

NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 10 TO FACILITY OPERATING LICENSE NO. NPF-74 ARIZONA PUBLIC SERVICE COMPANY, ET AL PALO VERDE NUCLEAR GENERATING STATION. UNIT 3

DOCKET NO. STN 50-530

1.0 INTRODUCTION

By letter dated March 1, 1988, Arizona Nuclear Power Project (ANPP) requested an amendment to change the Palo Verde Nuclear Generating Station (PVNGS) Unit 3 Technical Specifications. The proposed change revises Technical Specification Surveillance Requirement 4.7.9.b to postpone the first inservice visual inspection for all the inaccessible snubbers in Unit 3 until the first refueling outage. The remainder of the snubbers (those accessible during power operations) will be visually inspected in accordance with the current Technical Specification requirements.

2.0 DISCUSSION

Presently, the Technical Specifications require the first inservice visual inspection to be conducted after 4 months but within 10 months after commencing power operations. The Technical Specifications also require categorization of the snubbers as either accessible or inaccessible during reactor operations. The accessibility determination is based upon factors such as existing radiation levels, duration of time required to perform an inspection at the snubber location, temperature, atmosphere, and the recommendations of Regulatory Guides 8.8 and 8.10. There are a total of 720 mechanical snubbers and 12 hydraulic snubbers in Unit 3. Of the 720 mechanical snubbers, 455 are inaccessible during reactor operations and are located inside containment. They are more or less evenly distributed among the chemical and volume control, reactor coolant, main steam and safety injection systems. The 12 hydraulic snubbers, which are also inaccessible, are all located in the reactor coolant system.

Although the snubbers are categorized as inaccessible during reactor operations, many of the snubbers can be visually inspected when the plant is in Mode 3. ANPP states it will perform visual inspections on as many of the inaccessible snubbers as possible during any unplanned reactor shutdown until such time as the reactor is ready to be returned to service. However, not all of the inaccessible snubbers can be inspected in this manner as scaffolding must be installed to inspect the containment dome snubbers.

3.0 EVALUATION

The inaccessible snubbers (mechanical and hydraulic) that are the subject of this amendment request function to ensure the structural integrity of the RCS and other safety related systems. Proper operation of the snubbers during accident situations helps to ensure the structural integrity of the safety related systems which ensures that the consequences of previously evaluated accidents are not increased. Proper operation of these inaccessible snubbers without surveillance is a reasonable expectation due to the following considerations. There is a relatively short time involved with this amendment request. The extension is estimated as approximately 6 months, since the required 10 month surveillance interval will expire near the end of September 1988 and shutdown for the first refueling outage will occur at the beginning of April 1989.

Previous experience with snubber inservice visual inspections on PVGNS Units 1 and 2 indicates that no inoperable snubbers have been found during the performance of the visual inspections. Two inservice visual inspections have been conducted on Unit 2 which is significant when applied to Unit 3 since Unit 3 has not experienced the number of transient events and heatup/cooldown cycles that Units 1 and 2 have. Since Unit 2 has had no failures during adverse circumstances, it is unlikely Unit 3 would have failures in a more benign environment.

A portion of the inaccessible Unit 3 snubbers (those located in the dome region of the containment building) are part of the containment spray system. This system has not been operated with water, subjected to transients, or subjected to the thermal and mechanical stresses associated with system operation. Therefore, it is unlikely that any failures have occurred. The other inaccessible snubbers similarly are not expected to have experienced failures, based on the inspection results on Units 1 and 2 and the more favorable operating conditions previously discussed for Unit 3.

The basis for Technical Specification 4.7.9 concerning regular inspection of snubbers is to ensure the structural integrity of the RCS and other safety related systems during and following a seismic event or another event initiating dynamic loads. There is adequate assurance that the inaccessible snubbers will perform as required to ensure the structural integrity of the RCS and other safety related systems due to experience with snubbers at Units 1 and 2 described in the preceding paragraph. Therefore, an extension of approximately six months for surveillance of inaccessible snubbers at Unit 3 is acceptable.

The change proposed by the licensee has been reviewed by the staff and found to be acceptable because postponement of inspection of inaccessible snubbers at Unit 3 will eliminate unnecessary man-rem exposure without an unreasonable delay in the overall surveillance program.

4.0 CONTACT WITH STATE OFFICIAL

The Arizona Radiation Regulatory Agency was advised of the proposed determination of no significant hazards consideration with regard to this change. No comments were received.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment involves a change to a surveillance requirement with respect to the installation or use of the facility components located within the restricted areas as defined in 10 CFR 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued proposed findings that the amendment involves no significant hazards consideration, and there has been no public comment on such findings. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need to be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The staff has concluded, based on the consideration discussed above, that:
(1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public. We, therefore, conclude that the proposed change is acceptable.

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Dated: July 10, 1988