

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 55 TO FACILITY OPERATING LICENSE NO. NPF-41

AMENDMENT NO. 42 TO FACILITY OPERATING LICENSE NO. NPF-51  
AND AMENDMENT NO. 28 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

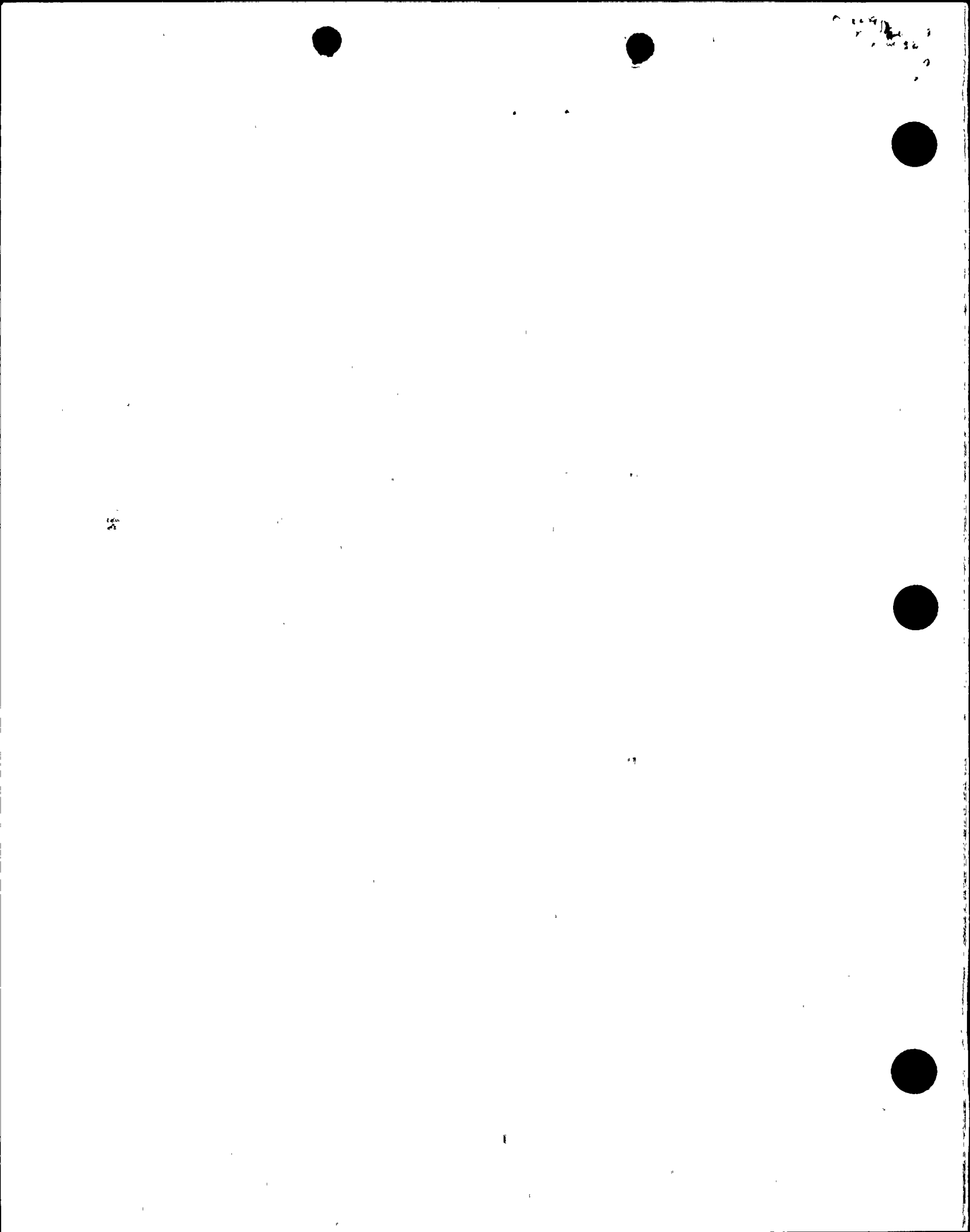
1.0 INTRODUCTION

By letter dated May 17, 1991, Arizona Public Service Company (APS or the licensee) submitted a request for changes to the Technical Specifications for the Palo Verde Nuclear Generating Station Units 1, 2, and 3. The Arizona Public Service Company submitted this request 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. The requested changes would clarify the Limiting Condition for Operation (LCO) 3.4.8.1 during the time the reactor vessel head is fully detensioned. This will allow normal outage activities to be conducted which require the temperature of the reactor coolant system (RCS) to be below 93°F, currently prohibited within Technical Specification Table 3.4-3, "Maximum Allowable Heatup and Cooldown Rates."

2.0 EVALUATION

The requirements of Table 3.4-3 were introduced in Amendments 52, 38, and 24 for Unit Nos. 1, 2, and 3 Technical Specifications, respectively, and were the result of a reanalysis of the pressure-temperature (P-T) limits using the more restrictive requirements of Regulatory Guide 1.99, Revision 2, as promulgated by Generic Letter 88-11. This reanalysis limited cooldown below 93°F to maintain an isothermal condition with the reactor coolant system (RCS) capable of being pressurized. The maximum allowable cooldown rates specified in Technical Specification (TS) 3/4 4-3 are based upon preventing RCS pressures from exceeding the corresponding normal operation pressure-temperature limit, assuming a concurrent pressurization due to the limiting low temperature overpressurization transient. Therefore, during a refueling outage when the vessel head is fully detensioned, the TS cooldown rate limits specified in TS 3/4.4-8 are not applicable.

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Technical Specification Table 3.4-3 prohibits cooldown below 93°F. However, the reactor coolant system temperature will be below 93°F when the vessel head is removed, the reactor vessel has been defueled, and the refueling cavity has been filled from the refueling water tank. Because the refueling water tank is approximately 70°F, and because there is no decay heat available after the fuel has been removed, the RCS cannot be maintained above 93°F. The amendment clarifies LCO 3.4.8.1 during the time the reactor vessel head is fully detensioned to allow RCS temperatures to be below 93°F. This would allow normal outage activities to be conducted.

A waiver of compliance from this condition was granted by the NRC on March 26, 1991 for Unit 3. Based on this previous waiver and on a review of the proposed changes to the Technical Specifications for Unit Nos. 1, 2, and 3, the staff finds the amendment requests acceptable.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Arizona State official was notified of the proposed issuance of these amendments. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC 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 (56 FR 31428). 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 be prepared in connection with the issuance of the amendments.

### 5.0 CONCLUSION

The Commission 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 the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: C. Thompson

Date: September 19, 1991

