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FACIL:STN-50-529 Palo Verde Nuclear Station, Unit 2, Arizona Publi 05000529
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SUBJECT: Application for amend to license NPF-51,allowing 18 month surveillance requirement for Diesel Generators to be performed during upcoming Unit 2 refueling outage.

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WILLIAM F. CONWAY
EXECUTIVE VICE PRESIDENT
NUCLEAR

161-04059-WFC/JRP

July 13, 1991

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-37
Washington, D. C. 20555

Dear Sirs:

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Unit 2
Technical Specification Amendment Request
Section 4.8.1
File: 91-056-026; 91-005-419.05

In accordance with the provisions of 10 CFR 50.90, Arizona Public Service Company (APS), herewith requests to amend Facility Operating License NPF-51 for PVNGS Unit 2. The proposed amendment will allow the 18 month (plus 25%) surveillance requirement for the Diesel Generators (DG's) to be performed during the upcoming Unit 2 refueling outage. Current DG surveillance requirements in Technical Specification 4.8.1.1.2.d.1 (due no later than September 29, 1991, for DG Train "B") would force the unit to shutdown just prior to the planned refueling outage, currently scheduled to begin October 17, 1991.

The proposed amendment would extend the surveillance requirement interval by approximately one month to coincide with the Unit 2 refueling outage. APS requests that the surveillance requirements be extended until the end of the Unit 2 refueling outage, or no later than December 31, 1991, which ever is earlier. This three month window of time is sufficient for completing the surveillance requirements for the DG's Train "A" and Train "B". Therefore, in order to preclude an unplanned shutdown of Unit 2, APS requests NRC approval of this amendment prior to September 29, 1991.

Enclosed within this amendment request are:

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

Pursuant to 10 CFR 50.91(b)(1), and by copy of this letter and attachment, we have notified the Arizona Radiation Regulatory Agency of this request for a Technical Specification amendment.

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If you should have any questions, please contact Michael E. Powell of my staff at (602) 340-4981.

Sincerely,

WFMary

WFC/JRP/pmm

Attachment

cc: J. B. Martin (all w/attachment)
C. M. Trammell
D. H. Coe
C. D. Tedford
A. C. Gehr
A. H. Gutterman

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

I, W. F. Conway, represent that I am Executive Vice President - Nuclear, that the foregoing document has been signed by me on behalf of Arizona Public Service Company with full authority to do so, that I have read such document and know its contents, and that to the best of my knowledge and belief, the statements made therein are true and correct.

W F Conway
W. F. Conway

Sworn To Before Me This 13 Day Of July, 1991.

Linda Spell
Notary Public

My Commission Expires

June 2, 1992

ATTACHMENT 1

A. DESCRIPTION OF THE PROPOSED AMENDMENT REQUEST

This amendment request proposes to extend the surveillance requirement frequency for Unit 2 Diesel Generators (DGs) at PVNGS by allowing a one time extension to the current 18 month surveillance plus the additional 25% allowed by Section 4.0.2. The proposed Technical Specification amendment, in the form of a footnote to Surveillance Requirement 4.8.1.1.2.d.1, would allow the DGs to be inspected in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service, (currently to be performed no later than September 29, 1991), to be deferred until the upcoming refueling outage, but not beyond December 31, 1991.

B. PURPOSE OF THE TECHNICAL SPECIFICATION

The operability of the A.C. power sources and associated distribution systems during operation ensures that sufficient power will be available to supply the safety-related equipment required for the safe shutdown of the facility and the mitigation and control of accident conditions within the facility.

The operability of the A.C. power sources and associated distribution systems during shutdown and refueling ensures that the facility can be maintained in the shutdown or refueling condition for extended time periods and sufficient instrumentation and control capability is available for monitoring and maintaining the unit status.

The operability of the power sources are consistent with the initial condition assumptions of the safety analysis and are based upon maintaining at least one redundant set of A.C. and D.C. power sources and associated distribution systems operable during accident conditions coincident with an assumed loss-of-offsite power and single failure of the other onsite A.C. sources.

C. NEED FOR THE TECHNICAL SPECIFICATION AMENDMENT

This one time only extension to Surveillance Requirement 4.8.1.1.2.d.1, is needed since performance of the DG surveillance inspection within the current interval would require an unscheduled shutdown of Unit 2, approximately three weeks prior to the planned start of the third refueling outage, currently scheduled to begin on October 17, 1991. The previous Unit 2 DG inspection (32-ST-9PE01-2) on Train "A" was on January 5, 1990, and Train "B" was on November 8, 1989.

The previous refueling outage was scheduled for 92 days; however, it lasted 145 days, the length of the previous outage will result in the third refueling outage starting just beyond the 18 months plus 25% Surveillance time limit.

D. 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 of 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 amendment would extend the surveillance requirement interval of 18 months plus 25% to the end of the upcoming refueling outage or December 31, 1991, whichever is earlier. The objectives of the surveillance inspections are to detect possible equipment problems before they become serious enough to cause equipment malfunctions, and to verify that the diesel generator and its associated electrical equipment are in an operable condition.

Surveillance test 32-ST-9PE01-2 was last performed on Train "A" on January 5, 1990, and Train "B" November 8, 1989, therefore, the 18 month plus 25% ST is due November 26, 1991, and September 29, 1991, respectively. Train "B" will be the only DG which will be over the surveillance requirement timeframe, this will be from September 29, 1991, until October 19, 1991, a total of 20 days. Train "B" DG is scheduled to begin its ST on October 18, 1991.

