

UNITED STATES NUCLEAR REGULATORY COMMISSION

BOSTON EDISON COMPANY

PILGRIM NUCLEAR POWER STATION

DOCKET NO. 50-293

NOTICE OF ISSUANCE OF ENVIRONMENTAL ASSESSMENT AND  
FINDING OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. DPR-35, issued to the Boston Edison Company (BECo, or the licensee), for operation of the Pilgrim Nuclear Power Station, located in Plymouth, Massachusetts.

Identification of Proposed Action:

The amendment would consist of changes to the Technical Specifications (TSs) and would authorize an increase of the storage capacity of the spent fuel pool (SFP) from 2320 fuel assemblies to 3859 fuel assemblies.

The NRC staff has prepared an Environmental Assessment of the Proposed Action.

Summary of Environmental Assessment:

The "Final Generic Environmental Impact Statement (FGEIS) on Handling and Storage of Spent Light Water Power Reactor Fuel" (NUREG-0575), Volumes 1-3, concluded that the environmental impact of interim storage of spent fuel was negligible and the cost of the various alternatives reflects the advantage of continued generation of nuclear power with the accompanying spent fuel storage. Because of the differences in design, the FGEIS recommended evaluating SFP expansions on a case-by-case basis.

For Pilgrim, the expansion of the storage capacity of the SFP will not create any significant additional radiological effects or nonradiological environmental impacts.

The additional whole body dose that might be received by an individual at the site boundary and the estimated dose to the population within an 80 kilometer radius is believed to be too small to have any significance when compared to the fluctuations in the annual dose this population receives from exposure to background radiation. The occupational radiation dose for the proposed operation of the expanded SFP is estimated to be extremely small compared to the total annual occupational radiation exposure for this facility.

The only nonradiological impact affected by the SFP expansion is the waste heat rejected. The total increase in heat load rejected to the environment will be small in comparison to the amount of total heat currently being released. There is no significant environmental impact attributed to the waste heat from the plant due to this very small increase.

#### FINDING OF NO SIGNIFICANT IMPACT

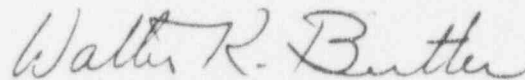
The staff has reviewed the proposed SFP expansion to the facility relative to the requirements set forth in 10 CFR Part 51. Based on this assessment, the NRC staff concludes that there are no significant radiological or nonradiological impacts associated with the proposed action and that the issuance of the proposed amendment to the license will have no significant impact on the quality of the human environment. Therefore, pursuant to 10 CFR 51.31, no environmental impact statement needs to be prepared for this action.

For further details with respect to this action, see (1) the application for amendment to the TSs dated February 11, 1993, (2) the FGEIS on Handling and Storage of Spent Light Water Power Reactor Fuel (NUREG-0575), (3) the Final Environmental Statement for the Pilgrim Nuclear Power Station, dated May 1972, and (4) the Environmental Assessment dated June 15, 1994 .

These documents are available for public inspection at the Commission's Public Document Room, 2120 L Street, NW., Washington, DC 20555, and at the local public document room located at Plymouth Public Library, 11 North Street, Plymouth, Massachusetts 02360.

Dated at Rockville, Maryland, this 15th day of June 1994.

FOR THE NUCLEAR REGULATORY COMMISSION



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