



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 164 AND 144 TO

FACILITY OPERATING LICENSE NOS. NPF-4 AND NPF-7

VIRGINIA ELECTRIC AND POWER COMPANY

OLD DOMINION ELECTRIC COOPERATIVE

NORTH ANNA POWER STATION, UNITS NO. 1 AND NO. 2

DOCKET NOS. 50-338 AND 50-339

1.0 INTRODUCTION

By letter dated June 8, 1992, the Virginia Electric and Power Company (the licensee) proposed a change to the Technical Specifications (TS) for the North Anna Power Station, Units No. 1 and No. 2 (NA-1&2). The change would revise the time frames in the NA-1&2 TS 3.0.5 for conducting a shutdown in a controlled and orderly manner to be consistent with the time frames in the NA-1&2 TS 3.0.3.

2.0 DISCUSSION

The proposed change would revise TS 3.0.5 completion times to permit a shutdown to proceed in a controlled and orderly manner that is within the maximum cooldown rate and within the cooldown capabilities of the unit, assuming only the minimum required equipment is operable. TS 3.0.5 delineates additional conditions that must be satisfied to permit operation to continue when a normal or emergency power source is not operable. It specifically prohibits operation when one division is inoperable because its normal or emergency power source is inoperable, and a system, subsystem, train, component, or device in another division are inoperable for another reason.

An NRC letter to All Power Reactor Licensees, dated April 10, 1980, requested licensees to submit proposed TS 3.0.3 and 3.0.5. The NRC letter contained model TS. Both model TS 3.0.3 and 3.0.5 were formulated to ensure that no set of equipment outages would be allowed to persist that would result in the facility being in an unprotected condition. The model TS 3.0.3 and 3.0.5 contained the same time frames to reach hot standby, hot shutdown, and cold shutdown.

Amendment No. 19 for NA-1 (issued August 5, 1980) and the original operating license for NA-2 (issued August 21, 1980) contained TSs 3.0.3 and 3.0.5 consistent with the April 10, 1980 NRC letter. However, TS 3.0.3 was later revised in Amendment Nos. 62 and 46 for NA-1&2, respectively (issued

February 1, 1985). These amendments were consistent with NUREG-0452, Revision 4, "Standard Technical Specifications for Westinghouse Pressurized Water Reactors." However, NUREG-0452 does not include TS 3.0.5, and, therefore, a change was not made to TS 3.0.5 at that time. As a result of the issuance of Amendment Nos. 62 and 46, the time frames for TS 3.0.3 and 3.0.5 became inconsistent. The changes proposed in the instant amendment request for NA-1&2 would correct the inconsistency, meet the intent of the April 10, 1980 NRC letter and still maintain consistency with NUREG-0452.

Currently, TS 3.0.5 requires that the unit be placed in hot standby within 1 hour, in hot shutdown within the following 6 hours, and in cold shutdown within the following 30 hours if the conditions stated in the TS are not met. The proposed change will modify TS 3.0.5 such that it includes the following actions if the conditions stated in the applicable TS are not met:

"...within one hour ACTION shall be initiated to place the unit in a MODE in which the Specification does not apply by placing it, as applicable, in:

1. At least HOT STANDBY within 6 hours,
2. At least HOT SHUTDOWN within the next 6 hours, and
3. At least COLD SHUTDOWN within the following 24 hours.

Also, changes in the format have been incorporated in TS 3.0.5 for editorial purposes only.

The purpose of the above-stated section of TS 3.0.5 is to delineate the time limits for placing the unit in a safe shutdown mode. One hour is permitted under the proposed change to prepare for an orderly shutdown before initiating a change in plant operations. The completion times specified to reach lower modes of operation permit the shutdown to proceed in a controlled and orderly manner that is within the maximum cooldown rate and within the shutdown capabilities of the unit, assuming only the minimum required equipment is operable. This reduces thermal stresses on components of the primary coolant system and the potential for a plant upset that could challenge safety systems under conditions for which these time limits would apply.

The completion times proposed above to reach hot standby, hot shutdown, and cold shutdown for TS 3.0.5 are consistent with the completion times currently established in TS 3.0.3.

3.0 EVALUATION

The proposed change would correct an inconsistency associated with completion times for TS 3.0.3 and 3.0.5 and meet the intent of the April 10, 1980 NRC letter while still maintaining consistency with NUREG-0452. Therefore, the staff finds the proposed change to be acceptable.

4.0 STATE CONSULTATION

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

5.0 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 (57 FR 30263). 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 the amendments.

6.0 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 the 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: August 10, 1992