

**ATOMIC ENERGY ACT OF 1946
(Public Law 585, 79th Congress)**

Excerpted from

“LEGISLATIVE HISTORY

OF THE

ATOMIC ENERGY ACT OF 1946
(Public Law 585, 79th Congress)”

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James D. Nuse
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Volume I
Principal Documents

U.S. ATOMIC ENERGY COMMISSION
WASHINGTON, 1965

For the development and control of atomic energy.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

DECLARATION OF POLICY

SECTION 1. (a) FINDINGS AND DECLARATION.—Research and experimentation in the field of nuclear chain reaction have attained the stage at which the release of atomic energy on a large scale is practical. The significance of the atomic bomb for military purposes is evident. The effect of the use of atomic energy for civilian purposes upon the social, economic, and political structures of today cannot now be determined. It is a field in which unknown factors are involved. Therefore, any legislation will necessarily be subject to revision from time to time. It is reasonable to anticipate, however, that tapping this new source of energy will cause profound changes in our present way of life. Accordingly, it is hereby declared to be the policy of the people of the United States that, subject at all times to the paramount objective of assuring the common defense and security, the development and utilization of atomic energy shall, so far as practicable, be directed toward improving the public welfare, increasing the standard of living, strengthening free competition in private enterprise, and promoting world peace.

(b) PURPOSE OF ACT.—It is the purpose of this Act to effectuate the policies set out in section 1 (a) by providing, among others, for the following major programs relating to atomic energy:

(1) A program of assisting and fostering private research and development to encourage maximum scientific progress;

(2) A program for the control of scientific and technical information which will permit the dissemination of such information to encourage scientific progress, and for the sharing on a reciprocal basis of information concerning the practical industrial application of atomic energy as soon as effective and enforceable safeguards against its use for destructive purposes can be devised;

(3) A program of federally conducted research and development to assure the Government of adequate scientific and technical accomplishment;

(4) A program for Government control of the production, ownership, and use of fissionable material to assure the common defense and security and to insure the broadest possible exploitation of the fields; and

(5) A program of administration which will be consistent with the foregoing policies and with international arrangements made by the

United States, and which will enable the Congress to be currently informed so as to take further legislative action as may hereafter be appropriate.

ORGANIZATION

SEC. 2. (a) ATOMIC ENERGY COMMISSION.—

(1) There is hereby established an Atomic Energy Commission (herein called the Commission), which shall be composed of five members. Three members shall constitute a quorum of the Commission. The President shall designate one member as Chairman of the Commission.

(2) Members of the Commission shall be appointed by the President, by and with the advice and consent of the Senate. In submitting any nomination to the Senate, the President shall set forth the experience and the qualifications of the nominee. The term of office of each member of the Commission taking office prior to the expiration of two years after the date of enactment of this Act shall expire upon the expiration of such two years. The term of office of each member of the Commission taking office after the expiration of two years from the date of enactment of this Act shall be five years, except that (A) the terms of office of the members first taking office after the expiration of two years from the date of enactment of this Act shall expire, as designated by the President at the time of appointment, one at the end of three years, one at the end of four years, one at the end of five years, one at the end of six years, and one at the end of seven years, after the date of enactment of this Act; and (B) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed, shall be appointed for the remainder of such term. Any member of the Commission may be removed by the President for inefficiency, neglect of duty, or malfeasance in office. Each member, except the Chairman, shall receive compensation at the rate of \$15,000 per annum; and the Chairman shall receive compensation at the rate of \$17,500 per annum. No member of the Commission shall engage in any other business, vocation, or employment than that of serving as a member of the Commission.

(3) The principal office of the Commission shall be in the District of Columbia, but the Commission or any duly authorized representative may exercise any or all of its powers in any place. The Commission shall hold such meetings, conduct such hearings, and receive such reports as may be necessary to enable it to carry out the provisions of this Act.

(4) There are hereby established within the Commission—

(A) a General Manager, who shall discharge such of the administrative and executive functions of the Commission as the Commission may direct. The General Manager shall be appointed by the President by and with the advice and consent of the Senate, and shall receive compensation at the rate of \$15,000 per annum. The Commission may make recommendations to the President with respect to the appointment or removal of the General Manager.

(B) a Division of Research, a Division of Production, a Division of Engineering, and a Division of Military Application.

