



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 7 TO

FACILITY LICENSE NO. R-114

MICHIGAN STATE UNIVERSITY

DOCKET NO. 50-294

1.0 INTRODUCTION

By letter dated December 1, 1988, the licensee, Michigan State University (licensee) requested that its license be amended to "possession-only" status. The licensee submitted revisions to the license conditions and Technical Specifications (TS) and documentation to support the revisions. On December 14, 1988 the licensee submitted additional revisions to the TS. The licensee has also requested waiver from the physical security and emergency plans since there is no fuel at the site. The licensee is planning to decommission the reactor and has awarded a contract for the preparation of a decommissioning plan.

2.0 EVALUATION

In preparation for dismantling and decommissioning the reactor, the licensee shipped the fuel offsite. The only radioactive material onsite consists of activated byproduct material, a 3 curie sealed americium-beryllium neutron source and 2 grams of contained U-235 in connection with reactor instrumentation (fission chamber). Because of these conditions, the licensee has requested a waiver from both the emergency and physical security plans. The staff finds that a specific exemption under 10 CFR 50.12 is appropriate. This special exemption is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security and special circumstance of 10 CFR 50.12(2)(ii) exists, i.e. application of the regulation in the particular circumstance is not necessary to achieve the underlying purpose of the rule. The TS, however, require that operating procedures be in-place for radiation safety and emergency situations. A physical security plan is no longer required; however a new technical specification, Section 6.6, has been added to provide facility access control.

The Technical Specifications have been modified extensively to reflect the "possession-only" status requested by the licensee. In general, those Technical Specifications relating to reactor operation, performance, safety, surveillance, and related reporting were deleted. Those relating to staff and population safety, surveillance, monitoring, organization, and related reporting requirements have been retained.

All specifications relating to in-core fuel, coolant, and moderator systems; reactor control and safety systems; and in-core experiments have been deleted. Since the reactor cannot be fueled or operated, these items are no longer relevant and Technical Specifications that address them are not meaningful. Those Technical Specifications that pertain to the "possession-only" status of the facility were retained. They include the radiation monitoring system and administrative functions. The amended Technical Specifications will continue to ensure that the various activities permitted under the "possession-only" license status will be conducted without significant risk to the health and safety of onsite personnel or the public or to the environment.

### 3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves changes in the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20 and changes in inspection and surveillance requirements. The staff has determined that the amendment involves no significant hazards consideration (as discussed below), there is no significant change in the types or significant increase in the amounts 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 concludes, that amending this license to a possession-only status is appropriate. The staff has further 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, or create the possibility of a new or different kind of accident from any accident previously evaluated, or 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: June, 1989