

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

DEC 5 1975

Docket Nos. 50-528
50-529
50-530

R. C. DeYoung, Assistant Director for Light Water Reactors, Group 1, RL
SAFETY EVALUATION REPORT SUPPLEMENT

Plant Name: Palo Verde Nuclear Generating Station
Licensing Stage: CP
Docket Numbers: 50-528; 50-529; 50-530
Responsible Branch: LWR 1-3
Project Manager: D. Allison
Requested Completion Date: December 5, 1975

The enclosed supplement to the Palo Verde Nuclear Generating Station Safety Evaluation Report updates the sections of the Auxiliary and Power Conversion Systems input based on our review of amendments up to and including Amendment 14. The ultimate heat sink is discussed in the enclosed supplement.

9.2.5 Ultimate Heat Sink - In Amendment 14, the applicant has changed the design of the ultimate heat sink. Two seismic Category I spray ponds are separated by a barrier and sluice gate. Transfer of water from one side of the pond to the other is controlled by the sluice gate. We have reviewed the proposed revised design and find that the applicant meets our design criteria and, therefore, our conclusion that the ultimate heat sink is acceptable has not changed. The evaluation is enclosed.

Two areas remain unresolved of the SER. These are as follows:

10.4.9 Auxiliary Feedwater System - In Amendment 14 the applicant has modified the design of the auxiliary feedwater system. The modified system uses two a.c. powered seismically designed trains, each with 100% capacity pumps, and a third train, which is non-seismically designed, contains a turbine driven pump. The motor operated valves of the third train are powered from the d.c. bus. We find this system to be unacceptable since the turbine driven pump is not designed to seismic Category I requirements. Our conclusion has not changed in that the modified system as proposed remains unacceptable.

50-528

8308290170 830613
PDR FOIA
BELL83-168 PDR

R. C. DeYoung

-2-

DEC 5 1975

- 9.2.2 The design of the cooling system for reactor auxiliaries has not been changed and, therefore, this system remains unacceptable.

R. L. Tedesco
Robert L. Tedesco, Assistant Director
for Containment Safety
Division of Technical Review

Enclosure:
As Stated

cc: S. Hanauer, TA
W. McDonald, MIPC
R. Boyd, RL
R. Heineman, TR
O. Parr, RL
V. Benaroya, APCSB
D. Allison, RL
D. Fischer, APCSB
P. Matthews, APCSB
S. Varga, RL
J. Glynn, CS
J. Zwolinski, APCSB
D. Eisenhut, NRR

Auxiliary and Power Conversion Systems Branch
Supplemental Safety Evaluation Report
Palo Verde Nuclear Generating Station, Units 1, 2 & 3
Docket Nos. 50-528; 50-529; 50-530

Revise Section 9.2.3 of the Palo Verde SER to reflect the following change.

9.2.3 Ultimate Heat Sink

"The applicant, in Amendment 14, has revised the design of the ultimate heat sink. The ultimate heat sink is presently designed using two seismic Category I spray ponds which are separated from each other by a barrier containing a sluice gate. The sluice gate, which is manually operated, is provided to equalize the water level between the ponds. The sluice gate replaces the transfer system which had previously been used.

Based on our review, we have concluded that the new ultimate heat sink design criteria and bases comply with the recommendations of Regulatory Guide 1.27, and are, therefore, acceptable."