



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 104 TO FACILITY OPERATING LICENSE NO. NPF-41,  
AMENDMENT NO. 93 TO FACILITY OPERATING LICENSE NO. NPF-51,  
AND AMENDMENT NO. 76 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 application dated November 7, 1995, as supplemented by letter dated January 17, 1996, the Arizona Public Service Company (APS or the licensee) requested changes to the Technical Specifications (Appendix A to Facility Operating License Nos. NPF-41, NPF-51, and NPF-74, respectively) 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 proposed changes modify the current Technical Specification (TS) Section 5.0, "Design Features," of the Palo Verde Nuclear Generating Station Units 1, 2, and 3 to be consistent, with Sections 4.0 and 5.0 of NUREG-1432, "Standard Technical Specifications, Combustion Engineering Plants," Revision 1, dated April 7, 1995. The change allows the relocation of various subsections to the Offsite Dose Calculation Manual (ODCM) or the PVNGS Updated Final Safety Analysis Report (UFSAR). An additional statement has been added to revised Section 5.2.1 allowing the use of other cladding material with an approved exemption from Section 50.44, Section 50.46, and Appendix K of Title 10 of the Code of Federal Regulations (CFR).

The January 17, 1996, supplemental letter provided additional clarifying information and did not change the initial no significant hazards consideration determination published in the Federal Register on December 20, 1995 (60 FR 65673).

2.0 BACKGROUND

The NRC staff undertook efforts in the early 1980's to address problems related to the content of nuclear power plant technical specifications. These projects have resulted in the issuance of various reports, proposed rulemakings, and Commission policy statements. Line item improvements became a mechanism for technical specification improvement as part of the implementation of the Commission's interim policy statement on technical

specification improvements published on February 6, 1987 (52 FR 3788). The final Commission policy statement on technical specification improvements was published July 22, 1993 (58 FR 39132). The final policy statement provided criteria which can be used to establish, more clearly, the framework for technical specifications. The staff has maintained the line item improvement process, through the issuance of generic letters, in order to improve the content and consistency of technical specifications and to reduce the licensee and staff resources required to process amendments related to those specifications being relocated from the TS to other licensee documents as a result of the implementation of the Commission's final policy statement.

Section 50.36 of Title 10 of the Code of Federal Regulations requires that technical specifications include items in five specified categories: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. In addition, the Commission's final policy statement on technical specification improvements and other Commission documents provide guidance regarding the required content of technical specifications. The fundamental purpose of the technical specifications, as described in the Commission's final policy statement, is to impose those conditions or limitations upon reactor operation necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety by identifying those features that are of controlling importance to safety and establishing on them certain conditions of operation which cannot be changed without prior Commission approval.

On July 19, 1995, the NRC issued a Final Rule (60 FR 36953) revising 10 CFR 50.36 to codify the four criteria for determining the content of technical specifications. The criteria were the same as those contained in the final policy statement, which was referenced in the licensee's proposed Technical Specification amendment. A technical specification limiting condition for operation of a nuclear reactor must be established for each item meeting one or more of the following criteria: (1) installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary; (2) a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; (3) a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; (4) a structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.<sup>1</sup> As a result, existing TS

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<sup>1</sup> The Commission recently adopted amendments to 10 CFR 50.36, pursuant to which the rule was revised to codify and incorporate these criteria. See Final Rule, "Technical Specifications," 60 FR 36953 (July 19, 1995). The Commission indicated that reactor core isolation cooling, isolation condenser, residual heat removal, standby liquid control, and recirculation pump trip systems are included in the TS under Criterion 4, although it recognized that

requirements which fall within or satisfy any of the criteria in the Final Policy Statement must be retained in the TS, while those TS requirements which do not fall within or satisfy these criteria may be relocated to other, licensee-controlled documents. The proposed TS requirements do not fall within or satisfy any of these criteria in the Final Policy Statement and may be relocated to other licensee-controlled documents.

The Commission's final policy statement recognized, as had previous statements related to the staff's technical specification improvement program, that implementation of the policy would result in the relocation of existing technical specification requirements to licensee-controlled documents such as the UFSAR. Those items relocated to the UFSAR would in turn be controlled in accordance with the requirements of 10 CFR 50.59, "Changes, tests and experiments." Section 50.59 of Title 10 of the Code of Federal Regulations provides criteria to determine when facility or operating changes planned by a licensee require prior Commission approval in the form of a license amendment in order to address any unreviewed safety questions. NRC inspection and enforcement programs also enable the staff to monitor facility changes and licensee adherence to UFSAR commitments and to take any remedial action that may be appropriate.

