



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NOS. 128 AND 112 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

INTRODUCTION

By letter dated March 26, 1990, the Virginia Electric and Power Company (the licensee) proposed changes to the Technical Specifications (TS) for the North Anna Power Station, Units No. 1 and No. 2 (NA-1&2). The proposed changes would add a surveillance requirement to clean and inspect the diesel fuel oil storage tanks. The additional surveillance requirement will enhance emergency diesel generator reliability by way of cleaning and inspecting the tanks.

DISCUSSION

Two underground fuel oil storage tanks are available to provide sufficient fuel to operate two emergency diesel generators at full load for 7 days in accordance with the NA-1&2 design basis. They are missile-protected, seismic Category 1 tanks. Each underground 50,000 gallon tank is fed by gravity from a 210,000 gallon above-ground main fuel oil storage tank and can also be fed by emergency, seismic Category 1, tornado-, missile-, and flood-protected truck fill line connections.

General industry experience has indicated that periodic cleaning and inspection of underground tanks is prudent. However, the tanks must be removed from service in order to perform periodic cleaning and/or inspection. The current action statements in TS 3.8.1.1 (modes 1 through 4) and TS 3.8.1.2 (modes 5 and 6) do not provide for temporary removal of a tank from service.

The proposed changes would add a surveillance requirement to clean and inspect the diesel fuel oil storage tanks at least once per 10 years. The appropriate action requirement would also be modified to allow removal from service of one tank for up to 7 days for anticipated maintenance to the tank or associated components.

Provisions are established in the proposed changes to ensure that with one tank out of service, a minimum of 100,000 gallons of fuel would be available from the above-ground tank and arrangements would be made to ensure that an additional 50,000 gallons of fuel oil could be delivered in less than a 48-hour period if required. This would ensure operation of the required two

emergency diesel generators (one per unit) at full load for 7 days, since the tank remaining in service would provide fuel to operate the two emergency diesel generators for at least 3 1/2 days at full load and backup capabilities to refill the tank are established.

The provision to have a source of fuel oil and transportation to supply 50,000 gallons of fuel in less than a 48-hour period is pre-coordinated through the licensee's fuel procurement department. The fuel procurement department has agreements in place with several fuel suppliers to obtain normal and emergency supplies of fuel oil when required.

EVALUATION

The proposed changes do not alter the conditions or assumptions of the NA-1&2 accident analysis or the basis of the current TS. The consequences of a diesel generator failure are unchanged. Fuel oil would be available to supply one diesel generator per unit with sufficient fuel to meet the requirement for full-load operation for 7 days. Finally, emergency diesel generator reliability will be improved by cleaning and inspection of the diesel fuel oil storage tanks. Based on the above, we find the proposed changes to be acceptable.

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 and changes surveillance requirements. 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 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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