



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

SAFETY EVALUATION BY THE  
OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 6 TO  
FACILITY LICENSE NO. R-97  
GEORGIA INSTITUTE OF TECHNOLOGY  
DOCKET NO. 50-160

Introduction

The Georgia Institute of Technology (Georgia Tech) has possessed and operated two nuclear reactors on its campus in Atlanta for several years. During late 1983 and early 1984, two decisions were made by Georgia Tech that have a bearing on these facilities and on their licenses: 1) to reorganize the management structure through which these reactors are operated, and 2) to decommission and dispose of the smaller AGN 201 training reactor, Operating License No. R-111, Docket No. 50-276. In the meantime, Georgia Tech has submitted an application for authorization to dismantle the AGN and for NRC to terminate its operating license. Actions related to that request are in progress. In addition, because of the reorganization, Georgia Tech applied by letter dated December 18, 1984, for a license amendment for License No. R-97, Docket No. 50-160, to reflect the new organization. The letter also requested several other changes in the technical specifications to properly reflect changes in names and organization within the Nuclear Regulatory Commission (NRC). In this same letter, the licensee requested that License No. R-97 be amended to authorize retention and possession under the license of the fuel components currently authorized under License No. R-111. The reason for this request is to allow both an orderly and timely decommissioning of the AGN reactor, and eventual return of the AGN fuel to its owner, the Department of Energy. The timing of this return involves factors not under the control of either NRC or the licensee.

Evaluation

The reorganization within Georgia Tech left the Nuclear Research Center as it was previously, with the Director responsible for properly implementing License No. R-97. However, it also made the Director responsible for the AGN and License No. R-111. The reorganization of management placed the Director of the Nuclear Research Center in a position reporting directly to the Vice President for Research, where Georgia Tech policy on research activities originates. The staff concludes that this organizational structure does not remove any important management function necessary for safe operation of the reactor facilities.

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The several other changes in the technical specifications of License No. R-97 are administrative in nature, and have no impact on the operation or safety of the reactor facility.

The amendment to License No. R-97 that would authorize the licensee to continue to possess the AGN fuel from License No. R-111 is intended to provide opportunity for the licensee to continue expeditiously to dismantle, decontaminate as necessary, dispose of the AGN reactor components, and for NRC to terminate the license, unhampered by a possible extended time frame for returning the AGN fuel to the Department of Energy (DOE). This authorization to continue to possess, but not to use, the AGN fuel is considered to be temporary, and the licensee has informed us that steps are being taken to return the fuel to DOE.

The AGN fuel has been operated only at power levels below 0.1 watt, and not at all within the past five years. Therefore, its radioactivity is primarily that of the U-235 special nuclear material itself. The licensee has acceptable and approved fuel storage facilities used in conjunction with License No. R-97 in which the AGN fuel will be stored in a sub-critical arrangement. The AGN fuel, approximately 700 grams of U-235, is enriched to less than 20%. Because of the quantity and the enrichment, storage of this fuel in the same vault with kilogram quantities of highly enriched U-235 does not increase the requirements for adequate physical security.

#### 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. 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 that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has made a no significant hazards consideration finding with respect to this amendment (see below). 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.

#### Conclusion

The staff concludes, 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, 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 operation in the proposed manner; 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 to the health and safety of the public.

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