UNITED STATES ATOMIC ENERGY COMMISSION

DOCKET NO. 50-160

GEORGIA INSTITUTE OF TECHNOLOGY

NOTICE OF PROPOSED ISSUANCE OF CONSTRUCTION PERMIT AND AMENDED FACILITY OPERATING LICENSE

The Atomic Energy Commission ("the Commission") is considering the issuance of a construction permit and subsequently an amended facility operating license to the Georgia Institute of Technology (Georgia Tech) in Atlanta, Georgia. The proposed permit would authorize Georgia Tech to make modifications to its existing research reactor which are necessary for operation of the reactor at power levels up to 5 megawatts (thermal), and the amended license subsequently would authorize 5-megawatt operation and an increase from 11 kilograms to 33 kilograms in the quantity of contained uranium 235 that Georgia Tech is authorized to receive, possess and use in connection with operation of the reactor, in accordance with Georgia Tech's application received by the Commission's regulatory staff on March 11, 1968, as amended.

Since December 1964, Georgia Tech has been authorized (under Facility Operating License No. R-97) to operate the reactor at 1 megawatt (thermal). The reactor is of a heterogeneous type,

heavy-water moderated, cooled and reflected. It is located on Georgia Tech's campus in Atlanta, Georgia, and is used for research and development. The increase in the operating power level of the reactor will facilitate Georgia Tech's desired maximum utilization of the reactor for research and development activities.

The Commission has found that the application received on March 11, 1968, and amendments thereto dated July 13, 1971, October 22, 1971, June 23, 1972, October 30, 1972, and November 13, 1972, comply with the requirements of the Atomic Energy Act of 1954, as amended ("the Act"), and the Commission's regulations published in 10 CFR Chapter I. Prior to issuance of the proposed construction permit, the Commission will have made the remainder of the findings required by the Act and the Commission's regulations which are set forth in the proposed permit. Upon issuance of the permit, Georgia Tech will be required to execute an amended indemnity agreement as required by Section 170 of the Act and 10 CFR Part 140 of the Commission's regulations.

Upon completion of the modifications to the reactor in compliance with the terms and conditions of the construction permit and the application, as amended, and in the absence of good cause to the contrary, the Commission will issue to Georgia Tech (without prior notice) an amended Class 104.c facility license authorizing operation of the reactor at power levels up

to 5 megawatts (thermal) since the application is complete enough to permit evaluation of the safety of the operation of the facility at the increased power level, in the manner and location proposed. Prior to the issuance of the license, the facility will be inspected by a representative of the Commission to determine whether it has been modified in accordance with the application and the provisions of the construction permit. The amended operating license will not be issued until the Commission makes the findings required by the Act and the Commission's regulations which are set forth in the proposed amended license, and concludes that the issuance of the amended license will not be inimical to the common defense and security or to the health and safety of the public.

Within thirty days from the date of publication of this notice in the FEDERAL REGISTER, the applicant may file a request for a hearing and any person whose interest may be affected by this proceeding may file a petition for leave to intervene. Requests for a hearing and petitions to intervene shall be filed in accordance with the Commission's "Rules of Practice" in 10 CFR Part 2. If a request for a hearing or a petition for leave to intervene is filed within the time prescribed in this notice, the Commission will issue a notice of hearing or an appropriate order.

For further details with respect to these actions, see (1) the application by Georgia Tech received by the Commission's regulatory staff on March 11, 1968, and amendments thereto, (2) the proposed construction permit, (3) proposed amended facility license, and (4) the Commission's related Safety Evaluation, all of which are available for public inspection at the Commission's Public Document Room at 1717 H Street, N. W., Washington, D. C. A copy of each of items (2), (3), and (4) may be obtained upon request sent to the U. S. Atomic Energy Commission, Washington, D. C. 20545, Attention: Deputy Director for Reactor Projects, Directorate of Licensing. Prior to issuance of the amended facility operating license the proposed revised Technical Specifications for Facility Operating License No. R-97 will be made available in the above Public Document Room.

FOR THE ATOMIC ENERGY COMMISSION

Donald J. Skovholt
Assistant Director
for Operating Reactors
Directorate of Licensing

Dated at Bethesda, Maryland,
this 19th day of December 1972.

UNITED STATES ATOMIC ENERGY COMMISSION

DOCKET NO. 50-160

GEORGIA INSTITUTE OF TECHNOLOGY

PROPOSED CONSTRUCTION PERMIT

Construction Permit
No. CPRR-___

1. By application received by the Commission on March 11, 1968, and amendments thereto dated July 13, 1971, October 22, 1971, June 23, 1972, October 30, 1972, and November 13, 1972, the Georgia Institute of Technology (Georgia Tech) requested authority to make modifications to its present research reactor located on its campus in Atlanta, Georgia, and licensed by Commission License No. R-97. The modifications are necessary for operation of the reactor at 5 megawatts (thermal).

2. The Atomic Energy Commission ("the Commission") has found that:

   A. The application, as amended, complies with the requirements of the Atomic Energy Act of 1954, as amended ("the Act"), and the Commission's regulations set forth in 10 CFR Chapter I;

   B. The reactor will be a utilization facility as defined in the Commission's regulations contained in 10 CFR Part 50, "Licensing of Production and Utilization Facilities";

   C. The reactor will be used in the conduct of research and development activities of the type specified in Section 31 of the Act;

   D. Georgia Tech is technically and financially qualified to engage in the proposed activities in accordance with the Commission's regulations;

   E. Georgia Tech has submitted sufficient technical information concerning the proposed facility to provide reasonable assurance that the existing facility can be modified and operated at its present location without undue risk to the health and safety of the public, and

F. The issuance of a construction permit to Georgia Tech for modification of its reactor will not be inimical to the common defense and security or to the health and safety of the public.

