



Entergy Nuclear Operations, Inc.  
Pilgrim Nuclear Power Station  
600 Rocky Hill Road  
Plymouth, MA 02360

Michael A. Balduzzi  
Site Vice President

August 7, 2003

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555-0001

SUBJECT: Entergy Nuclear Operations, Inc.  
Pilgrim Nuclear Power Station  
Docket No. 50-293  
License No. DPR-35

Response to NRC Request for Additional Information in Support of  
Proposed changes to Jet Pump Operability Surveillance Requirements  
(TAC NO. MB7950)

REFERENCES:

1. Entergy Letter No. 2.03.001, Request for Amendment to the Technical Specifications (TS), Jet Pump Operability Surveillance Requirements and Correction to Reference Cited in TS 4.11.C.1, Revision 1, dated, January 30, 2003.
2. NRC Letter, Request for Additional Information Re: Jet Pump Operability Surveillance Requirements and Correction to Reference Cited in TS 4.11.C.1 (TAC No. MB7950), dated July 31, 2003

LETTER NUMBER: 2.03.087

Dear Sir or Madam:

By Reference 1, Entergy requested review and approval of changes to Pilgrim's Technical Specification (TS) 4.6.E, jet pump surveillance requirements and its Bases and a correction to a reference in TS 4.11.C.1, in accordance with 10 CFR 50.90.

The attachment to this letter provides the Pilgrim response to the NRC Request for Additional Information, dated July 31, 2003 (Reference 2), in support of the referenced submittal. This response does not impact the no significant hazards consideration determination (10 CFR 50.92(c)) provided in the referenced submittal.

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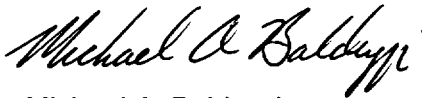
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If you have any questions or require additional information, please contact Mr. Bryan Ford, Licensing Manager, at (508) 830-8403.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on the 7th day of August 2003.

Sincerely,



Michael A. Balduzzi

Attachment: Pilgrim Response to NRC Request for Additional Information (1 page)

cc:

Mr. Travis Tate, Project Manager  
Office of Nuclear Reactor Regulation  
Mail Stop: 0-8B-1  
U.S. Nuclear Regulatory Commission  
1 White Flint North  
11555 Rockville Pike  
Rockville, MD 20852

U.S. Nuclear Regulatory Commission  
Region 1  
475 Allendale Road  
King of Prussia, PA 19406

Senior Resident Inspector  
Pilgrim Nuclear Power Station

Mr. Steve McGrail, Director  
Mass. Emergency Management Agency  
400 Worcester Road  
P.O. Box 1496  
Framingham, MA 01702

Mr. Robert Walker  
Radiation Control Program  
Commonwealth of Massachusetts  
Exec Offices of Health & Human Services  
174 Portland Street  
Boston, MA 02114

## ATTACHMENT

### PILGRIM RESPONSE TO NRC REQUEST FOR ADDITIONAL INFORMATION DATED JULY 31, 2003 (TAC NO. MB7950)

REQUEST FOR AMENDMENT TO THE TECHNICAL SPECIFICATIONS, 4.6.E, JET PUMP OPERABILITY SURVEILLANCE AND CORRECTION TO REFERENCE CITED IN TS 4.11.C.1

#### NRC REQUEST

In your application dated January 30, 2003, you reference the requirements in NUREG-1434, Standard Technical Specifications (STS) for BWR/6 in your proposed change instead of the requirements in NUREG-1433, STS for BWR/4, at several sections in the submittal. In BWR/6 plants, flow control valves are used rather than the variable pump speed for recirculation flow control. Pilgrim utilizes the variable pump speed design for flow control. Please provide an explanation of why Entergy proposes the use of the jet pump operability requirements in NUREG-1434, STS for BWR/6, rather than STS for BWR/4? Please address the impact, if any, of the difference in pumps for flow control on your proposed changes.

#### PILGRIM RESPONSE

The current and proposed Jet Pump Operability surveillances included in Pilgrim TS 4.6.E are consistent with the surveillances included in GE STS, NUREG-0123, Rev. 2, dated August 1979, which are similar to the surveillances in BWR/6 STS. Pilgrim elected to reference the BWR/6 STS because the format and content of Pilgrim's current and proposed surveillances are similar to the BWR/6 surveillances, rather than BWR/4. Also, use of BWR/6 surveillances is consistent with BWR/4 STS as stated in the Reviewer's Note on page 3.4-4 of BWR/4 STS. Further, the proposed surveillances were chosen to prevent modifying the surveillance methodology, which is currently required by the Pilgrim Technical Specifications while resolving the non-conservative acceptance criteria in the current Technical Specifications. The NSSS vendor recommended the proposed surveillance criteria.

The Pilgrim TS 4.6.E.1 compares recirculation loop flows to each other at the same pump speeds (within  $\pm 5\%$ ), whereas, the BWR/6 STS looks at established relationships among the flow control valve position, recirculation flow, and pump speed. Pilgrim does not have flow control valves and operates with both gate valves in full open positions. With both gate valves full open and the recirculation pumps operating at the same speed, a significant difference in flow between the recirculation loops could indicate a jet pump failure. Accordingly, TS 4.6.E.1 compares recirculation loop flows to each other at the same pump speeds with full open gate valves. Consistent with the acceptance criteria for a difference of 10% from the expected flow rates in BWR/6 surveillance, 10% is proposed in Pilgrim TS as the acceptance criteria for this surveillance. The NSSS vendor suggested this value based on industry experience to resolve the non-conservative acceptance criteria.