The proposed extension will not impact the DG's ability to start and perform its intended safety function. Since initial licensing, train "A" has had 127 starts as of May 2, 1991, with only one failure to start. The failure on test start 119 (December 12, 1990) was caused by air in the fuel line which happened during post-maintenance testing after routine maintenance. Train "B" has had 120 starts as of May 9, 1991, and has had zero failures. Based on the past performance of the DG's, an extension of the surveillance requirement to the end of the refueling outage will not involve a significant increase in the probability of an accident previously

evaluated. Train "A" DG will be operable while Train "B" is undergoing the 18 month inspection. Technical Specification 3.8.1.2 allows one DG to be out of service in Modes 5 and 6 to allow for inspections. When Train "B" is declared operable, scheduled for November 10, 1991, Train "A" will begin its 18 month inspection. During the refueling outage, at least one train of the DG will be operable. Therefore, the proposed Technical Specification amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

The objectives of the Surveillance Test are to detect possible equipment problems before they become serious enough to cause equipment malfunctions, and to verify that the diesel generator and its associated electrical equipment are in an operable condition. Train "A" will remain in an operable condition during the refueling outage until its scheduled surveillance of November 11, 1991. This is in accordance with Technical Specification 3.8.1.2 which requires that one diesel generator shall be operable in Modes 5 and 6. Train "B" is scheduled to begin its surveillance testing on October 19, 1991, with completion of the integrated safeguards testing on November 10, 1991, at which time Train "B" will be declared operable.

Train "B" diesel generator surveillance extension will be from September 29, 1991, until October 19, 1991, a total of 20 days. The diesel generator will still perform its intended function even after the 18 month plus 25% surveillance requirement. There is no reason to believe otherwise based on its past performance during its surveillances. Subjecting the diesel to inspection in accordance with procedures prepared in conjunction with the manufacturer's recommendations for this class of standby service provides additional assurance that the diesel generators will perform their safety function when called upon to do so. Therefore, the proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

The proposed amendment does not involve a significant reduction in the margin of safety because the extension of time sought for the diesel generator testing does not involve a change to safety limits, setpoints or design margins. At least one diesel generator will be operable during the refueling outage, this meets the Technical Specification requirements. Therefore, the proposed amendment will not involve in a significant reduction in the margin of safety.

E. SAFETY ANALYSIS OF THE PROPOSED AMENDMENT REQUEST

The proposed Technical Specification amendment would allow a one time only extension to the current diesel generator surveillance requirements so that the inspection to be performed during the upcoming refueling outage would not cause a premature shutdown of the unit. Performing the currently required surveillance requirement within the existing interval would force the unit to shutdown approximately 18 days prior to the scheduled start of the refueling outage on October 17, 1991. Therefore, a footnote is proposed explaining that this inspection can be deferred until the end of the next refueling outage, but not beyond December 31, 1991.

In evaluating the safety significance of the proposed amendment, past diesel generator performance should be discussed. The four previous performances of the 18 month inspection support the conclusion that the diesel generators have a good inservice inspection record. In one case, Train "B" generator slip ring exceeded PVNGS criteria for vibration. APS consulted with the vendor who determined that the vibration was still satisfactory. In one other unrelated case, Train "A" failed to meet the generator stator to rotor air gap. Prior to the inspection, generator temperature parameters were normal. The stator coils were shimmed to the tolerances required by the surveillance procedure.

Train "A" has had 127 starts as of May 2, 1991, with only one failure to start, which was a result of air in the fuel line. Train "B" has had 120 starts as of May 29, 1991, with zero failures. Therefore, it can be stated that the maintenance and testing program for the diesel generators has contributed to their high reliability. The extension of this amendment request would allow the 18 month plus 25% surveillance requirement to be completed by the end of the refueling outage, or December 31, 1991, which ever is earlier. The actual length of time would be from September 29, 1991, to October 18, 1991, or 19 days. The DG inspection can only be performed during shutdown, Mode 5 or 6; where only one diesel generator need be operable. Train "A" will remain operable until its scheduled surveillance on November 11, 1991, after Train "B" is declared operable.

Based on the discussions provided above, this proposed amendment request will not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed amendment will not make any hardware changes to the facility. Train "B" will be outside of the Technical Specification time interval from September 29, 1991, until October 19, 1991, a total of 20 days. The train "B" diesel generator will, however meet all other surveillance requirements for the 20 day interval. Train "A" will remain operable per Technical Specification 3.8.1.2. Because 1) the train "B" diesel generator will be subject to the technical specifications, except for surveillance requirement

4.8.11.2.d.1; 2) no hardware changes are being made; and 3) the reliability history of the diesel generators, this request will not create the possibility of a new or different kind of accident from any previously evaluated.

The extension of time sought for the diesel generator surveillance requirement inspection does not involve a change to the safety limits, setpoints, or design margins, and as such, the amendment request will not involve a significant reduction in a margin of safety.

F. ENVIRONMENTAL IMPACT CONSIDERATION DETERMINATION

APS has determined that the proposed amendment involves no change in the amount or type of any 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 CHANGE PAGES

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3/4 8-4