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ACCESSION NBR: 9201070163 DOC. DATE: 91/12/30 NOTARIZED: YES DOCKET #
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 STN-50-529 Palo Verde Nuclear Station, Unit 2, Arizona Publi 05000529
 STN-50-530 Palo Verde Nuclear Station, Unit 3, Arizona Publi 05000530

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SUBJECT: Application for amends to Licenses NPF-41, NPF-51 & NPF-74,
 revising TS Section 3.6.1.7 action statements re containment
 purge supply & exhaust valves for consistency w/other
 containment sys action requirements.

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WILLIAM F. CONWAY
EXECUTIVE VICE PRESIDENT
NUCLEAR

Docket Nos. STN 50-528/529/530

161-04549-WFC/JCO

December 30, 1991

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

Dear Sirs:

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Units 1, 2, and 3
Proposed Technical Specification Amendment to Section 3.6.1.7
File: 91-005-419.05; 91-056-026

Arizona Public Service Company (APS) is requesting an amendment to the ACTION statements of Section 3.6.1.7 for PVNGS Units 1, 2, and 3. This request changes the containment purge supply and exhaust valve ACTION statements to be consistent with other containment system action requirements. Specifically, the proposed ACTION statements will require PVNGS to be in HOT STANDBY, as the first stage of plant shutdown, in lieu of the existing requirement to be in HOT SHUTDOWN in six hours.

Provided in the attachment to this letter, for the proposed Technical Specification amendment, are the following:

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

Pursuant to 10 CFR 50.91(b)(1), a copy of this request is being forwarded to the Arizona Radiation Regulatory Agency.

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

Sincerely,



WFC/JCO/jco
Attachment

cc: J. B. Martin
D. H. Coe
A. C. Gehr
A. H. Gutterman
F. Tedford

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ATTACHMENT

A. Description of the Proposed Amendment Request

Technical Specification 3.6.1.7 ACTION Statements a., b., and c. will be changed to require the first stage of plant shutdown to be HOT STANDBY, in lieu of the existing HOT SHUTDOWN.

This change makes the Specification 3.6.1.7 ACTION Statements consistent with the ACTION requirements of the other Containment Systems described in Technical Specification Section 3.6 and the generic Limiting Condition for Operation (LCO) 3.0.3. This change also makes Technical Specification 3.6.1.7 ACTION statements consistent with the wording contained in LCO 3.6.1.8 of NUREG 0212, Draft Revision 3, the basis for the Palo Verde Nuclear Generating Station (PVNGS) Technical Specifications.

B. Purpose of the Technical Specification

Technical Specification 3.6.1.7 ensures that: (1) each 42-inch containment purge supply and exhaust isolation valve is OPERABLE and sealed closed during Plant Operating MODES 1, 2, 3, and 4, and (2) the 8-inch containment purge supply and exhaust isolation valves are operable and sealed closed "to the maximum extent practicable but may be open for purge system operation for pressure control, for ALARA and respirable air quality considerations for personnel entry and for surveillance tests" during MODES 1 through 4.

The BASES for Specification 3.6.1.7 indicates that the 42-inch containment purge supply and exhaust isolation valves are required to be closed during plant operation because these valves have not been demonstrated capable of closing during a Loss of Coolant Accident (LOCA) or steam line break accident.

The BASES for the 8-inch valves indicates that unlike the 42-inch valves, the 8-inch purge supply and exhaust valves will close during a LOCA or steam line break accident.

The purpose of the Technical Specification, therefore, ensures that the site boundary guidelines of 10 CFR 100 will not be exceeded in the event of an accident during purging operations as described in UFSAR Sections 15.1.5 (steam line break) and 15.6.5 (LOCA). See also UFSAR 6.2.4, 7.3 and 9.4 for Purge Valve Isolation description.

C. Need for the Technical Specification Amendment

ACTION statement a. for the 42-inch containment purge supply and exhaust isolation valve(s) requires that for one valve open or not sealed closed, the valve be closed or sealed closed; or isolate the penetration within 4 hours; or be in at least HOT SHUTDOWN within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Should two valves become inoperable or not sealed closed, Specification 3.0.3 would apply. Specification 3.0.3 requires action to be taken within one hour to place the plant in at least HOT STANDBY within the next 6 hours and COLD SHUTDOWN within 30 hours.

The current ACTION requirement for one valve in non-compliance is more restrictive than two valves in non-compliance. One valve in non-compliance requires that the valve be closed within four hours or the plant be placed in HOT SHUTDOWN ($K_{eff} < 0.99$; 0% Rated Thermal Power (RTP); T_{cold} between 350° F and 210° F) within the next six hours. LCO 3.0.3 applies for two valves in non-compliance. LCO 3.0.3 requires that the valves be closed within one hour, otherwise the plant must be placed in HOT STANDBY ($K_{eff} < 0.99$; 0% RTP; $T_{cold} \geq 350^\circ$ F) within six hours. Therefore, one valve in non-compliance results in a greater plant cooldown than two valves in non-compliance. This is inconsistent with the graded nature of ACTION requirements and is overly restrictive for one valve being inoperable.

