# 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 a schedular exemption from certain requirements of 10 CFR 50.48 to the Boston Edison Company (BECo) (the licensee) for the Pilgrim Nuclear Power Station, located at the licensee's site in Plymouth County, Massachusetts. ENVIRONMENTAL ASSESSMENT

# Identification of the Proposed Action

The proposed action would grant a schedular exemption from requirements of 10 CFR 50.48(c)(4) relating to the completion dates for modifications that RECo is making to protect and enhance the plant's safe shutdown capabilities against the effects of fire. These modifications primarily consist of separating redundant shutdown equipment by relocating control panels and cables, relocating and adding sprinklers, emergency lights and fire dampers, and adding torus water level and temperature instrumentation. A 3-hour fire-rated door is also being added to the 4160-volt "A" switchgear room.

## The Need for the Proposed Action

10 CFR 50.48(c)(4) requires, in part, that any fire protection modifications needed to satisfy Section III.6.3 of Appendix R to 10 CFR Part 50, and requiring plant shutdown in order to complete them, shall be implemented before startup after an unplanned outage that lasts for at least 120 days. Such an

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unplanned outage began at Pilgrim Station on April 12, 1986 when the plant was shut down for investigation of leakage inside the residual heat remova? (RHR) system. Several other equipment problems were also identified. The necessary repairs were nearly complete when NRC notified BECo and other licensees of potential intergranular stress corrosion cracking of impeller wear rinds in the RHR pumps. Due to the importance of these pumps to safe operation and a need to leak test the containment isolation valves, BECo decided to inspect and, if necessary, repair the RHR pumps before restarting the plant. These additional activities are expected to extend the outage until the end of August, 1986, which is approximately 3 weeks more than the 120 days cited above.

Although the fire protection modifications of Pilgrim Station are about 85 percent complete, BECo states that the remainder cannot be completed by August 10, 1986. Hence, the need arises for an exemption from the 120-day schedular requirement.

# Environmental Impact of the Proposed Action

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The proposed action only affects the length of time allowed by 10 CFR 50.48(c)(4) for completion of the required modifications. The licensee has proposed interim compensatory measures to provide the necessary level of fire protection until the modifications are completed during the coming refueling outage, as scheduled by BECo and required by 10 CFR 50.48(c)(4). Thus, fire-related radiological releases will not differ from those determined previously and the proposed exemption does not

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otherwise affect facility radiological effluent or occupational exposures. With regard to potential nonradiological impacts, the proposed exemption does not affect plant nonradiological effluents and has no other environmental impact. Therefore, the Commission concludes there are no measurable radiological or nonradiological environmental impacts associated with the proposed exemption.

# Alternatives to the Proposed Action:

Since the Commission has concluded there is no measurable environmental impact associated with the proposed exemption, other alternatives need not he evaluated. The principal alternative to the exemption would be to require rigid compliance with the 50.48(c)(4) requirements. Such action would not enhance the protection of the environment and would result in unjustified costs for the licensee.

# Alternative Use of Resources:

This action does not involve the use of resources not considered previously in the Final Environmental Statement related to the operation of Pilgrim 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 environmencal assessment, the NRC staff concludes that the proposed action will not have a significant effect on the quality of the human environment.

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For further details with respect to this proposed action, see the licensee's letters dated July 2, 1986 and July 14, 1986. These letters are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW, Washington, D.C. and at the Plymouth Public Library, 11 North Street, Plymouth County, Massachusetts 02360.

Dated at Bethesda, Maryland this 24th day of July 1986.

FOR THE NUCLEAR REGULATORY COMMISSION

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Rajender Auluck, Acting Director BWR Project Directorate #1 Division of BWR Licensing

#### UNITED STATES NUCLEAR REGULATORY COMMISSION

# ROSTON 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 a schedular exemption from certain requirements of 10 CFR 50.48 to the Roston Edison Company (RECo) (the licensee) for the Pilgrim Nuclear Power Station, located at the licensee's site in Plymouth County, Massachusetts. ENVIRONMENTAL ASSESSMENT

# Identification of the Proposed Action

The proposed action would grant a schedular exemption from requirements of 10 CFR 50.48(c)(4) relating to the completion dates for modifications that RECn is making to protect and enhance the plant's safe shutdown capabilities against the effects of fire. These modifications primarily consist of separating redundant shutdown equipment by relocating control panels and cables, relocating and adding sprinklers, emergency lights and fire dampers, and adding torus water level and temperature instrumentation. A 3-hour fire-rated door is also being added to the 4160-volt "A" switchgear room.

## The Need for the Proposed Action

10 CFR 50.48(c)(4) requires, in part, that any fire protection modifications needed to satisfy Section III.6.3 of Appendix R to 10 CFR Part 50, and requiring plant shutdown in order to complete them, shall be implemented before startup after an unplanned outage that lasts for at least 120 days. Such an

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unplanned outage began at Pilgrim Station on April 12, 1986 when the plant was shut down for investigation of leakage inside the residual heat removal (RHR) system. Several other equipment problems were also identified. The necessary repairs were nearly complete when NRC notified RECo and other licensees of potential intergranular stress corrosion cracking of impeller wear rings in the RHR pumps. Due to the importance of these pumps to safe operation and a need to leak test the containment isolation valves, BECo decided to inspect and, if necessary, repair the RHP pumps before restarting the plant. These additional activities are expected to extend the outage until the end of August, 1986, which is approximately 3 weeks more than the 120 days cited above.

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Although the fire protection modifications of Pilgrim Station are about 85 percent complete, BFCo states that the remainder cannot be completed by August 10, 1986. Hence, the need arises for an exemption from the 120-day schedular requirement.

# Environmental Impact of the Proposed Action

The proposed action only affects the length of time allowed by 10 CFR 50.48(c)(4) for completion of the required modifications. The licensee has proposed interim compensatory measures to provide the necessary level of fire protection until the modifications are completed during the coming refueling outage, as scheduled by BECo and required by 10 CFR 50.48(c)(4). Thus, fire-related radiological releases will not differ from those determined previously and the proposed exemption does not

otherwise affect facility radiological effluent or occupational exposures. With renard to potential nonradiological impacts, the proposed exemption does not affect plant nonradiological effluents and has no other environmental impact. Therefore, the Commission concludes there are no measurable radiological or nonradiological environmental impacts associated with the proposed exemption.

## Alternatives to the Proposed Action:

Since the Commission has concluded there is no measurable environmental impact associated with the proposed exemption, other alternatives need not he evaluated. The principal alternative to the exemption would be to require rigid compliance with the 50.48(c)(4) requirements. Such action would not enhance the protection of the environment and would result in unjustified costs for the licensee.

# Alternative Use of Resources:

This action does not involve the use of resources not considered previously in the Final Environmental Statement related to the operation of Pilorim Station.

# Acencies and Persons Consulted:

The NEC 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 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 letters dated July 2, 1986 and July 14, 1986. These letters are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW, Washington, D.C. and at the Plymouth Public Library, 11 North Street, Plymouth County, Massachusetts 02360.

Dated at Bethesda, Maryland this 24th day of July 1986.

FOR THE NUCLEAR REGULATORY COMMISSION

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Raiender Auluck, Acting Director RWR Project Directorate #1 Division of RWR Licensing

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