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 RECIP. NAME RECIPIENT AFFILIATION  
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SUBJECT: Application for amend to License NPF-74 changing Tech Specs  
 to increase negative moderator temp coefficient limit.

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## Arizona Nuclear Power Project

P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

161-00927-EEVB/PGN  
April 7, 1988

Docket Nos. STN 50-530

U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

ATTN: Document Control Desk

Dear Sirs:

Subject: Palo Verde Nuclear Generating Station (PVNGS)  
Unit 3  
Technical Specification Amendment -  
Section 3/4.1.1.3  
File: 88-F-005-419.05; 88-D-056-026

Attached please find proposed changes to the PVNGS Unit 3 Technical Specifications. The proposed change increases the negative Moderator Temperature Coefficient limit from -30 pcm/<sup>o</sup>F to -35 pcm/<sup>o</sup>F.

Enclosed with the amendment request package, are the following:

- A. Description of the Technical Specification Amendment Request.
- B. Purpose of the Technical Specification.
- C. Need for the Technical Specification Amendment.
- D. Basis for Proposed No Significant Hazards Consideration Determination.
- E. Safety Evaluation for the Amendment Request.
- F. Environmental Impact Consideration Determination.
- G. Marked-up Technical Specification Change Pages.

Once issued, the technical specification amendment will be implemented within thirty days of the effective date.

By copy of this letter, we are also forwarding the proposed changes to the appropriate state agency.

In accordance with the requirements of 10CFR170.12(c), the license amendment application fee of \$150.00 is being forwarded to the Facilities Program Coordinator of LFMB.

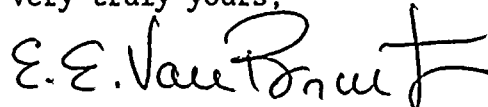
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If you have any questions, please call A. C. Rogers at (602) 371-4041.

Very truly yours,



E. E. Van Brunt, Jr.  
Executive Vice President  
Project Director

EEVB/PGN/l  
Attachments

cc: A. C. Gehr (all w/a)  
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E. A. Licitra  
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C. E. Tedford  
R. M. Diggs (w/WFD \$150)



## ATTACHMENT

### A. DESCRIPTION OF THE TECHNICAL SPECIFICATION AMENDMENT REQUEST

Technical Specification (TS) 3/4.1.1.3 provides limits on the Moderator Temperature Coefficient (MTC). The proposed change will increase the negative MTC limit from -30 pcm/ $^{\circ}$ F to -35 pcm/ $^{\circ}$ F.

### B. PURPOSE OF THE TECHNICAL SPECIFICATION

The limitations on MTC are provided to ensure that the assumptions used in the accident and transient analysis remain valid through each fuel cycle.

### C. NEED FOR THE TECHNICAL SPECIFICATION AMENDMENT

During initial testing on PVNGS Unit 1, a concern was raised over the location of the safety injection line drains and the effect on safety analysis assumptions. The larger dilution volume which resulted was compensated for by using a reduced value of MTC (-30 pcm/ $^{\circ}$ F) in the Steam Line Break Analysis. A change request was submitted for Unit 1 to reduce the lower MTC limit to -30 pcm/ $^{\circ}$ F to reflect the new safety analysis assumption, but the drain line was relocated prior to NRC approval of the change and the TS change request was withdrawn.

The MTC limit of -30 pcm/ $^{\circ}$ F was incorporated in the initial Units 2 and 3 TS under the assumption that the drain line relocation for Units 2 and 3 would occur at the first refueling outage. In reality, the drain line relocation was performed for Units 2 and 3 during initial start-up for each unit. The Unit 2 limit was changed back to -35 pcm/ $^{\circ}$ F as part of the Unit 2 Cycle 2 reload TS. This change is necessary to change the Unit 3 TS limit back to the original value assumed in the safety analysis (-35 pcm/ $^{\circ}$ F).

### D. BASIS FOR PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

1. The Commission has provided standards for determining whether a significant hazards consideration exists as stated in 10CFR50.92. A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with a proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

A discussion of these standards as they relate to the amendment request follows:

Standard 1--Involve a significant increase in the probability or consequences of an accident previously evaluated.





