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STEWART,W.L. Arizona Public Service Co. (formerly Arizona Nuclear Power
RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: Application for amend to license NPF-51,revising TS 3/4.9.6 to increase refueling machine overload cut off limit to 2000 lb in an effort to free stuck fuel assembly from core location A-06.

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10 CFR 50.90
10 CFR 50.91

Arizona Public Service

PALO VERDE NUCLEAR GENERATING STATION
P.O. BOX 52034 PHOENIX, ARIZONA 85072-2034

102-03636-WLS/AKK/TNW
March 26, 1996

WILLIAM L. STEWART
EXECUTIVE VICE PRESIDENT
NUCLEAR

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-37
Washington, DC 20555-0001

Dear Sirs:

Reference: Letter 102-03635, dated March 26, 1996, from W. L. Stewart, Executive Vice President - Nuclear, APS, to USNRC

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Unit 2
Docket No. STN 50-529
Proposed Amendment to Technical Specification (TS)
Section 3/4.9.6, "Refueling Machine,"
Under Emergency Circumstances

Pursuant to 10 CFR 50.90 and 10 CFR 50.91(a)(5), Arizona Public Service Company (APS) submits herewith a request to amend Facility Operating License NPF-51 for Unit 2 of the PVNGS under emergency circumstances. The proposed amendment would revise TS 3/4.9.6 to allow the refueling machine overload cut off limit to be increased to as much as 2000 pounds in an effort to free the stuck fuel assembly from core location A-06.

The emergency TS change submitted by the referenced letter is withdrawn in its entirety and superseded by this request.

Provided in the enclosure to this letter are the following sections which support the proposed TS amendment:

A. Explanation of the Emergency Circumstances
B. Description of the Proposed TS Amendment
C. Purpose of the TS
D Safety Analysis of the Proposed TS Amendment
E No Significant Hazards Consideration Determination
F. Environmental Impact Determination
G. Marked-up TS Page

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It is requested that this TS change be issued on March 27, 1996, in order to prevent further delay of Unit 2 core offload. Should issuance of this change not be possible by March 27, 1996, it is requested that consideration be given to issuance of a Notice of Enforcement Discretion in accordance with Section VII.C of Appendix C, General Statement of Policy and Procedure for NRC Enforcement Actions, to 10 CFR Part 2, Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders.

In accordance with TS Section 6.5, the Plant Review Board and Offsite Safety Review Committee have reviewed and concurred with this proposed amendment. By copy of this letter this request is being forwarded to the Arizona Radiation Regulatory Agency (ARRA) pursuant to 10 CFR 50.91(b)(1).

Should you have any questions, please contact Scott A. Bauer at (602) 393-5978.

Sincerely,

James M. Levine for WLS

WLS/SAB/TNW/rv

Enclosure

cc: L. J. Callan (all with enclosure)
K. E. Perkins
C. R. Thomas
K. E. Johnston
A. V. Godwin (ARRA)

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

I, J. M. Levine, represent that I am Vice President - Nuclear Production, Arizona Public Service Company (APS), that the foregoing document has been signed by me on behalf of APS with full authority to do so, and that to the best of my knowledge and belief, the statements made therein are true and correct.

J. M. Levine

Sworn To Before Me This 26 Day Of March, 1996.

Notary Public

My Commission Expires

June 12, 1997

ENCLOSURE

PROPOSED AMENDMENT TO TECHNICAL SPECIFICATION

SECTION 3/4.9.6 "REFUELING MACHINE"

UNDER EMERGENCY CIRCUMSTANCES

A. EXPLANATION OF THE EMERGENCY CIRCUMSTANCES

During the Palo Verde Nuclear Generating Station (PVNGS) current Unit 2 sixth refueling outage, refueling personnel were not able to withdraw fuel assemblies from core locations A-06 and A-07 during the course of normal refueling activities. The fuel assemblies were discovered to be stuck on March 22, 1996, at approximately 1430 MST, and March 24, 1996, at approximately 1500 MST, respectively. Subsequently, Arizona Public Service (APS) and Combustion Engineering (ABB-CE) personnel have been evaluating the condition in order to determine the proper course of action to free the stuck assemblies. These activities have included video taping of the assemblies to identify potential causes for the assemblies being stuck and offloading assemblies adjacent to A-06 and A-07. The emergency circumstances exist because the fuel assembly from core location A-06 was unable to be withdrawn using the current limits of limiting condition for operation (LCO) 3.9.6, thereby preventing completion of fuel movement and the resumption of power operations. The suspension of fuel movement would leave the core partially unloaded.

The emergency circumstances could not be avoided because the stuck fuel assembly condition in Unit 2 was unexpected.

