



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

Michael A. Balduzzi
Site Vice President

August 19, 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

License Amendment Request to Amend Technical Specifications (TS)
Table 3.2.C-1

REFERENCES: 1. BECo Letter No. 91-0005, Proposed Technical Specification
APRM, RBM, and TS Improvement Program, dated January 22,
1991.

2. License Amendment 138, dated July 1, 1991

3. Entergy Letter No. 2.03.076, Core Operating Limits Report,
Revision 15A, dated, May 13, 2003.

LETTER NUMBER: 2.03.090

Dear Sir or Madam:

Entergy requests NRC approval of proposed changes to Pilgrim's Technical Specification (TS) Tables 3.2.C-1 in accordance with 10 CFR 50.90.

Entergy proposes a correction to the Rod Block Monitor (RBM) power dependent set point numerical allowable value from $\leq 29\%$ to $\leq 25.9\%$ in TS Table 3.2.C-1. A set point value of $\leq 29\%$ instead of $\leq 25.9\%$ was incorrectly inserted in the proposed Technical Specification change request (Ref. 1) that was carried through the License Amendment 138 (Ref. 2). The plant procedures and Core Operating Limits Report (COLR) (Ref. 3) have enforced the correct set point value of $\leq 25.9\%$ derived from the NRC approved methodology in compliance with TS 5.6.5. This proposed change corrects the error in Note 5 for Table 3.2.C-1 to conform to the value used in plant procedures and COLR since the issuance of License Amendment 138.

Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station

Letter Number: 2.03.090
Page 2

The enclosure provides an evaluation of the proposed change and mark-up of Technical Specification.

Pilgrim has reviewed the proposed amendment in accordance with 10 CFR 50.92 and concludes it does not involve a significant hazards consideration.

Entergy requests approval of this change by September 1, 2004. Once approved, the amendment will be implemented within 60 days.

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 19th day of AUGUST 2003.

Sincerely,



Michael A. Balduzzi

Enclosure: Evaluation Of The Proposed Changes - 4 pages

Attachment: 1. Proposed Technical Specification (mark-up) - 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

ENCLOSURE

Evaluation Of The Proposed Changes

Subject: Request for Amendment to the Technical Specifications Table 3.2.C-1

- 1. DESCRIPTION**
- 2. PROPOSED CHANGES**
- 3. BACKGROUND**
- 4. TECHNICAL ANALYSIS**
- 5. REGULATORY SAFETY ANALYSIS**
 - 5.1 No Significant Hazards Consideration**
- 6. ENVIRONMENTAL CONSIDERATION**
- 7. REFERENCES**

1. **DESCRIPTION**

This letter is a request to amend Operating License DPR-35 for Pilgrim Nuclear Power Station. The proposed amendment revises Technical Specification (TS) Note 5 to Table 3.2.C-1.

A correction to the Rod Block Monitor (RBM) Power Dependent Low Power Set Point (LPSP) numerical allowable value from $\leq 29\%$ to $\leq 25.9\%$ in Note 5 to TS Table 3.2.C-1 is proposed. The set point value of $\leq 29\%$ instead of $\leq 25.9\%$ was incorrectly inserted in the proposed Technical Specification change that was carried through the License Amendment 138 (Reference 1 and 2). This error is corrected to conform to the Core Operating Limits Report (COLR) submitted to the NRC for fuel cycle 15 (Ref. 3). Section 2.3 of COLR correctly identifies the set point allowable value as $\leq 25.9\%$ of rated power.

The above-proposed change had no impact on the safe operation of Pilgrim station because the actual allowable RBM LPSP set point value of $\leq 25.9\%$ has been enforced by COLR and plant procedures.

Entergy requests approval of this change by September 1, 2004.

2. **PROPOSED CHANGES**

The last sentence of Note 5 for TS Table 3.2.C-1 on TS page 3/4.2-22 is revised to state as follows:

"The allowable value for the LPSP is $\leq 25.9\%$ of rated core thermal power."

3. **BACKGROUND**

BECo Letter No. 91-005, dated January 22, 1991 (Ref. 1) proposed changes to Pilgrim Technical Specifications to implement ARTS (Average Power Range Monitor, Rod Block Monitor and Technical Specification) improvement program. A set point value of $\leq 29\%$ instead of $\leq 25.9\%$ was incorrectly inserted in the proposed Technical Specification change request (Ref. 1). That incorrect allowable set point value was carried through the License Amendment 138 (Ref. 2). However, the error was not translated into COLR and plant procedures. The COLR and plant procedures correctly specified the RBM LPSP as $\leq 25.9\%$ of rated core thermal power. This proposed TS change corrects the error to conform to the COLR (Ref. 3) and plant procedures. Section 2.3 of COLR correctly specifies the RBM LPSP allowable value as $\leq 25.9\%$.

4. **TECHNICAL ANALYSIS**

Pilgrim is required to operate within the core operating limits, as derived in accordance with NRC approved methodology in compliance with TS 5.6.5. Accordingly, Pilgrim has submitted the core operating limits report for cycle 15. Section 2.3 of the report specifies the allowable values for the power-dependant rod block monitor trip setpoints. The low power set point limit specified is $\leq 25.9\%$. This bounding value is from the calculations

done for the ARTS program submitted for the NRC approval (Ref. 1) and approved by License Amendment 138 (Ref. 2).

Compliance with the low power set point assures RBM downscale trip is bypassed for reactor power $\leq 25.9\%$ of rated thermal power.

The proposed TS change is more conservative than the current incorrect requirement. The proposed RBM LPSP allowable value of $\leq 25.9\%$ provides rod block protection over a wider power range from $\leq 25.9\%$ to 100%, instead of $\leq 29\%$ to 100%, thereby enforcing RBM protection against a rod withdrawal error at a lower power level. The proposed requirement is consistent with the COLR and is in accordance with License Amendment 138. Pilgrim has enforced a RBM LPSP set point value of $\leq 25.9\%$ since the License Amendment 138.

5. REGULATORY SAFETY ANALYSIS

5.1 No Significant Hazards Consideration

Entergy Nuclear Operations, Inc. (Entergy) proposes to correct the Rod Block Monitor Low Power Set Point (LPSP) to $\leq 25.9\%$ from $\leq 29\%$ in Note 5 of Technical Specification Table 3.2.C-1. Entergy has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of Amendment," as discussed below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed Rod Block Monitor (RBM) power dependant Low Power Set Point (LPSP) of $\leq 25.9\%$ corrects the incorrect value of $\leq 29\%$ in Note 5 of TS Table 3.2.C-1 and is more restrictive than the incorrect value. The proposed set point allowable value of $\leq 25.9\%$ provides rod block protection over a wider power range from $\leq 25.9\%$ to 100%, instead of $\leq 29\%$ to 100%, thereby enforcing RBM protection against rod withdrawal error at a lower power level. Also, the proposed requirement is consistent with the core operating limits report and is in accordance with License Amendment 138.

The proposed RBM LPSP value ensures safe operation of the plant during startup and run modes. This requirement is not an accident precursor. The proposed analytical value $\leq 25.9\%$ was derived from the Average Power Range Monitor, Rod Block Monitor and Technical Specification (ARTS) improvement program methodology that was approved by License Amendment 138 and complies with the analytical methods required by Technical Specification 5.6.5. The proposed change provides additional assurance that the core operating limits are followed for safe operation and assumptions for core operating limits are met.

Therefore, the probability or consequence of an accident previously evaluated is not significantly increased.

2. Does the proposed change create the possibility of a new or different kind of accident for any accident previously evaluated?

Response: No

The proposed change does not involve a change to the plant design or a new mode of equipment operation and enforces previously evaluated conditions. As a result, the proposed changes do not affect parameters or conditions that could contribute to the initiation of any new or different kind of accident. Therefore, this proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the change involve a significant reduction in a margin of safety?

Response: No

The proposed change increases the margin of safety by providing additional assurance that the RBM downscale trip is not bypassed for reactor power $\geq 25.9\%$ of rated thermal power and is based on previously evaluated methodologies. Therefore, the proposed change does not involve a significant reduction in the margin of safety.

Based on the above, Entergy concludes that this proposed license amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and accordingly a finding of "no significant hazards consideration" is justified.

6. ENVIRONMENTAL CONSIDERATIONS

The proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant change in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.2(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

7. REFERENCES

1. BECo Letter No. 91-0005, Proposed Technical Specification APRM, RBM, and TS Improvement Program, dated January 22, 1991.
2. License Amendment 138, dated July 1, 1991
3. Entergy Letter No. 2.03.076, Core Operating Limits Report 15A, dated, May 13, 2003.

ATTACHMENT 1

Proposed Technical Specification (mark-up) -1 page

TS Page 3/4.2-22



203090.pdf

NOTES FOR TABLE 3.2.C-1

1. Deleted
2. a. With one RBM Channel inoperable:
 - (1) restore the inoperable RBM channel to operable status within 24 hours; otherwise place one rod block monitor channel in the tripped condition within the next hour, and;
 - (2) prior to control rod withdrawal, perform an instrument function test of the operable RBM channel.
- b. With both RBM channels inoperable, place at least one inoperable rod block monitor channel in the tripped condition within one hour.
3. Deleted
4. Deleted
5. RBM operability is required in the run mode in the presence of a limiting rod pattern with reactor power greater than the RBM low power setpoint (LPSP). A limiting rod pattern exists when:

$\text{MCPR} < 1.41$ for reactor power $\geq 90\%$

$\text{MCPR} < 1.72$ for reactor power $< 90\%$

The allowable value for the LPSP is $\leq 25.9\%$ of rated core thermal power.
6. Deleted
7. With one or more Reactor Mode Switch - Shutdown Position channels inoperable, suspend control rod withdrawal and initiate action to fully insert all insertable control rods in core cells containing one or more fuel assemblies immediately.