

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

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## JAN 14 1992

## **MEMORANDUM FOR:**

Thomas M. Novak, Director Division of Safety Programs Office for Analysis and Evaluation of Operational Data

FROM:

Jack E. Rosenthal, Chief Reactor Operations Analysis Branch Office for Analysis and Evaluation of Operational Data

SUBJECT:

160121

TECHNICAL REVIEW REPORT-ENHANCED SETPOINT TESTING PROCEDURES FOR PRESSURIZER SAFETY VALVES AT OCONEE AND CATAWBA

The Duke Power Company reported that as-found setpoint tests of pressurizer safety valves (PSVs) from Oconee and Catawba had revealed three valves whose setpoint exceeded the nominal  $\pm 1$  percent psig allowed by technical specification (TS).

Duke's investigation into the cause for setpoint deviation produced several possible causes. After evaluation, they took actions to resolve them; particularly, they recognized that the remedies for leakage could affect the valve setpoint and required retest of the valve subsequent to polishing the disc and seat.

Both the Westinghouse Owner's Group actions to accommodate the effects of a water-filled loop seal discussed in AEOD T91-05 and Duke's actions to remedy leakage detailed in this report have improved the understanding of the role that setpoint testing plays in determining an accurate setpoint for spring-actuated safety valves. They are a demonstration of individual efforts now underway by the nuclear industry to resolve the safety valve setpoint problems. Both show that carefully controlled testing procedures produce better testing results.

This technical review report is the product of an investigation which began with a trip to Charlotte, N.C. to discuss the problem with Duke, NRR, and Region II and a followup trip

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to Wyle Laboratories to witness a valve test. Duke demonstrates that stricter controls on procedures used in refurbishment and retesting can give better results.

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Original signed by Jack E. Rosenthal

Jack E. Rosenthal, Chief Reactor Operations Analysis Branch Office for Analysis and Evaluation of Operational Data

Enclosure: As stated cc: S. Hart, Duke Power Company J. Carbonneau, Wyle Laboratories

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