3. Construction Permit No. CPRR-__, effective as of the date of issuance, is issued to Georgia Tech to read as follows:

A. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Georgia Tech:

Pursuant to the Act and 10 CFR Part 50 - "Licensing of Production and Utilization Facilities", to modify its research reactor authorized under Facility License No. R-97 and located in Atlanta, Georgia, in accordance with the procedures and limitations described in the application received on March 11, 1968, and amendments thereto dated July 13, 1971, October 22, 1971, June 23, 1972, October 30, 1972, and November 13, 1972, and in this permit.

B. This permit shall be deemed to contain and be subject to the conditions specified in the following Commission regulations: Part 20, Sections 50.54, 50.55 and 50.55a of Part 50; and is subject to all applicable provisions of the Act, and rules, regulations and orders of the Commission now or hereafter in effect, and is subject to the additional conditions specified or incorporated below:

(1) The earlies[illegible]ompletion date for modification of the reactor is [illegible]ruary 22, 1973. The latest completion date for mo[illegible]ication of the reactor is February 22, 1974. The term "completion date", as used herein, means the date on which modification of the reactor in Atlanta, Georgia, is completed, except for the introduction of the fuel material;

(2) Georgia Tech shall not operate the modified reactor until Commission approval is granted by the issuance of an amendment to Facility Operating License No. R-97.

4. Upon completion of the modifications of the reactor in accordance with the terms and conditions of this permit, and the application, upon the filing of any additional information required to complete the revisions to the Technical Specifications, upon finding by the Commission that the reactor modifications authorized have been completed and that the modified reactor will operate in conformity with the application and the provisions of the Act and of the rules and regulations of the Commission, and in the absence of any good cause being shown to the Commission why the granting of a amended license would not be in accordance with the provisions of the Act, the Commission will issue to Georgia Tech Amendment No. 1 to Facility License No. R-97. The amended license shall expire 20 years from its date of issuance.

FOR THE ATOMIC ENERGY COMMISSION

Donald J. Skovholt
Assistant Director
for Operating Reactors
Directorate of Licensing

Date of Issuance:

UNITED STATES ATOMIC ENERGY COMMISSION

DOCKET NO. 50-160

GEORGIA INSTITUTE OF TECHNOLOGY

PROPOSED AMENDED FACILITY OPERATING LICENSE

License No. R-97
Amendment No. 1

1. The Atomic Energy Commission ("the Commission") has found that:

   A. The application, as amended, complies with the requirements of the Atomic Energy Act of 1954, as amended ("the Act"), and the regulations of the Commission set forth in 10 CFR Chapter I;

   B. Construction of the facility has been completed substantially in conformity with Construction Permit No. CPRR-57, as modified by CPRR-__, and the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;

   C. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   D. There is reasonable assurance (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the rules and regulations of the Commission;

   E. The Georgia Institute of Technology is technically and financially qualified to engage in the activities authorized by this operating license in accordance with the rules and regulations of the Commission;

   F. The Georgia Institute of Technology is a nonprofit educational institute and will use the facility for the conduct of educational research and development activities. The applicant is therefore exempt from the

financial protection requirement of subsection 170a of the Act;

G. The Georgia Institute of Technology has executed an indemnity agreement which satisfies the requirements of 10 CFR Part 140, and

H. The issuance of this amended facility operating license will not be inimical to the common defense and security or to the health and safety of the public.

2. Facility Operating License No. R-97 issued to the Georgia Institute of Technology is hereby amended in its entirety to read as follows:

A. This license applies to the heavy-water moderated, tank-type nuclear reactor (hereinafter "the reactor") which is owned by the Georgia Institute of Technology (hereinafter "Georgia Tech") and located on Georgia Tech's campus in Atlanta, Georgia, and described in the application dated February 1, 1960, and subsequent amendments thereto, including the application received on March 11, 1968, and amendments thereto dated July 13, 1971, October 22, 1971, June 23, 1972, October 30, 1972, and November 13, 1972 (hereinafter "the application").

B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Georgia Tech:

(1) Pursuant to Section 104.c of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities", to possess, use and operate the reactor as a utilization facility at the designated location on Georgia Tech's campus in Atlanta, Georgia, in accordance with the procedures and limitations described in the application and in this license;

(2) Pursuant to the Act and 10 CFR Part 70, "Special Nuclear Material", to receive, possess and use in connection with operation of the reactor up to 33 kilograms of contained uranium 235;

(3) Pursuant to the Act and 10 CFR Part 30, "Rules of General Applicability to the Licensing of Byproduct Material", (1) to possess and use a 50-curie antimony-beryllium sealed neutron source for reactor startup, and (2) to possess, but not to separate, such byproduct material as may be produced by operation of the reactor.

C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Sections 50.54 and 50.59 of Part 50 and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect, and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Georgia Tech is authorized to operate the reactor at steady state power levels up to five (5) megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A appended hereto are hereby incorporated in this license. Georgia Tech shall operate the reactor in accordance with these Technical Specifications. No changes shall be made in the Technical Specifications unless authorized by the Commission as provided in Section 50.59 of 10 CFR Part 50.

D. This amended license is effective as of its date of issuance and shall expire at midnight (20 years from its date of issuance).

FOR THE ATOMIC ENERGY COMMISSION

Donald J. Skovholt
Assistant Director
for Operating Reactors
Directorate of Licensing

Date of Issuance: