



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 50 TO FACILITY OPERATING LICENSE NO. NPF-41 AND
AMENDMENT NO. 36 TO FACILITY OPERATING LICENSE NO. NPF-51
ARIZONA PUBLIC SERVICE COMPANY, ET AL.
PALO VERDE NUCLEAR GENERATING STATION, UNITS 1 AND 2
DOCKET NOS. STN 50-528 AND STN 50-529

1.0 INTRODUCTION

By letters dated June 20, 1989 and August 30, 1989, 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 changes to the Technical Specifications for the Palo Verde Nuclear Generating Station, Units 1 and 2 (Appendix A to Facility Operating License Nos. NPF-41 and NPF-51, respectively). The proposed changes consist of a number of format and editorial changes to the Technical Specifications (TS) to clarify operation when 1 or 2 Control Element Assembly Calculators (CEACs) are inoperable. Specifically, the amendment modifies TS 3/4.1.3; Limiting Conditions for Operation (LCO) 3.1.3.1, 3.1.3.2, 3.1.3.5, 3.1.3.6, 3.1.3.7; Surveillance Requirements (SR) 4.1.3.5, 4.1.3.6, 4.1.3.7; TS 3/4.3.1; LCO 3.3.1; TS 3/4.10.4; LCO 3/10.4, and SR 4.10.4.1 and 4.10.4.2.

2.0 DISCUSSION

The purpose of Technical Specifications 3.1.3.1, 3.1.3.2, 3/4.1.3.5, 3/4.1.3.6 and 3/4.1.3.7 is to ensure that acceptable power distribution limits are maintained, that the minimum shutdown margin is maintained and the potential effects of CEA misalignments are limited to acceptable levels. The amendment provides clarification to these Technical Specifications with respect to the CEAC's operability. A brief description, justification and acceptability for each TS change is provided in the following.

Technical Specification 3/4.1.3

LCO 3.1.3.1, Action c.2.a, is modified to eliminate specific reference to the figures which specify the full and part length Control Element Assembly (CEA) insertion limits, since the figures are contained within the Technical Specifications already referenced

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in this Action Statement. This change will simplify future Technical Specification changes in cases where figure numbers are changed, or figures within the Technical Specifications are added or deleted. The change is a matter of convenience, not substantive and is acceptable.

LCO 3.1.3.2, Action c, is modified to include reference to LCO 3.1.3.5 for shutdown CEA insertion limits for the purpose of clarification and completeness. Therefore, this change is acceptable.

LCO 3.1.3.5, Action b, is modified to change the word "apply" to "comply with," for the purpose of clarification, and is acceptable.

SR 4.1.3.5 b is modified to include the specific requirement when both CEACs are inoperable. This is consistent with the current format of SR 4.1.3.1.1 and 4.1.3.6 for CEA and Regulating Group position and with the proposed format of SR 4.1.3.7 for Part Length Group Position. Also, the specific time interval requirement must be included in this Surveillance Requirement since it is proposed that it be removed from Table 3.3-1, Action 6b.3. These changes provide for consistency and increase the specification's wording clarity. Therefore, they are acceptable.

LCO 3.1.3.6 is reformatted to clarify and specify the operation and actions required for one or two CEACs inoperable, operating between the Long Term Steady State Insertion Limits (LTSSIL) and the Transient Insertion Limits (TIL), and operating between the Short Term Steady State Insertion Limits (STSSIL) and the Transient Insertion Limits (TIL). The reformatting is necessary to improve readability, decreasing the potential for human error. We find this change an improvement and, therefore, acceptable.

LCO 3.1.3.6 a.2 is added to specify information previously contained only in the action statement, and clarifies restrictions on operation between the STSSIL and the TIL. This change is, therefore, acceptable.

LCO 3.1.3.6 b is added to clarify the specific insertion limits of CEA Group 5 for the condition of both CEACs inoperable (with or without COLSS in service), since it is appropriate that this insertion limit be specified within this LCO. Prior to this proposed change, the limitations applying to the specific condition of both CEACs inoperable were only contained in Table 3.3-1. This clarification is an editorial enhancement and is, therefore, acceptable.

