plymouth County, Massachusetts.

ENVIRONMENTAL ASSESSMENTIdentification of Proposed Action:

The exemption would relax the following requirements:

1. That there be no intervening combustibles between redundant trains of safe shutdown equipment. The exemption would apply only to certain fire zones on the 23-foot and 51-foot elevations of the reactor building where the intervening combustible load is very low and the licensee proposes to install automatic water curtains where no physical barriers exist.
2. That total area coverage automatic fire suppression systems be installed. The exemption would apply only to the above fire zones and to the torus compartment below the reactor building. The licensee proposes to enclose in a fire barrier one train of shutdown cables in the torus compartment to assure safe shutdown.
3. That fixed fire suppression systems be installed in areas for which alternate shutdown capability is provided. The exemption would apply

only to the fire zones identified in item 1 above and to the vital M.G. set room. Automatic smoke detection equipment, which alarms in the control room, and manually-operated fire suppression equipment is available in these areas.

The exemption is responsive to the licensee's application for technical exemptions dated May 17, 1983, as supplemented by a letter dated April 2, 1984. The request for scheduler exemption will be the subject of a separate action.

The Need for the Proposed Action:

The proposed exemption is needed because the features described in the licensee's request regarding the existing level of fire protection and proposed modifications at the plant are the most practical method of meeting the intent of Appendix R and literal compliance would not significantly enhance the fire protection capability.

Environmental Impacts of the Proposed Action: The proposed exemption will provide a degree of fire protection equivalent to that required by Appendix R 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. Neither does the proposed exemption otherwise affect radiological plant effluents. Therefore, the Commission concludes that there are no significant 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. It does not affect non-radiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant non-radiological environmental impacts associated with the proposed exemption.

Alternative Use of Resources:

This action involves no use of resources not previously considered in the Final Environmental Statement related to operation of the 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

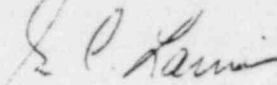
The Commission has determined not to prepare an environmental impact statement for the proposed exemption.

Based upon the foregoing environmental assessment, we conclude that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the application for exemption dated May 17, 1983, and the supplement dated April 2, 1984, which are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., and at the Plymouth Public Library, North Street, Plymouth, Massachusetts.

Dated at Bethesda, Maryland this 27th day of November, 1984.

FOR THE NUCLEAR REGULATORY COMMISSION



Gus C. Lainas, Assistant Director
for Operating Reactors
Division of Licensing