### 3.0 EVALUATION

The licensee has proposed changes to make TS Section 5.0, "Design Features," more consistent with NUREG-1432, "Standard Technical Specifications, Combustion Engineering Plants," Revision 1, dated April 7, 1995. The NRC staff evaluated the licensee's submittal against the applicable sections in the Atomic Energy Act of 1954, as amended; Title 10 of the Code of Federal Regulations; and NUREG-1432, "Standard Technical Specifications, Combustion Engineering Plants," Revision 1, dated April 7, 1995.

#### 3.1 Sections 5.1 and 5.5

APS, in its November 7, 1995 submittal, proposes to delete the following from the TS: Section 5.1.1, "Site and Exclusion Boundaries"; Section 5.1.2, "Low Population Zone"; Section 5.1.3, "Gaseous Release Points"; Section 5.5.1, "Meteorological Tower Location"; and associated Figures 5.1-1, 5.1-2, and 5.1-3. In addition, the licensee proposes to replace the existing Figure 5.1-1 with a description giving the site location, area, and closest distance from the containment building to the exclusion area boundary. APS states that the deleted figures are contained in existing licensee-controlled documents, the Offsite Dose Calculation Manual (ODCM) and the Updated Final Safety Analysis Report (UFSAR). The ODCM is discussed in Section 6.8 of the PVNGS TS, and changes to both licensee-controlled documents are controlled by the 10 CFR 50.59 review process.

Because the information contained in the deleted figures is controlled under the 10 CFR 50.59 review process and the proposed description is consistent with NUREG-1432, the proposed deletions and the Section 5.1 revision are acceptable.

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other structures, systems, and components could also meet these criteria.

### 3.2 Sections 5.2, 5.4, and 5.7

The licensee proposes to delete the following: Section 5.2.1, "Configuration"; Section 5.2.2, "Design Pressure and Temperature"; Section 5.4.1, "Design Pressure and Temperature"; Section 5.4.2, "Volume"; Section 5.7, "Component Cyclic or Transient Limits"; associated Tables 5.7-1 and 5.7-2; and the reference to Table 5.7-2 in TS Section 4.4.8.2.2. The information for these sections except Section 5.7 is currently located in the UFSAR, with adequate control of reactor coolant system parameters such as temperature, pressure, and boundary degradation being maintained under TS 3/4.4. The licensee intends to relocate the component cyclic or transient limits to UFSAR Section 3.9.1.1.1.

Because the deletion of the sections mentioned above is consistent with NUREG-1432 and the information contained in Section 5.7 is adequately controlled under TS Section 3/4.4 and the 10 CFR 50.59 review process, the above proposed deletions and the relocation of Section 5.7 are acceptable.

### 3.3 Sections 5.3 and 5.6

The licensee states that Sections 5.3.1 and 5.6 would be modified to be more consistent with NUREG-1432 and that the fuel enrichment information would be relocated to revised Sections 5.3.1.1 and 5.3.1.3. An additional statement would be added to revised Section 5.2.1 allowing the use of other cladding material with an approved exemption from Section 50.44, Section 50.46, and Appendix K of Title 10 of the Code of Federal Regulations (CFR). This section would be renumbered Section 5.2.

Since the modified sections mentioned above are consistent with NUREG-1432 and since the renumbering is purely administrative in nature, thus not affecting the health or safety of the public, the proposed modifications are acceptable.

Further, APS proposes to maintain the current information contained in Section 5.3.2. The licensee contends that the discussion of control material has been omitted because it is currently discussed in the UFSAR. The revised section would be renumbered 5.2.2.

The NRC staff disagrees with the proposed omission of the discussion concerning the control material. Changing the number of control element assemblies or their materials of construction could have a significant impact on safety; therefore, they must be controlled by the TS. In a letter dated January 17, 1996, the licensee has revised Section 5.2.2 to include a description of the control material. Because the modification of the section mentioned above is purely administrative in nature, thus not affecting the health or safety of the public, and because the added revision being consistent with NUREG-1432, the proposed change is acceptable.

Based on its review, the staff concludes that 10 CFR 50.36 does not require these TS requirements to be retained in the TS. The staff determined that these TS requirements are adequately controlled by 10 CFR 50.59 and that their inclusion is an operational detail related to the licensee's safety analysis. Therefore, the continued processing of license amendments related to revisions of the affected TS requirements, where the revisions to those requirements do

not involve an unreviewed safety question under 10 CFR 50.59, would afford no significant benefit with regard to protecting the public health and safety.

The staff has concluded, therefore, that removal of these TS requirements is acceptable because (1) their inclusion in the TS is not specifically required by 10 CFR 50.36 or other regulations, (2) the TS requirements have been incorporated into PVNGS administratively controlled documents, and (3) changes that are not deemed to involve an unreviewed safety question will require NRC approval in accordance with 10 CFR 50.59 9(c).

#### 4.0 STATE CONSULTATION

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

#### 5.0 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. 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 (60 FR 65673). 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.

#### 6.0 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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

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