



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 149 TO FACILITY OPERATING LICENSE NO. DPR-32
AND AMENDMENT NO. 146 TO FACILITY OPERATING LICENSE NO. DPR-37

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION, UNIT NOS. 1 AND 2
DOCKET NOS. 50-280 AND 50-281

INTRODUCTION

By letter dated June 25, 1990, Virginia Electric and Power Company (the licensee) requested a change to Technical Specifications (TS) for Surry Power Station, Units 1 and 2. The proposed change to TS Section 4.3B would delete the 100 psi overpressure leakage test requirement after the reactor coolant system has been closed. Instead, a leakage test would be performed at normal operating pressure and temperature in accordance with ASME Code requirements.

DISCUSSION AND EVALUATION

Section 4.3B of the Surry TS requires that the reactor coolant system (RCS) be leak tested at nominal operating pressure (2250 psig) plus 100 psi following closure of the RCS after refueling or certain other maintenance activities. The proposed change would eliminate this requirement. Instead, the leak-tight integrity of the RCS would be verified by visual examination at the normal operating pressure (2250 psig) in accordance with Section XI of the ASME Code. The proposed change would reduce the possibility of needlessly challenging the pressurizer safety valves (PSVs) which are set at 2485 psig $\pm 1\%$. The PSVs have, on occasion, experienced increased seat leakage as the RCS pressure approaches the PSV setpoint of 2485 psig $\pm 1\%$.

The licensee conducted a review for the basis of the 100 psi overpressure test requirement. The original Surry Preliminary Safety Analysis Report, the Final Safety Analysis Report, the ASME Code Section XI, 1970 Edition, Winter 1970 Addenda, and the ASLB hearing notes were all reviewed, but no basis for the requirement could be found. The licensee then theorized that the testing requirement was conservatively established as a result of the original construction concern on welds.

The current Code requirements for hydrostatic tests at Surry are that the system leakage tests be conducted at not less than nominal operating pressure, and hydrostatic tests be conducted at temperatures above 100°F and at pressures as required in Table IWB-5220-1. The system leak test is required to be conducted after each refueling outage prior to startup and after any nonwelded repair or replacement. Therefore, the 100 psi over nominal pressure test is not required to ensure system integrity and in fact poses a potential undue risk of challenging the PSVs in terms of spurious openings.

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Based on the above evaluation, the staff concludes that the TS requirement for the test pressure of 100 psi over nominal operating pressure is unnecessary and should be deleted, and therefore, the proposed change is acceptable.

ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. We have 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 these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these 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 these amendments.

CONCLUSION

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: December 5, 1990

Principal Contributors:

B. Buckley
D. Smith