Recognizing that the ACTION statements for each of the Containment Systems consistently specify the first stage of plant shutdown as HOT STANDBY and not HOT SHUTDOWN (3.6.1.1, 3.6.1.3, 3.6.1.4, 3.6.1.5, 3.6.1.6, 3.6.2.1, 3.6.2.2, 3.6.3, 3.6.4.1, 3.6.4.2 and 3.6.4.3) and that Specification 3.0.3 specifies HOT STANDBY, the existing Technical Specification 3.6.1.7 ACTION statement requirement to go to HOT SHUTDOWN is overly restrictive.

The source of the existing inconsistent ACTION requirements is the apparent inadvertent substitution of the Boiling Water Reactor (BWR) (Shoreham) ACTION requirements during the resolution of the containment purge issue during PVNGS licensing. The NRC staff, during the licensing of Unit 1, used the Shoreham Technical Specifications as an example of acceptable wording for LCO 3.6.1.7. The operations mode of HOT SHUTDOWN for a BWR is similar to the PVNGS (CE-PWR) operating mode of HOT STANDBY, for purposes of this ACTION statement, and not HOT SHUTDOWN as currently specified in the 3.6.1.7 ACTION statements. This change is consistent with the wording contained in LCO 3.6.1.8 of NUREG 0212, Draft Revision 3, the basis for the PVNGS Technical Specifications.

ACTION Statement b. for one 8-inch containment purge supply and/or exhaust isolation valve(s) open, for reasons other than those given in the LCO, requires the valve(s) must be closed or the penetration isolated within 4 hours, otherwise the plant must be in HOT SHUTDOWN within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. As for the 42-inch valves, this ACTION statement needs to be changed to achieve consistency within the Technical Specifications and eliminate unwarranted plant cooldowns.

ACTION Statement c. for containment purge supply and exhaust isolation valve leakage should be changed to require HOT STANDBY as the initial stage for plant shutdown rather than HOT SHUTDOWN for the same reasons provided for ACTION statements a. and b. above.

D. Safety Analysis of the Proposed Technical Specification Amendment

The proposed amendment resolves an inconsistency in the ACTION requirements for the containment purge exhaust and supply isolation valves. The resolution of this inconsistency will provide an increase in the margin of safety by reducing the potential need for accelerated plant cooldowns to HOT SHUTDOWN when a containment purge supply or exhaust isolation valve is inoperable.

The limiting dose consequences for steam line breaks (UFSAR Section 15.1.5.4) results from breaks outside containment at full power, for which containment purge isolation does not have a meaningful dose contribution. The limiting dose consequences for LOCA (UFSAR Section 15.6.5) result from a Large Break LOCA from a conservatively assumed 102% power. The duration of plant operation at either HOT STANDBY or HOT SHUTDOWN in the event of a 42-inch or 8-inch purge isolation valve being inoperable is not a meaningful contributor to dose since the analysis assumes 102% power as the initial condition for the Large Break LOCA which would result in higher doses than a Large Break LOCA from either HOT STANDBY or HOT SHUTDOWN. Therefore, the limiting UFSAR analyses are unaffected by the proposed Technical Specification amendment.

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 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 does not affect the probability or consequences of an accident previously evaluated because the plant being in either HOT SHUTDOWN or HOT STANDBY, as the first stage of plant shutdown, has no impact on the assumptions made in the limiting accident analyses, Steam Line Break (15.1.5) and Large Break LOCA (15.6.5). The plant being at 0% power (HOT STANDBY) would result in no increase in the probability of occurrence of the events.

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

The first stage of plant shutdown to comply with a LCO has no effect on the type of accident to which the plant could be exposed. Both HOT SHUTDOWN and HOT STANDBY are plant modes for which the facility has been analyzed; therefore, no new or different kind of accident from any previously evaluated will be created.

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

The proposed change from HOT SHUTDOWN to HOT STANDBY as the first stage of plant shutdown for the ACTION statements for Specification 3.6.1.7 will increase the margin of safety by reducing the potential for accelerated plant cooldowns to HOT SHUTDOWN, consistent with the other PVNGS Containment System Action statements.

Therefore, the proposed change will not reduce the margin of safety.

F. Environmental Impact Consideration Determination

The proposed amendment changes the ACTION statement requirements for either one 42" containment purge or one 8" containment purge valve in non-compliance with the Technical Specification.

Arizona Public Service Company has determined that the proposed amendments involve no change in the amount or type of any effluent that may be released offsite, and there is no increase in individual or cumulative occupational radiation exposure. As such, operation of PVNGS Units 1, 2, and 3 in accordance with the proposed amendment does not involve an environmental impact.

G. Marked-Up Technical Specification Change Pages

PVNGS Unit 1

3/4 6-14

PVNGS Unit 2

3/4 6-14

PVNGS Unit 3

3/4 6-14



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 30 Day Of December, 1991.

Linda B. Spill
Notary Public

My Commission Expires

June 5, 1992

