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 R, 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 exemptions from certain requirements of Appendix R of 10 CFR Part 50. The reduests (Exemption Request Mos. 15, 18 and 22) seek exemptions from the provisions of subsections: 1) III.G.2.b to the extent that full area fire detection and automatic fire suppression would be required for the area between Corridor #137 (containing Division A safe shutdown circuits) on elevation 23 feet and Corridor #49 (containing redundant Division B safe shutdown circuits) on elevation (-) 1 foot; 2) III.G.2.b to the extent no combustibles or fire hazards are to be located between two redundant safe shutdown systems located in the same fire area. The subject of these exemption requests is a single cable tray located 13 feet above the floor on Elevation 23 feet that is located between the Train A and Train B Reactor

Building Closed Cooling Water (RBCCW) rooms; and 3) III.G.3 that requires fire detection and automatic suppression for redundant safe shutdown equipment (in this case the normal torus water level indication cables) located in the same fire area when alternative safe shutdown capability is provided.

The Need for the Proposed Action:

The proposed exemptions are needed because the plant-specific circumstances and features described in the licensee's requests regarding Exemption Requests Nos. 15, 18 and 22 are the most practical means for meeting the intent of Appendix R and literal compliance would not significantly enhance the fire protection capability.

The existing physical arrangement, separation, lack of continuity of combustibles and existing automatic detection and suppression provide assurance that one train of redundant safe shutdown circuits would be available to achieve and maintain safe shutdown in the event of a fire in relation to Exemption Request No. 15.

The existence of a single cable tray (only intervening combustible) between redundant safe shutdown trains would not result in a single fire capable of simultaneously damaging both redundant trains due to the physical configuration, the existing detection and suppression, and the concrete plug that seals the equipment hatchway when equipment is not actually being moved. Thus, one train necessary to achieve and maintain safe shutdown would be available in the event of a fire in relation to Exemption Request No. 18.

The lack of fire detection and automatic suppression for the redundant torus water level indication cables would not result in the loss of both torus water level indications due to the lack of continuous combustibles, spatial separation and existing concrete barriers in the event of a fire in relation to Exemption Request No. 22.

Environmental Impacts of the Proposed Action:

The proposed exemptions, 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 significant radiological environmental impacts associated with these proposed exemptions.

With regard to potential non-radiological impacts, the proposed exemptions involve 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 exemptions.

Alternative to the Proposed Action:

Since the Commission has concluded there are no measurable environmental impacts associated with the proposed exemptions, any alternatives with equal or greater environmental impact need not be evaluated. The principal alternative to the exemptions would be to require rigid compliance with the applicable portions of Section III.G of the Appendix R requirements. Such action would not enhance the protection of the environment and would result in unjustified costs to 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 exemptions. 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 10, 1987. The letter is 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, 11 North Street, Plymouth, Massachusetts. Dated at Rockville, Maryland, this /3 Eday of July, 1988.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard H. Wessman, Director Project Directorate I-3

Division of Reactor Projects I/II

JUL 14 1988

Dist: Docket 50-293 F PD I-3 Reading M. Rushbrook D. McDonald J. Kopeck, PA

DOCKET NO.

50-293

MEMORANDUM FOR:

Rules and Procedures Branch Division of Rules and Records

Office of Administration

FROM:

NRC FORM 318 (10-10-140 MBCM 0240

Office of Nuclear Reactor Regulation

ROSTON EDISON COMPANY - DILICOTM MICLEAD BOLLED

Notice o	f Receipt of Application for Construction Permit(s) and Operating License(s).	
	f Receipt of Partial Application for Construction Permit(s) and Facility	
	s): Time for Submission of Views on Antitrust Matters.	
Notice o	f Consideration of Issuance of Amendment to Facility Operating License.	
Notice o	f Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.	ort; a
Notice of	f Availability of NRC Draft/Final Environmental Statement.	
Notice of	f Limited Work Authorization.	
Notice of	Availability of Safety Evaluation Report.	
Notice of	f Issuance of Construction Permit(s).	
Notice of	f Issuance of Facility Operating License(s) or Amendment(s).	
Order.		
Exemption	an.	
become	Granting Exemption.	
Environm	nental Assessment.	
Notice of	Preparation of Environmental Assessment.	
Other:		
	Office of Nicolana Paratas (Sanatas)	
	Office of Nuclear Reactor Regulation	
Enclosure:		

OFFICIAL RECORD COPY

For further details with respect to this proposed action, see the licensee's letter dated August 10, 1987. The letter is available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the "lymouth Public Library, 11 North Street, Plymouth, Massachusetts.

Dated at Rockville, Maryland, this

13 day of July 1988.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard H. Wessman, Director Project Directorate I-3 Division of Reactor Projects I/II

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BOSTON EDISON COMPANY

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Environmental Impacts of the Proposed Action:

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Alternative to the Proposed Action:

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Agencies and Persons Consulted:

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Dated at Rockville, Maryland, this /3 Eday of July, 1988.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard H. Wessman, Director Project Directorate I-3

Division of Reactor Projects I/II