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SUBJECT: Application for amends to Licenses NPF-51 & NPF-65, changing
 max enrichment in fuel assemblies from 4.0 % U-235 to 4.05%.

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161-00500-JGH/LJM
September 14, 1987

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Unit 2 and 3
Docket No. STN 50-529 (License NPF-51)
STN 50-530 (License NPF-65)
Reload Technical Specification Amendment -
File: 87-F-005-419.05; 87-C-056-026; 87-F-056-026

Dear Sir:

Attached please find proposed changes to the PVNGS Unit 2 and 3 Technical Specifications. The amendment request addresses changing the maximum enrichment in fuel assemblies from 4.0 weight percent U-235 to 4.05 weight percent. This change is a result of the final Cycle 2 fuel management core design.

Enclosed, with this 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 Analysis for the Amendment Request.
- F. Environmental Impact Consideration Determination.
- G. Marked-up Technical Specification Change Pages.

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

In accordance with the requirements of 10 CFR 170.12(c), the license amendment application fee of \$150.00 has been forwarded to the U.S. NRC License Fee Management Coordinator.

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Reload Technical Specification
Amendment
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If you have any questions, please call W. F. Quinn at (602) 371-4087.

Very truly yours,



J. G. Haynes
Vice President
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JGH/LJM/ljs
Attachments

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ATTACHMENT

A. DESCRIPTION OF THE TECHNICAL SPECIFICATION AMENDMENT REQUEST

The proposed amendment increases the maximum enrichment from 4.0 to 4.05 weight percent U-235 as set forth in Technical Specification (T.S.) 5.3.1.

B. PURPOSE OF THE TECHNICAL SPECIFICATION

T.S. 5.3.1 describes the core by way of the number of fuel assemblies, the length of the fuel rods and the weight of the fuel rods. It identifies the physical properties of the rods, fuel and burnable poison, contained within a bundle. The T.S. states the maximum allowable enrichment of U-235.

C. NEED FOR THE TECHNICAL SPECIFICATION AMENDMENT

To support the desired fuel management design of Cycle 2 and to allow future 18-month equilibrium cycles, the maximum peak pin enrichment as stated in T.S. 5.3.1 will be increased to the value of 4.05, weight percent U-235. By increasing the enrichment to 4.05 PVNGS will be able to meet the long term goal of 18 month equilibrium cycles without adversely affecting safety margins.

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 10 CFR 50.92. 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 from any 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 does not involve a significant increase in the probability or consequences of an accident previously evaluated. Increasing the maximum allowed enrichment to 4.05 weight percent affects the criticality analysis for New Fuel Storage and Spent Fuel Storage. The FSAR references the results of the existing criticality analyses for a maximum enrichment of 4.3 wt%. The results of the analysis for 4.05 enrichment shows that the K_{eff} for new fuel storage/handling is still less than the limit of 0.98 as required by T.S. 5.6.1.2 and for spent fuel

of the analysis for 4.05 enrichment shows that the K_{eff} s, the limiting value set forth by the T.S. for both New Fuel and Spent Fuel Storage, are still less than the limits of 0.98 and 0.95 respectively. Therefore, the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the FSAR will not be increased.

The proposed Technical Specification amendment will not create the possibility for an accident or malfunction of a different type than any previously evaluated in the FSAR. The proposed change does not alter the configuration of the plant or the way in which it is operated. Therefore, the possibility of a different accident or malfunction will not be created.

The proposed Technical Specification amendment will not reduce the margin of safety as defined in the basis for the Technical Specifications. The analysis performed for the proposed change shows that, for an enrichment of 4.05 wt% the results are still conservative with respect to the criteria set forth by Technical Specifications. Therefore, the margin of safety is maintained.

F. ENVIRONMENTAL IMPACT CONSIDERATION DETERMINATION

The proposed change request does not involve an unreviewed environmental question because operation of PVNGS Units 2 and 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; or
2. Result in a significant change in effluents or 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.