The proposed change will not increase the probability or consequences of an accident previously evaluated. The TS limit is set by the steam line break design basis accident. Since the proposed value of  $-35 \text{ pcm}/^{\circ}\text{F}$  is the same value assumed in the analysis, the probability or consequences of an accident previously evaluated will not be increased.

Standard 2--Create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change will not create the possibility of a new or different kind of accident from any accident previously evaluated. The MTC only affects core response, therefore the possibility of a new or different kind of accident from any previously evaluated will not be created.

Standard 3--Involve a significant reduction in a margin of safety.

The proposed change will not reduce a margin of safety as defined in the TS. The basis for the MTC limit is to ensure that assumptions used in the safety analyses remain valid through each fuel cycle. The current MTC limit of  $-30 \text{ pcm}/^{\circ}\text{F}$  in the Unit 3 TS was required to compensate for the as-built safety injection drain line configuration. Subsequently, the drain lines were reconfigured so that the MTC limit of  $-35 \text{ pcm}/^{\circ}\text{F}$  that was assumed in the safety analyses would be valid. Therefore, increasing the MTC limit from  $-30 \text{ pcm}/^{\circ}\text{F}$  to  $-35 \text{ pcm}/^{\circ}\text{F}$  does not reduce the margin of safety defined in the TS.

2. The proposed change matches the guidance concerning the application of the standards for determining whether or not a significant hazards consideration exists (51FR7751) by the example:

(vi) A change which either may result in some increase to the probability or consequences of a previously analyzed accident or may reduce in some way a safety margin, but where the results of the change are clearly within all acceptable criteria with respect to the system or component specified in the Standard Review Plan: for example, a change resulting from the application of a small refinement of a previously used calculation model or design method.

and

(ix) Other: A change to return the TS to the original limits, where the TS were previously amended in response to an as-built condition that has been since modified to meet the original design.

#### E. SAFETY EVALUATION FOR THE AMENDMENT REQUEST

The proposed change will not increase the probability or consequences of an accident or malfunctioning of equipment important to safety previously evaluated. The TS limit is set by the steam line break design basis accident. Since the proposed value of  $-35 \text{ pcm}/^{\circ}\text{F}$  is the same value assumed in the analysis, the probability or consequences of an accident previously evaluated will not be increased. The malfunction of equipment was also considered in the steam line break analysis. Since the proposed value of  $-35 \text{ pcm}/^{\circ}\text{F}$  is the same value assumed in the analysis, the probability or consequences of a malfunction of equipment important to safety will not be increased.



The proposed change will not create the possibility of a new or different kind of accident from any accident previously evaluated. The MTC only affects core response, therefore the possibility of a new or different kind of accident from any previously evaluated will not be created.

The proposed change will not reduce a margin of safety as defined in the TS. The basis for the MTC limit is to ensure that assumptions used in the safety analyses remain valid through each fuel cycle. The current MTC limit of -30 pcm/ $^{\circ}$ F in the Unit 3 TS was required to compensate for the as-built safety injection drain line configuration. Subsequently, the drain lines were reconfigured so that the MTC limit of -35 pcm/ $^{\circ}$ F that was assumed in the safety analyses would be valid. Therefore, increasing the MTC limit from -30 pcm/ $^{\circ}$ F to -35 pcm/ $^{\circ}$ F does not reduce the margin of safety defined in the TS.

F. ENVIRONMENTAL IMPACT CONSIDERATION DETERMINATION

The proposed change request does not involve an unreviewed environmental question because operation of PVNGS Unit 3 in accordance with this change would not:

1. Result in a significant increase in any adverse environmental impact previously evaluated in the Final Environmental Statement (FES) as modified by the staff's testimony to the Atomic Safety and Licensing Board;
2. Result in a significant change in effluents of power levels; or
3. Result in matters not previously reviewed in the licensing basis for PVNGS which may have a significant environmental impact.

G. MARKED-UP TECHNICAL SPECIFICATION CHANGE PAGES

Limiting Conditions for Operation and Surveillance Requirements:

Figure 3.1-1

