

July 31, 2006

Mr. Michael Kansler
President
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601-1839

SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
PILGRIM NUCLEAR POWER STATION LICENSE RENEWAL APPLICATION
(TAC MC9669)

Dear Mr. Kansler:

By letter dated January 25, 2006, Entergy Nuclear Operations, Inc. submitted an application pursuant to 10 CFR Part 54, to renew the operating license for Pilgrim Nuclear Power Station for review by the U.S. Nuclear Regulatory Commission (NRC). The NRC staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review. These requests for additional information address license renewal scoping and screening aspects for reactor coolant system (Section 2.3.1), engineered safety features (Section 2.3.2), and auxiliary systems (Section 2.3.3).

These questions were discussed with a member of your staff, Bryan Ford, and a mutually agreeable date for this response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-1478 or e-mail RXS2@nrc.gov.

Sincerely,

/RA/

Ram Subbaratnam, Project Manager
License Renewal Branch A
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-293

Enclosure:
Requests for Additional Information

cc w/encl: See next page

July 31, 2006

Mr. Michael Kansler
President
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601-1839

SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
PILGRIM NUCLEAR POWER STATION LICENSE RENEWAL APPLICATION
(TAC MC9669)

Dear Mr. Kansler:

By letter dated January 25, 2006, Entergy Nuclear Operations, Inc. submitted an application pursuant to 10 CFR Part 54, to renew the operating license for Pilgrim Nuclear Power Station for review by the U.S. Nuclear Regulatory Commission (NRC). The NRC staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review. These requests for additional information address license renewal scoping and screening aspects for reactor coolant system (Section 2.3.1), engineered safety features (Section 2.3.2), and auxiliary systems (Section 2.3.3).

These questions were discussed with a member of your staff, Bryan Ford, and a mutually agreeable date for this response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-1478 or e-mail RXS2@nrc.gov.

Sincerely,
/RA/

Ram Subbaratnam, Project Manager
License Renewal Branch A
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-293

Enclosure:
Requests for Additional Information

cc w/encl: See next page

ADAMS Accession No.: ML062120743

E:\Filenet\ML062120743.wpd

OFFICE	PM:RLRA:DLR	LA:RLRA:DLR	BC:REBB:DLR
NAME	RSubbaratnam	IKing	LLund
DATE	7/ 26 /06	7/ 21 /06	7/ 28 /06

OFFICIAL RECORD COPY

Letter to Michael Kansler from Ram Subbaratnam dated July 31, 2006

SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
PILGRIM NUCLEAR POWER STATION LICENSE RENEWAL APPLICATION
(TAC MC9669)

HARD COPY

DLR R/F

E-MAIL:

JFair
RWeisman
AMurphy
RPettis
GGalletti
DShum
GBagchi
SSmith (srs3)
SDuraiswamy
YL (Renee) Li
RidsNrrDir
RidsNrrDirRlra
RidsNrrDirRlrb
RidsNrrDe
RidsNrrDci
RidsNrrEemb
RidsNrrDeEeeb
RidsNrrDeEqva
RidsNrrDss
RidsNrrDnrl
RidsOgcMailCenter
RidsNrrAdes
DLR Staff

RSubbaratnam
Shoffman
SUttal
JShea
AWilliamson
MRazzaque
GCranston
GWilson
CAnderson, Region 1
WRaymond, Region 1
NSheehan, Region 1

Pilgrim Nuclear Power Station

cc:

Regional Administrator, Region I
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406-1415

Senior Resident Inspector
U. S. Nuclear Regulatory Commission
Pilgrim Nuclear Power Station
Post Office Box 867
Plymouth, MA 02360

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

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

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

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

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

Director, Radiation Control Program
Commonwealth of Massachusetts
Executive Offices of Health and
Human Services
174 Portland Street
Boston, MA 02114

Secretary of Public Safety
Executive Office of Public Safety
One Ashburton Place
Boston, MA 02108

Director, Massachusetts Emergency
Management Agency
Attn: James Muckerheide
400 Worcester Road
Framingham, MA 01702-5399

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

Mr. Michael A. Balduzzi
Site Vice President
Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5508

Mr. Stephen J. Bethay
Director, Nuclear Safety Assurance
Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5508

Mr. Bryan S. Ford
Manager, Licensing
Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5508

Mr. Gary J. Taylor
Chief Executive Officer
Entergy Operations
1340 Echelon Parkway
Jackson, MS 39213

cc:

Mr. John T. Herron
Sr. VP and Chief Operating Officer
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Mr. Oscar Limpias
Vice President, Engineering
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Mr. Christopher Schwarz
Vice President, Operations Support
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Mr. John F. McCann
Director, Nuclear Safety Assurance
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Ms. Charlene D. Faison
Manager, Licensing
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Mr. Michael D. Lyster
5931 Barclay Lane
Naples, FL 34110-7306

