

50-293



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 30, 1997

Mr. E. Thomas Boulette, Ph.D
Senior Vice President - nuclear
Boston Edison Company
Pilgrim Nuclear Power Station
RFD #1 Rocky Hill Road
Plymouth, MA 02360

SUBJECT: REQUEST TO CREDIT CONTAINMENT OVERPRESSURE TO SATISFY NET POSITIVE SUCTION HEAD (NPSH) REQUIREMENTS, AND SUBSEQUENT DEFERRAL OF REVIEW REQUEST BASED ON 10 CFR 50.59 EVALUATION - PILGRIM NUCLEAR POWER STATION (TAC NO. M97789)

Dear Mr. Boulette:

By letters dated January 20 and January 30, 1997, the Boston Edison Company (BECo/the licensee) submitted an amendment request for the Pilgrim Nuclear Power Station (PNPS). The licensee requested to update the Updated Final Safety Analysis Report (UFSAR) to credit containment overpressure to satisfy Emergency Core Cooling System (ECCS) pump NPSH requirements, and also requested approval of revised containment pressure and suppression pool temperature analyses for an increased ultimate heat sink temperature of 75 °F, versus the current 65 °F. The NRC staff had determined that the licensee's need for containment overpressure constituted an Unreviewed Safety Question (USQ) and approval of the amendment request was needed to support plant startup.

The licensee subsequently determined that because of the reduced head losses associated with new ECCS suction strainers installed during the refueling outage 11, credit for containment overpressure, assuming a 65 °F ultimate heat sink temperature, is no longer necessary to satisfy low-pressure coolant injection and core spray pump NPSH requirements. By letter dated April 11, 1997, the licensee submitted a 10 CFR 50.59 safety evaluation supporting this conclusion and committed to enter a "loss of containment cooling" limiting condition for operation when the ultimate heat sink temperature exceeds 65 °F. By letter dated June 20, 1997, BECo revised the above commitment by changing the administrative limit from 65 °F to 68 °F. BECo has performed analysis using a 68 °F seawater temperature and determined that credit for containment overpressure is not needed at this temperature. While we have not been able to perform an in depth review of your June 20, 1997, submittal the 10 CFR 50.59 safety evaluation appears to be consistent with the plant's licensing basis. We acknowledge that BECo has concluded that overpressure is not necessary to satisfy NPSH requirements at 68 °F or less and that the change of the administrative limit on service water temperature has been implemented.

1/0 DFM

9707020360 970630
PDR ADOCK 05000293
P PDR

NRC FILE CENTER COPY

E. Thomas Boulette

- 2 -

If you have any questions in this matter, please contact Mr. Alan Wang at (301) 415-1445.

Sincerely,

Original signed by

Patrick D. Milano, Acting Director
Project Directorate I-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-293

cc: See next page

Distribution

| | | |
|-------------|------------|------------|
| Docket File | AWang | CBerlinger |
| PUBLIC | OGC | RConte, RI |
| PDI-3 RF | ACRS | |
| SVarga | GCarpenter | |
| PMilano | HDawson | |
| JKudrick | | |

DOCUMENT NAME: G:\PILGRIM\NPSH.592

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

| | | | | | | | |
|--------|------------------|-------------------|-------------------|--|--|--|--|
| OFFICE | PM:PDI-3 | LA:PDI-1 | (A)D:PDI-3 | | | | |
| NAME | AWang <i>pkw</i> | SLittle <i>SL</i> | PMilano <i>PK</i> | | | | |
| DATE | 06/30/97 | 06/30/97 | 06/30/97 | | | | |

OFFICIAL RECORD COPY

E. Thomas Boulette

Pilgrim Nuclear Power Station

cc:

Mr. Leon J. Olivier
Vice President of Nuclear
Operations & Station Director
Pilgrim Nuclear Power Station
1FD #1 Rocky Hill Road
Plymouth, MA 02360

Mr. Jeffery Keene
Licensing Division Manager
Boston Edison Company
600 Rocky Hill Road
Plymouth, MA 02360-5599

Resident Inspector
U. S. Nuclear Regulatory Commission
Pilgrim Nuclear Power Station
Post Office Box 857
Plymouth, MA 02360

Ms. Nancy Desmond
Manager, Reg. Affairs Dept.
Pilgrim Nuclear Power Station
RFD #1 Rocky Hill Road
Plymouth, MA 02360

Chairman, Board of Selectmen
11 Lincoln Street
Plymouth, MA 02360

Mr. David F. Tarantino
Nuclear Information Manager
Pilgrim Nuclear Power Station
RFD #1, Rocky Hill Road
Plymouth, MA 02360

Chairman, Duxbury Board of Selectmen
Town Hall
878 Tremont Street
Duxbury, MA 02332

Ms. Kathleen M. O'Toole
Secretary of Public Safety
Executive Office of Public Safety
One Ashburton Place
Boston, MA 02108

Office of the Commissioner
Massachusetts Department of
Environmental Protection
One Winter Street
Boston, MA 02108

Mr. Peter LaPorte, Director
Attn: James Muckerheide
Massachusetts Emergency Management
Agency
400 Worcester Road
P.O. Box 1496
Framingham, MA 01701-0317

Office of the Attorney General
One Ashburton Place
20th Floor
Boston, MA 02108

Chairman, Citizens Urging
Responsible Energy
P.O. Box 2621
Duxbury, MA 02331

Mr. Robert M. Hallisey, Director
Radiation Control Program
Massachusetts Department of
Public Health
305 South Street
Boston, MA 02130

Citizens at Risk
P.O. Box 3803
Plymouth, MA 02361

Regional Administrator, Region I
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

W.S. Stowe, Esquire
Boston Edison Company
800 Boylston St., 36th Floor
Boston, MA 02199

Ms. Jane Fleming
8 Oceanwood Drive
Duxbury, MA 0233

cc: (cont.)

Chairman
Nuclear Matters Committee
Town Hall
11 Lincoln Street
Plymouth, MA 02360

Mr. William D. Meinert
Nuclear Engineer
Massachusetts Municipal Wholesale
Electric Company
P.O. Box 426
Ludlow, MA 01056-0426