

NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 75 TO FACILITY OPERATING LICENSE NO. DPR-22 NORTHERN STATES POWER COMPANY MONTICELLO NUCLEAR GENERATING PLANT DOCKET NO. 50-263

1.0 INTRODUCTION

By letter dated July 31, 1990, Northern States Power Company (the licensee) requested an amendment to the Technical Specifications (TSs) appended to Facility Operating License No. DPR-22 for the Monticello Nuclear Generating Plant. The proposed amendment would revise the minimum quantity of diesel oil required to be available in the storage tank from 26,250 gallons to 32,500 gallons. The amendment would also clarify that "full load," for purposes of the diesel oil storage tank capacity calculation, is 2500 KW.

A discussion of the proposed changes and the NRC staff's evaluation and findings relative to each are addressed in Section 2 of this Safety Evaluation Report.

2.0 DISCUSSION AND EVALUATION

On May 30, 1990, the staff issued NRC INFORMATION NOTICE NO. 89-50 "INADEQUATE EMERGENCY DIESEL GENERATOR FUEL SUPPLY" advising licensees of the need to update fuel oil consumption calculations to reflect changes in equipment loading and operating times. Monticello's subsequent investigation concluded that the minimum oil storage tank level in the facility Technical Specifications, based on operating one emergency diesel generator at full load (2500 KW) for seven days, is low. The Technical Specifications presently requires a minimum level corresponding to 26,250 gallons. The amount of diesel fuel required to operate one emergency diesel generator at 2500 KW for seven days is 31,248 gallons.

Staff guidance for the calculation of fuel oil storage requirements is set forth in Regulatory Guide 1.137 "Fuel-Oil Systems for Standby Diesel Generators" which invokes the guidance of ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators," Section 5.4. The guidance states that either of two methods may be used; (1) the calculation may assume that a diesel generator operates continuously at rated capacity for seven days, or (2) the calculation may be time-dependent based predicted time-dependent loads. The licensee's proposed changes are consistent with option (1) of the staff guidance, and are therefore acceptable.

It is noted that the actual capacity of the Monticello underground diesel oil storage tank is 60,000 gallons and fluid level is maintained above the low level alarm setpoints (40,330 gallons (LOW) and 35,575 gallons (LOW-LOW)). This practice provides additional margin with respect to Technical Specifications compliance and, in event of a design basis event would also provide sufficient diesel oil availability to permit limited operation of selected non-safety related equipment such as the plant heating boiler, diesel fire pump, etc. These features are acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or changes an inspection or surveillance requirement. We have determined that the amendment involves 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 published a proposed finding that this amendment involves no significant hazards consideration and there has been no public connent on such finding. Accordingly, this amendment meets 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 this amendment.

A.O 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Dated: October 12, 1990