Mr. Michael J. Colomb
Director of Oversight
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Ms. Stacey Lousteau
Treasury Department
Entergy Services, Inc.
639 Loyola Avenue
New Orleans, LA 70113

Mr. James Sniezek
5486 Nithsdale Drive
Salisbury, MD 21801

Mr. Travis C. McCullough
Assistant General Counsel
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Mr. James Ross
Nuclear Energy Institute
1776 I Street, NW, Suite 400
Washington, DC 20006-3708

Plymouth Public Library
Attn: Dinah O'Brien
132 South Street
Plymouth, MA 02360

Duxbury Free Library
ATTN: Ms. Elaine Winquist
77 Alden Street
Duxbury, MA 02332

Kingston Public Library
ATTN: Reference Librarian
6 Green Street
Kingston, MA 02364

Ms. Mary Lampert
Duxbury Nuclear Advisory, Chair
Pilgrim watch, Director
148 Washington Street
Duxbury 02332

REQUESTS FOR ADDITIONAL INFORMATION (RAIs)
PILGRIM NUCLEAR POWER STATION
LICENSE RENEWAL APPLICATION SECTIONS 2.3.1, 2.3.2 and 2.3.3

2.3.1.1 Reactor Vessel

RAI 2.3.1.1-1

In Table 2.3.1-1 of the license renewal application (LRA), the reactor vessel leakage monitoring piping was not identified as a component within scope requiring an aging management review (AMR). The staff requests the applicant to identify the subject components within scope, because it is considered as part of the pressure boundary, and accordingly, it should be within the scope of license renewal and subject to AMR. If, however, the applicant believes that the components do not require an AMR, then they should provide plant-specific justification based on the description of the subject components, or any other relevant information, as to why the components need not be subjected to an AMR.

RAI 2.3.1.1-2

The staff believes that the scram discharge piping and volume should be in scope requiring aging management. However, it appears that the subject component was not identified in Table 2.3.1-1 of the LRA. Please justify.

RAI 2.3.1.1-3

The staff understands that the CRD Housing Supports (CRDHS) limit the travel of a control rod in the event that a control rod housing is ruptured. The supports prevent a nuclear excursion as a result of a housing failure, thus protecting the fuel barrier, and limiting radioactive releases. In addition, following a postulated failure of the drive housing at the attachment weld at the same time the control rod is withdrawn, and if the collet were to stay unlatched, the housing would separate from the vessel, and the drive and housing would be blown downward against the CRDHS. If credit is taken for the CRDHS; and since, the CRDHS are passive and long-lived, the staff believes that the subject components should be within the scope of license renewal requiring aging management. It appears, however, that the subject components and their intended function of limiting travel of the control rod following control rod housing rupture have not been identified in Table 2.3.1-1 of the LRA. Therefore, the staff requests the applicant to provide an explanation.

2.3.1.2 Reactor Vessel Internals (RVI)

RAI 2.3.1.2-1

In Section 2.3.1.2, "Reactor Vessel Internals," it was stated that RVI include local power range monitors. The staff understands that the neutron monitoring system (NMS) includes additional neutron monitors, such as, intermediate range monitors, rod block monitors, etc.; and these monitoring circuits, along with their electrical cables should be within scope of license renewal requiring aging management. The staff also noted that in Table 2.2-1b of the LRA, it was

Enclosure

indicated that a bounding approach was used for the NMS. The staff requests the applicant to clarify which neutron monitors and the related cables are considered within scope based on the bounding approach.

2.3.2.1 Residual Heat Removal System

RAI 2.3.2.1-1

The low pressure coolant injection coupling was identified in the Boiling Water Reactor Vessel and Internals Project (BWRVIP)-06 report as a safety-related component. It appears, however, that the component was not identified in Table 2.3.2-1 of the LRA requiring an AMR. If the component exists at Pilgrim Nuclear Power Station, then the staff requests the applicant to justify its exclusion from aging management; otherwise, submit an AMR for the subject component.

RAI 2.3.2.1-2

Please clarify whether the passive components, namely, vortex breakers used in pump suction lines, which could be located inside the emergency core cooling system tanks or in the sump, and whose intended functions are to protect the pumps from cavitation, are subject to an AMR. If so, identify which of these tanks are equipped with such passive components, and where in the LRA are the AMRs for these components, or provide justifications for exclusion of these components from AMRs.

2.3.2.4 & 2.3.2.5 High Pressure Coolant Injection(HPCI) & Reactor Core Isolation Cooling (RCIC)

RAI 2.3.2.4-1

The steam supply and return lines for HPCI and RCIC perform safety functions, and therefore, should be in scope of license renewal in accordance with 10 CFR 50.4(a)(1). The staff requests the applicant to clarify whether the subject components are in scope requiring an AMR.