

April 6, 2001

Mr. Mike Bellamy  
Site Vice President  
Entergy Nuclear Generation Company  
Pilgrim Nuclear Power Station  
600 Rocky Hill Road  
Plymouth, MA 02360

SUBJECT: PILGRIM NUCLEAR POWER STATION - ENVIRONMENTAL ASSESSMENT  
AND FINDING OF NO SIGNIFICANT IMPACT FOR AN EXEMPTION FROM  
THE REQUIREMENTS OF 10 CFR PART 50.60 AND APPENDIX G TO 10 CFR  
PART 50 (TAC NO. MB0561)

Dear Mr. Bellamy:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for exemption dated January 19, 2001, as supplemented by letter dated February 8, 2001. The proposed exemption would exempt the licensee from certain requirements of Appendix G to Part 50 of Title 10 of the *Code of Federal Regulations* to allow the application of the methodology approved for determining the pressure-temperature limit curves in the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, Code Case N-640 entitled, "Alternate Reference Fracture Toughness for Development of P-T Curves for ASME Section XI, Division I."

The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

**/RA/**

Alan B. Wang, Project Manager, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-293

Enclosure: Environmental Assessment

cc w/encl: See next page

Mr. Mike Bellamy  
Site Vice President  
Entergy Nuclear Generation Company  
Pilgrim Nuclear Power Station  
600 Rocky Hill Road  
Plymouth, MA 02360

April 6, 2001

SUBJECT: PILGRIM NUCLEAR POWER STATION - ENVIRONMENTAL ASSESSMENT  
AND FINDING OF NO SIGNIFICANT IMPACT FOR AN EXEMPTION FROM  
THE REQUIREMENTS OF 10 CFR PART 50.60 AND APPENDIX G TO 10 CFR  
PART 50 (TAC NO. MB0561)

Dear Mr. Bellamy:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for exemption dated January 19, 2001, as supplemented by letter dated February 8, 2001. The proposed exemption would exempt the licensee from certain requirements of Appendix G to Part 50 of Title 10 of the *Code of Federal Regulations* to allow the application of the methodology approved for determining the pressure-temperature limit curves in the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, Code Case N-640 entitled, "Alternate Reference Fracture Toughness for Development of P-T Curves for ASME Section XI, Division I."

The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

**/RA/**

Alan B. Wang, Project Manager, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-293

Enclosure: Environmental Assessment

cc w/encl: See next page

DISTRIBUTION:

|                    |             |                  |
|--------------------|-------------|------------------|
| PUBLIC             | J. Clifford | OGC              |
| PDI-2 Reading File | T. Clark    | ACRS             |
| A. Wang            | RGEB        | B. Platchek, RGI |
| E. Adensam         |             |                  |

Accession Number: ML010810212

|        |          |          |                         |        |                      |
|--------|----------|----------|-------------------------|--------|----------------------|
| OFFICE | PDI-2\PM | PDI-2\LA | RGEB                    | OGC    | PDI-2\SC             |
| NAME   | AWang    | TClark   | BZalcman for CCarpenter | CMarco | REnnis for JClifford |
| DATE   | 3/29/01  | 4/2/01   | 3/29/01                 | 4/5/01 | 4/6/01               |

Official Record Copy

Pilgrim Nuclear Power Station

cc:

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, 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

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

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

John M. Fulton  
Assistant General Counsel  
Pilgrim Nuclear Power Station  
600 Rocky Hill Road  
Plymouth, MA 02360-5599

Mr. C. Stephen Brennon  
Licensing Superintendent  
Pilgrim Nuclear Power Station  
600 Rocky Hill Road  
Plymouth, MA 02360-5599

Mr. Jack Alexander  
Manager, Reg. Relations and  
Quality Assurance  
Pilgrim Nuclear Power Station  
600 Rocky Hill Road  
Plymouth, MA 02360-5599

Mr. David F. Tarantino  
Nuclear Information Manager  
Pilgrim Nuclear Power Station  
600 Rocky Hill Road  
Plymouth, MA 02360-5599

