

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 41 TO FACILITY OPERATING LICENSE NO. NPF-4 VIRGINIA ELECTRIC AND POWER COMPANY NORTH ANNA POWER STATION, UNIT-NO. 1

DOCKET NO. 50-338

Introduction:

By telecopy and letter dated July 16, 1982, the Virginia Electric and Power Company (the licensee) requested relief from Surveillance Requirement 4.4.7 (Table 4.4.3) of the Technical Specifications (TS) for the North Anna Power Station, Unit No. 1 (NA-1). Surveillance Requirement 4.4.7 requires that the reactor coolant system chemistry limits for chlorides and fluorides be sampled on a continuing 72 hour basis. The licensee's requested relief would eliminate the requirement for sampling chlorides and fluorides when the reactor coolant system is drained below the reactor pressure vessel nozzle and the internals and/or head are in place.

Our discussion and evaluation of the licensee's request is presented below and supports our letter to the licensee dated July 16, 1982 wherein we confirmed our telephone authorization to the licensee on July 16, 1982 granting the requested relief from Surveillance Requirement 4.4.7 (Table 4.4.3) of the NA-1 TS.

Discussion:

NA-1 is presently in its third refueling outage. The licensee is presently installing the Reactor Vessel Level Indication System as required by NUREG-0737 and is engaged in other maintenance and repairs. As such, fuel has presently been removed from the core and the Reactor Coolant System (RCS) is drained below the reactor coolant pressure nozzles. Also, the Reactor Heat Removal (RHR) system is drained and the upper core internals are presently in place.

To obtain the required chloride and fluoride samples on a continuing frequency of 72 hours would presently require personnel ingress to the area of the upper core internals. Entry into this area, which presently has a radiation field of 10 Roentgen per hour, would result in excessive radiation exposure.

Prior to fully draining the RCS, the required sampling of chlorides and fluorides was conducted in accordance with the specified sampling procedures. Also, since the RCS and the RHR system are presently drained, the inventory of chlorides and fluorides will not change and no makeup is planned for the RCS.

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The licensee will resume sampling the RCS for chlorides and fluorides when the RCS is refilled so that the chlorides and fluorides inventory will be known and Surveillance Requirement 4.4.7 (Table 4.4.3) will then be followed as presently specified.

Evaluation:

We find the licensee's request for relief to be acceptable based on : (1) there is no fuel in the reactor, (2) the chloride and fluoride inventory cannot change during the period of relief requested by the licensee, and (3) personnel exposure resulting from following the present specified surveillance is not in keeping with ALARA considerations.

Therefore, relief is hereby granted from Surveillance Requirement 4.4.7 (Table 4.4.3) when the RCS is drained below the reactor pressure nozzle and the internals and/or head are in place.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated, does not create the possibility of an accident of a type different from any evaluated previously, and does not involve a significant reduction in a margin of safety, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: August 4, 1982

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