



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 38 TO FACILITY OPERATING LICENSE NO. NPF-41,  
AMENDMENT NO. 25 TO FACILITY OPERATING LICENSE NO. NPF-51  
AND AMENDMENT NO. 14 TO FACILITY OPERATING LICENSE NO. NPF-74  
ARIZONA PUBLIC SERVICE COMPANY, ET AL.  
PALO VERDE NUCLEAR GENERATING STATION, UNIT NOS. 1, 2 AND 3  
DOCKET NOS. STN 50-528, STN 50-529 AND STN 50-530

1.0 INTRODUCTION

By letter dated May 27, 1988, the Arizona Public Service Company (APS) on behalf of itself, the Salt River Project Agricultural Improvement and Power District, Southern California Edison Company, El Paso Electric Company, Public Service Company of New Mexico, Los Angeles Department of Water and Power, and Southern California Public Power Authority (licensees), requested a change to the Technical Specifications for the Palo Verde Nuclear Generating Station, Units 1, 2 and 3 (Appendix A to Facility Operating License Nos. NPF-41, NPF-51 and NPF-74, respectively).

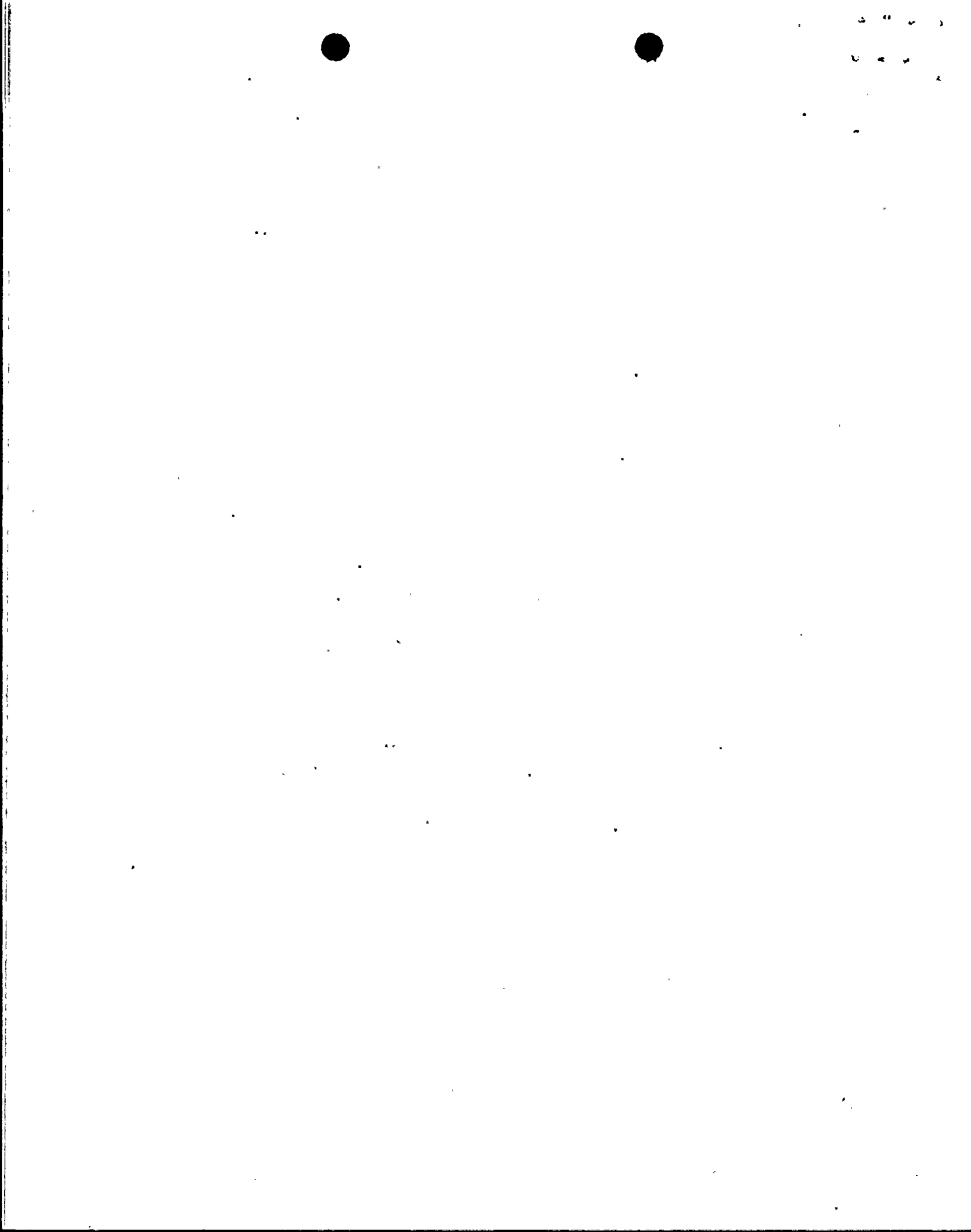
The proposed change modifies the azimuthal power tilt TS to require the measured azimuthal power tilt to be equal to or less than the CPC (Core Protection Calculator) allowance and the limit in Fig 3.2-1A when the Core Operating Limit Supervisory System (COLSS) is in service. The words "in service" and "out of service" have also been used to replace the terms "operable" and "inoperable" for the COLSS. Also an increase in the azimuthal power tilt limit was proposed for Unit 2 only.

2.0 EVALUATION

The proposed changes were in response to questions raised during review of the PVNGS Unit 2 Cycle 2 reload submittal and the NRC enhanced operational inspection of PVNGS Unit 3 conducted on December 10-18, 1987. The concern was whether the CPC azimuthal power tilt allowance could become non-conservative when the measured azimuthal power tilt exceeds the TS limit. The proposed changes eliminate this possibility by maintaining needed safety margins and thus make the TS more conservative.

The wording change regarding the status of the COLSS adds clarity to the TS and is acceptable. Increasing Unit 2's azimuthal power tilt limits for COLSS in service for operation below 40% power will allow the operators to better mitigate the consequence of xenon transients occurring below 40%

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power. The supporting analyses have been performed for Unit 2 only. These analyses are cycle and unit specific and will be performed during the next reload analysis for Units 1 and 3. The Unit 2 Cycle 2 analyses performed physics calculations for all reactivity insertion events for which the azimuthal power tilt is an explicit input. These analyses include Control Element Assembly (CEA) Ejection, Single Full Length CEA Withdrawal, and Single Part Length CEA drop events. The Unit 2 Cycle 2 analysis assuming the higher tilt values showed sufficient margin for the most limiting Design Bases Events. At greater than 40% power, the proposed limits are identical to the present values.

The staff has reviewed the material submitted by the licensee and, on the basis of the above evaluation, concludes that the proposed changes to Technical Specifications are acceptable.

### 3.0 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.

### 4.0 ENVIRONMENTAL CONSIDERATIONS

The amendments involve changes in the use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. The staff has determined that the amendments involve 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 a proposed finding that the amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendments meet 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 these amendments.

### 5.0 CONCLUSION

The staff has concluded, based on the considerations 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 these amendments 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 changes are acceptable.

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Dated: October 17, 1988

