



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

FACILITY OPERATING LICENSE NO. DPR-18

ROCHESTER GAS AND ELECTRIC CORPORATION

R. E. GINNA NUCLEAR POWER PLANT

DOCKET NO. 50-244

1.0 INTRODUCTION

On March 13, 1985, Rochester Gas and Electric Corporation submitted a Technical Specification amendment request that if granted would delete the requirement for operation of the charcoal filter system in the ventilation system exhaust from the spent fuel storage pit area during the handling of irradiated fuel assemblies in the auxiliary building.

2.0 EVALUATION

In the evaluation of SEP Topic XV-20, the limiting dose at the exclusion area boundary (EAB) was calculated for a fuel handling accident inside containment (Ref. 1). This evaluation concluded that the calculated dose for a release of unfiltered activity would be 96 rem at the EAB. In the March 13, 1985 submittal, the licensee stated that they felt that the assumptions used in this analysis are equally applicable to an evaluation of the consequences of a fuel handling accident inside the auxiliary building with no credit taken for operation of the charcoal filters and that the resulting dose would be well within the guidelines of 10 CFR Part 100. Therefore, the licensee felt that the operation of the charcoal filters should not be required.

The licensee proposed the addition of the requirement for a negative pressure to exist in the auxiliary building while moving irradiated fuel. This insures air flow into the building and out through the plant vent, in order that any release of activity due to a fuel handling accident could be monitored.

The function of the charcoal filter system is to mitigate the potential consequences of a postulated fuel handling accident inside the auxiliary building. The consequences, as expressed by calculated dose at the EAB, are determined in accordance with the guidance of the Standard Review Plan and Regulatory Guide 1.25. These guidelines detail a number of assumptions to be used in the analysis. These are:

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1. It is assumed that the accident occurs 100 hours after shutdown.
2. The discharged assembly is assumed to have operated at peak power (1.66) for the previous cycle.
3. The guidelines require an assumption that 100% of the volatile fission product inventory be released.
4. An appropriate decontamination factor is assumed for iodine removal in water (Ref. 2).

According to Reference 1, the effect of the charcoal filters is to reduce the calculated dose at the EAB from 96 to 34 rem. The licensee presents that these assumptions are overly conservative and that this reduction in calculated dose could be duplicated by an adjustment in the assumptions outlined above, and, that the charcoal filters do not provide any significant real benefit in reduction of exposure to plant personnel and the general public.

It is the staff's position that the assumptions are reasonable and should not be altered; therefore, the 96 rem calculated dose at the EAB should not be reduced. The use of the filters is needed to achieve a significant reduction in the calculated dose. Thus, adequate justification has not been presented to grant the amendment request and it should be denied.

3.0 REFERENCES

1. Letter, Mr. D. M. Crutchfield, NRC, to Mr. J. E. Maier, RG&E, October 7, 1981.
2. WCAP-7828, Radiological Consequences of a Fuel Handling Accident, Westinghouse Electric Corporation, 1971.

4.0 ACKNOWLEDGMENT

C. Miller prepared this Safety Evaluation.

Dated: May 30, 1985.