



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 152 TO FACILITY OPERATING LICENSE NO. DPR-32
AND AMENDMENT NO. 149 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

1.0 INTRODUCTION

Pursuant to 10 CFR 50.90, Virginia Electric and Power Company (VEPCO, the licensee) proposed to amend Facility Operating Licenses Nos. DPR-32 and DPR-37 for the Surry Power Station, Units 1 and 2. By letter dated June 26, 1990, VEPCO proposed to delete Technical Specification 3.15, "Containment Vacuum System" and its associated bases from the Surry Power Station, Units 1 and 2 Technical Specifications (TS). Currently, TS Section 3.15 requires that one of two mechanical vacuum pumps shall be operable whenever the reactor coolant system temperature/pressure is greater than 350°F or 450 psig, or whenever the reactor is critical. Thus, plant startup or continued power operation is prohibited unless each Surry Unit has at least one operable mechanical vacuum pump.

2.0 DISCUSSION AND EVALUATION

Surry, Units 1 and 2 each have two non-safety mechanical vacuum pumps which are used periodically to maintain the containment pressure between 9 and 10.55 psia (maximum) should the containment pressure rise from minor air leakage sources. In the event that both mechanical vacuum pumps are inoperable, TS Section 3.15 requires that the affected Surry Unit be in a hot shutdown condition within a period of 6 hours. Initially, the containment vacuum system steam air ejector is used to reduce the containment pressure from atmospheric pressure to the normal containment operating subatmospheric pressure and is then isolated from the containment. In this capacity, the containment vacuum system is used to prepare the containment for plant startup and operation, and performs no safety-related function. In the event that both mechanical vacuum pumps are inoperable, there would be no change on the conclusions previously drawn in the Final Safety Analysis Report, since plant shutdown is required by TS Section 3.8 should the containment pressure exceed 10.55 psia. The figure of 10.55 psia is the maximum containment pressure allowed by the TS and is the limiting safety consideration. Thus, the deletion of TS Section 3.15 will not diminish the degree of protection currently being provided to mitigate the consequences of postulated accidents. For clarification, TS Section 3.8 has been revised to specify the time that the reactor shall be brought to hot or cold shutdown should the containment operating conditions exceed the allowable TS requirements.

3.0 SUMMARY

The NRC staff has reviewed VEPCO's amendment request to delete the TS requirement to have the containment mechanical vacuum pumps operable prior to plant startup or during normal plant operation and finds it acceptable. Moreover, containment vacuum is still required by TS 3.8 to be maintained consistent with the initial conditions assumed in the accident analyses.

4.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change to a requirement with respect to 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.

5.0 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: February 7, 1991

Principal Contributor:
B. Buckley