The LCO of Technical Specification (TS) 3/4.9.6 currently specifies that the refueling machine be OPERABLE with an overload cut off limit of less than or equal to 1600 pounds. This request, under emergency circumstances, provides the justification to allow PVNGS Unit 2 to continue fuel movement by increasing the refueling machine overload cut off limit, for the fuel assembly located at core location A-06, to as much as 2000 pounds. The additional 400 pound increase will be applied in 50 pound increments.

B. DESCRIPTION OF THE PROPOSED TS AMENDMENT REQUEST

APS proposes to increase the refueling machine overload cut off limit, for the fuel assembly located at core location A-06, to as much as 2000 pounds. The additional 400 pound increase will be applied in 50 pound increments. This TS change will expire when the fuel assembly located at core location A-06 is successfully withdrawn.

C. PURPOSE OF THE TS

TS 3/4.9.6 identifies the overload cut off limit which protects the core internals (i.e., fuel assemblies, reactor vessel internals) and pressure vessel from possible damage in the

event a fuel assembly becomes mechanically bound as it is withdrawn from the reactor vessel.

D. SAFETY ANALYSIS OF THE PROPOSED TS AMENDMENT

The proposed TS amendment would increase the refueling machine overload cut off limit from 1600 pounds to 2000 pounds for the purpose of removing the fuel assembly at core location A-06. The refueling machine overload cut off limit ensures that the core internals and pressure vessel are protected from an excessive lifting force in the event they are inadvertently engaged during lifting operations. At the request of APS, ABB-CE has reviewed the current situation in order to assist APS in its effort to free the fuel assembly from core location A-06. ABB-CE has concurred with increasing the refueling machine overload cut off setpoint in 50 pound increments to 2000 pounds (400 pounds above the current setting of 1600 pounds). At each of the increased overload cut off setpoints, attempts will be made to withdraw the stuck assembly. The 2000 pound load is well within the structural capacity of the fuel assembly. During attempts to withdraw the fuel assembly in location A-06, the assembly in core location A-07 will be restrained to prevent moving or falling.

E. NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

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 a 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 this amendment request follows:

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

The proposed change increases the refueling machine overload cut off limit from 1600 pounds to 2000 pounds for the purpose of removing the fuel assembly at core location A-06. The change to the limit is based on engineering analyses by ABB-CE. APS is currently analyzed for a design basis fuel handling accident inside containment which is described as the dropping of a single fuel assembly during fuel handling. Engineering analyses verify that the revised limit is within the structural capacity of the fuel assembly. Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

Standard 2 --Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change increases the refueling machine overload cut off limit from 1600 pounds to 2000 pounds for the purpose of removing the fuel assembly at core location A-06. The proposed change to the overload cut off does not introduce any new modes of plant operation or new accident precursors, involve any physical alterations to plant configurations, or make any changes to system setpoints which could initiate a new or different kind of accident. The proposed change does not affect the design or performance characteristics of the refueling machine or the fuel assembly. No new failure modes have been defined nor new system interactions introduced for any plant system or component, nor has any new limiting failure been identified as a result of the proposed change. The configuration and use of the refueling machine will be maintained as described in CESSAR 9.1.4.2.2.1 and 9.1.4.3.4.b. The change to the overload cut off limit is well within the acceptable axial fuel assembly load of 5000 pounds described in the UFSAR 4.2.3.1.5.B. The consequences of a fuel handling accident as previously analyzed, bound any possible malfunction during fuel movement. The only possible equipment that could malfunction are the fuel assembly and the refueling machine. The malfunction of this equipment has been previously analyzed. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Standard 3 -- Does the proposed change involve a significant reduction in a margin of safety.

Under the proposed temporary change, the refueling machine will remain capable of performing its safety function. The change does not affect the design or performance of the refueling machine or the fuel assembly, but will allow APS to remove a stuck fuel assembly from core location A-06. The worst case fuel handling accident as previously evaluated, remains the limiting event even with the use of the increased overload cut off setpoint. The margin of safety will not be reduced since one of the primary reasons for the setpoint is to prevent damage to the core internals and the pressure vessel. The change to the overload cut off limit is well within the acceptable axial fuel assembly load described in UFSAR 4.2.3.1.5.B. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

F. ENVIRONMENTAL IMPACT DETERMINATION

The proposed amendment increases the refueling machine overload cut off limit from 1600 pounds to 2000 pounds for the purpose of removing the fuel assembly at core location A-06. APS has determined that the proposed amendment involves no changes in the amount or type of effluent that may be released offsite, and that there is no increase in individual or cumulative occupational radiation exposure. As such, operation of PVNGS Unit 2, in accordance with the proposed amendment, does not involve an unreviewed environmental safety question.

G. MARKED-UP TECHNICAL SPECIFICATION PAGES

PVNGS Unit 2 page: 3/4 9-6