



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 204 TO FACILITY OPERATING LICENSE NO. DPR-32
AND AMENDMENT NO. 204 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

By letter dated July 14, 1995, the Virginia Electric and Power Company (the licensee) submitted a request for changes to Surry Power Station Units 1 and 2 Technical Specifications (TS). The requested changes would provide a 2-hour allowed outage time (AOT) in TS 3.1.A.1.d.1 for one residual heat removal (RHR) loop when the average reactor coolant loop temperature is less than or equal to 350°F. This 2-hour AOT would be provided to accommodate plant safety and emergency power systems surveillance testing. The requested changes would also revise TS 3.1.G.1 to permit depressurizing the safety injection accumulators in lieu of accumulator isolation when the average reactor coolant loop temperature is less than or equal to 350°F.

2.0 EVALUATION

2.1 RHR Loop Operability

TS 3.1.A.1.d.1 currently requires a minimum of two non-isolated loops, consisting of any combination of reactor coolant loops or RHR loops, to be operable when the average reactor coolant loop temperature is less than or equal to 350°F. This requirement ensures a reliable method for cooling the reactor core and removing decay heat. During cold shutdown conditions, the RHR loops are used for this cooling function. A single RHR loop is sufficient to provide the required cooling capacity. However, TS 3.1.A.1.d.1 currently does not contain any provisions for removing one of the two required RHR loops from an operable status to permit required surveillance testing. Therefore, the licensee has proposed to modify TS 3.1.A.1.d.1 to permit a 2-hour AOT for performing surveillance testing of one RHR loop at a time provided the other RHR loop is operable and in operation.

The use of AOTs is not precluded by 10 CFR 50.36(c)(2) which states: "When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met." Specification of a 2-hour AOT for one RHR loop to perform surveillance testing when the average reactor coolant loop temperature is less than or equal to 350°F is consistent

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with current NRC staff positions (as reflected in the NRC's Improved Standard Technical Specifications, NUREG-1431, Revision 1). Therefore, the NRC staff finds the proposed change to TS 3.1.A.1.d.1 to add a 2-hour AOT for the purpose of performing surveillance testing of one RHR loop at a time acceptable.

2.2 Safety Injection Accumulator Depressurizing

TS 3.1.G.1.b currently requires the safety injection accumulators to be isolated from the reactor coolant system (RCS) by closed discharge isolation valves with their respective circuit breakers locked open whenever the RCS average temperature is less than or equal to 350°F and the reactor vessel head is bolted. TS 3.1.G.1.b permits the accumulator discharge isolation valves to be opened for up to 6 hours to perform valve testing. The licensee has proposed to modify TS 3.1.G.1.b to permit either: (1) continued isolation of the accumulators by closed discharge isolation valves (with their respective breakers locked, sealed or otherwise secured in the open position) or (2) depressurization of the accumulators to less than the pressurizer Power Operated Relief Valve (PORV) setpoint (385 psig) as specified in TS 3.1.G.1.c.(4).

The purpose of isolating the accumulators from the RCS when RCS average temperature is less than or equal to 350°F and the reactor vessel head is bolted is to preclude overpressurizing the RCS in the event of an inadvertent discharge of an accumulator. The current requirement to isolate the accumulators by closing their discharge isolation valves with their breakers locked open prevents inadvertent overpressurization of the RCS due to an inadvertent discharge of an accumulator. Reducing the accumulator pressure to less than the PORV setpoint will also eliminate the potential for overpressurization of the RCS due to an inadvertent discharge of an accumulator. Therefore, the proposed change to TS 3.1.G.1.b is acceptable since this proposed change will also preclude overpressurization of the RCS due to inadvertent discharge of an accumulator.

Additional changes were proposed to restructure TS 3.1.G.1.b. The proposed restructuring of TS 3.1.G.1.b is only administrative in nature and does not change the requirements of TS 3.1.G.1.b and is, therefore, acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Virginia State official was notified of the proposed issuance of the amendments. The State official had no comment.

4.0 ENVIRONMENTAL CONSIDERATION

These amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has 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 (60 FR 39455). 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

The Commission 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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Date: September 1, 1995