Ms. Jane Perlov  
Secretary of Public Safety  
Executive Office of Public Safety  
One Ashburton Place  
Boston, MA 02108

Mr. Stephen J. McGrail, Director  
Attn: James Muckerheide  
Massachusetts Emergency Management  
Agency  
400 Worcester Road  
Framingham, MA 01702-5399

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

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

Ms. Mary Lampert, Director  
Massachusetts Citizens for Safe Energy  
148 Washington Street  
Duxbury, MA 02332

UNITED STATES NUCLEAR REGULATORY COMMISSION

ENTERGY NUCLEAR GENERATION COMPANY

PILGRIM NUCLEAR POWER STATION

DOCKET NO. 50-293

ENVIRONMENTAL ASSESSMENT AND FINDING OF

NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an exemption from certain requirements of Appendix G to Part 50 of Title 10 of the *Code of Federal Regulations* (10 CFR Part 50) for Facility Operating License No. DPR-35, issued to Entergy Nuclear Generation Company, (the licensee), for operation of the Pilgrim Nuclear Power Station (Pilgrim), located in Plymouth, Massachusetts.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed action would exempt the licensee from certain requirements of Appendix G to 10 CFR Part 50 to allow the application of the methodology approved for determining the pressure-temperature (P-T) limit curves in the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, Code Case N-640 entitled, "Alternate Reference Fracture Toughness for Development of P-T Curves for ASME Section XI, Division I."

The proposed action is in accordance with the licensee's application for an exemption dated January 19, 2001, as supplemented by letter dated February 8, 2001.

The Need for the Proposed Action:

The licensee would like to revise the currently approved methodology for P-T limit calculations to incorporate the methodology approved for use in Code Case N-640. Code Case N-640 allows the use of  $K_{Ic}$  fracture toughness curve instead of  $K_{Ia}$  fracture toughness curve, as required by Appendix G to Section XI, for determining P-T limits for reactor pressure vessel (RPV) materials. The exemption is needed because the methodology in Code Case N-640 is less conservative in determining P-T limits than the approved methodology in Appendix G of Section XI. The proposed action also supports the licensee's application for a license amendment, dated November 22, 2000, as supplemented on January 30 and February 2, 2001, to revise the Technical Specifications (TSs) P-T limits for the remainder of operating cycles 13 and 14.

In the associated exemption, the staff has determined that, pursuant to 10 CFR 50.12(a)(2)(ii), the underlying purpose of the regulation will continue to be served by the implementation of the code case.

Environmental Impacts of the Proposed Action:

The NRC has completed its evaluation of the proposed action and concludes that the exemption described above would provide an adequate margin of safety against brittle failure of the RPV at Pilgrim.

The proposed action will not significantly increase the probability or consequences of accidents, no changes are being made in the types of any effluents that may be released off site, and there is no significant increase in occupational or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential nonradiological impacts, the proposed action does not involve any historic sites. It does not affect nonradiological plant effluents and has no other

environmental impact. Therefore, there are no significant nonradiological environmental impacts associated with the proposed action.

Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action.

Alternatives to the Proposed Action:

As an alternative to the proposed action, the staff considered denial of the proposed action (i.e., the "no-action" alternative). Denial of the application would result in no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources:

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for the Pilgrim Nuclear Power Station dated May 1972.

Agencies and Persons Consulted:

In accordance with its stated policy, on March 14, 2001, the staff consulted with the Massachusetts State official, James Muckerheide of the Massachusetts Emergency Management Agency, regarding the environmental impact of the proposed action. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

On the basis of the environmental assessment, the NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated January 19, 2001, as supplemented by letter dated February 8, 2001. Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room, located at One White

Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records will be accessible electronically from the ADAMS Public Library component on the NRC Web site, <http://www.nrc.gov> (the Electronic Reading Room).

Dated at Rockville, Maryland, this 6th day of April 2001.

FOR THE NUCLEAR REGULATORY COMMISSION

***/RA/***

Alan B. Wang, Project Manager, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation