



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 20 TO

FACILITY OPERATING LICENSE NO. R-84

ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE

DOCKET NO. 50-170

1.0 INTRODUCTION

By letter dated April 30, 1990, the Armed Forces Radiobiology Research Institute (AFRRI) requested a change in the Technical Specifications for Facility Operating License No. R-84. This change deletes the requirement for inspection of fuel elements in storage, but would continue the requirements for inspection of fuel elements that are in the core or returned to the core.

2.0 EVALUATION

The licensee is currently required to inspect all fuel elements regardless of use or storage. The licensee will continue to inspect all fuel elements that would be subjected to core conditions. Since fuel elements in storage are not subject to the power and temperature changes of fuel elements in the core, damage to the fuel elements in storage is highly unlikely and inspection to identify damage is not needed. This fuel inspection requirement for only fuel subject to core conditions is similar to that at other facilities, and as such, is not unique.

Additionally, the licensee has contained in storage a canister with one fuel element with what appears to be a blister. The licensee is concerned that unnecessary inspection of this fuel element could result in further damage. The licensee does not plan to return this fuel element to the core, and has determined that inspection of the fuel element is not needed.

In summary, there is no decrease in inspection of fuel elements that will be subject to the core conditions. This is not a unique requirement change. The unnecessary inspection of fuel elements in storage can be avoided. There is acceptable assurance that fuel elements subject to possible damage will be inspected and potential deterioration will be found and addressed. Applicable changes to the Technical Specifications have been discussed with and agreed to by the licensee.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves changes in a requirement with respect to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20. The staff has 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 there is no significant increase in individual or cumulative occupational radiation exposure. 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.

4.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously evaluated, or create the possibility of a new or different kind of accident from any accident previously evaluated, 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 the proposed activities, 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 the health and safety of the public.

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Dated: October 4, 1990