LCO 3.1.3.6 is revised by adding the last sentence referring to Regulating CEAs excluded by the insertion limits. This sentence clarifies information previously specified in a footnote. This footnote was deleted on page 3/4 1-29. This is a format change and is, therefore, acceptable.



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LCO 3.1.3.6, Action a, is modified to clarify operation for the condition of one or both CEACs inoperable and to add the direction to be in HOT STANDBY if the CEA groups cannot be maintained within the limits. This change is a clarification and, therefore is acceptable.

LCO 3.1.3.6, Action c, is a rewrite of what was previously Action b. This change was made for clarification purposes and to explicitly correspond with LCO 3.1.3.6 a.2, and to clearly state the action required for insertion between the STSSIL and the TIL. This change increases the clarity of the specification's wording, and therefore is acceptable.

SR 4.1.3.6 is modified to clarify that the requirement is applicable when both CEACs are inoperable. Additionally, "individual CEA" is changed to read more appropriately "CEA group," because this LCO/SR applies to "group" insertion. Surveillance Requirement 4.1.3.1.1 correctly addresses individual CEA position surveillance requirements. Therefore, the change is acceptable.

LCO 3.1.3.7 is reformatted to clarify and specify the operation and actions required for one or both CEACs inoperable. The reformatting is necessary to improve readability and will decrease the potential for human error. Additions to Actions a.2a.2 and a.2b provide direction to be in HOT STANDBY if the CEA groups cannot be maintained within the limits. This clarification is an editorial enhancement and is, therefore, acceptable.

SR 4.1.3.7 has minor editorial changes and is modified to include the requirement when both CEACs are inoperable. This is consistent with the current format of Surveillance Requirement 4.1.3.1.1 for CEA position and 4.1.3.6 for Regulating CEA Insertion. Also, the specific time interval requirements must be included in this Surveillance Requirement since it is proposed that it be removed from Table 3.3-1, Action 6b.3. These editorial changes provide for consistency and, therefore, are acceptable.

Technical Specification 3/4.3.1

LCO 3.3.1, Table 3.3-1, Action 6a, is modified to eliminate the details of the Surveillance Requirement from the Action Statement and instead, reference the appropriate Surveillance Requirement 4.1.3.1.1. The change will simplify future Technical Specification changes which involve changing the CEA position Surveillance Requirements. The change is a matter of convenience, is not substantive and is acceptable.

LCO 3.3.1, Table 3.3-1 Action 6b.2.a, is modified to reference pertinent Technical Specifications and reference the specification from which the Group 5 limits came. This change is an editorial enhancement and, therefore, is acceptable.

LCO 3.3.1, Table 3.3-1, Action 6b.2.c, is modified to reference appropriate pertinent Technical Specifications for CEA motion/position. This change is also an enhancement and, therefore, is acceptable.

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LCO 3.3.1, Table 3.3-1, Action 6.b.3, is modified by removing the details of the specific requirements for individual CEA and group position surveillances, and instead, reference the appropriate Surveillance Requirements. This is a format change and is, therefore, acceptable.

Technical Specification 3/4.10.4

LCO 3.10.4, and SR 4.10.4.1 and 4.10.4.2 are modified to add references to the Shutdown CEAs for completeness and are, therefore, acceptable.

On the basis of its review, the staff finds that the above changes to the TS for Palo Verde Nuclear Generating Station, Units 1 and 2, are acceptable.

3.0 CONTACT WITH STATE OFFICIAL

The Arizona Radiation Regulatory Agency has been advised of the proposed determination of no significant hazards consideration with regard to these changes. No comments were received.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments involve changes in the installation or use of facility components located within the restricted area as defined in 10 CFR 20. The staff has determined that the amendments involve no significant increase in the amount, and no significant change in the type, of any effluent 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 amendments involve no significant hazard 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 the 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 the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal contributor: Sheri R. Peterson

Dated: June 25, 1990

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