Each division shall be under the direction of a Director who shall be appointed by the Commission, and shall receive compensation at the rate of \$14,000 per annum. The Director of the Division of Military Application shall be a member of the armed forces. The Commission shall require each such division to exercise such of the Commission's powers under this Act as the Commission may determine, except that the authority granted under section 3 (a) of this Act shall not be exercised by the Division of Research.

(b) **GENERAL ADVISORY COMMITTEE.**—There shall be a General Advisory Committee to advise the Commission on scientific and technical matters relating to materials, production, and research and development, to be composed of nine members, who shall be appointed from civilian life by the President. Each member shall hold office for a term of six years, except that (1) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed, shall be appointed for the remainder of such term; and (2) the terms of office of the members first taking office after the date of the enactment of this Act shall expire, as designated by the President at the time of appointment, three at the end of two years, three at the end of four years, and three at the end of six years, after the date of the enactment of this Act. The Committee shall designate one of its own members as Chairman. The Committee shall meet at least four times in every calendar year. The members of the Committee shall receive a per diem compensation of \$50 for each day spent in meetings or conferences, and all members shall receive their necessary traveling or other expenses while engaged in the work of the Committee.

(c) **MILITARY LIAISON COMMITTEE.**—There shall be a Military Liaison Committee consisting of representatives of the Departments of War and Navy, detailed or assigned thereto, without additional compensation, by the Secretaries of War and Navy in such number as they may determine. The Commission shall advise and consult with the Committee on all atomic energy matters which the Committee deems to relate to military applications, including the development, manufacture, use, and storage of bombs, the allocation of fissionable material for military research, and the control of information relating to the manufacture or utilization of atomic weapons. The Commission shall keep the Committee fully informed of all such matters before it and the Committee shall keep the Commission fully informed of all atomic energy activities of the War and Navy Departments. The Committee shall have authority to make written recommendations to the Commission on matters relating to military applications from time to time as it may deem appropriate. If the Committee at any time concludes that any action, proposed action, or failure to act of the Commission on such matters is adverse to the responsibilities of the Departments of War or Navy, derived from the Constitution, laws, and treaties, the Committee may refer such action, proposed action, or failure to act to the Secretaries of War and Navy. If either Secretary concurs, he may refer the matter to the President, whose decision shall be final.

(d) **APPOINTMENT OF ARMY AND NAVY OFFICERS.**—Notwithstanding the provisions of section 1222 of the Revised Statutes (U. S. C., 1940 edition, title 10, sec. 576), section 212 of the Act entitled "An Act making appropriations for the Legislative Branch of the Government

for the fiscal year ending June 30, 1933, and for other purposes", approved June 30, 1932, as amended (U. S. C., 1940 edition, title 5, sec. 59a), section 2 of the Act entitled "An Act making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and ninety-five, and for other purposes", approved July 31, 1894, as amended (U. S. C., 1940 edition, title 5, sec. 62), or any other law, any active or retired officer of the Army or the Navy may serve as Director of the Division of Military Application established by subsection (a) (4) (B) of this section, without prejudice to his commissioned status as such officer. Any such officer serving as Director of the Division of Military Application shall receive, in addition to his pay from the United States as such officer, an amount equal to the difference between such pay and the compensation prescribed in subsection (a) (4) (B) of this section.

RESEARCH

SEC. 8. (a) RESEARCH ASSISTANCE.—The Commission is directed to exercise its powers in such manner as to insure the continued conduct of research and development activities in the fields specified below by private or public institutions or persons and to assist in the acquisition of an ever-expanding fund of theoretical and practical knowledge in such fields. To this end the Commission is authorized and directed to make arrangements (including contracts, agreements, and loans) for the conduct of research and development activities relating to—

- (1) nuclear processes;
- (2) the theory and production of atomic energy, including processes, materials, and devices related to such production;
- (3) utilization of fissionable and radioactive materials for medical, biological, health, or military purposes;
- (4) utilization of fissionable and radioactive materials and processes entailed in the production of such materials for all other purposes, including industrial uses; and
- (5) the protection of health during research and production activities.

The Commission may make such arrangements without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and may make partial and advance payments under such arrangements, and may make available for use in connection therewith such of its equipment and facilities as it may deem desirable. Such arrangements shall contain such provisions to protect health, to minimize danger from explosion and other hazards to life or property, and to require the reporting and to permit the inspection of work performed thereunder, as the Commission may determine; but shall not contain any provisions or conditions which prevent the dissemination of scientific or technical information, except to the extent such dissemination is prohibited by law.

(b) RESEARCH BY THE COMMISSION.—The Commission is authorized and directed to conduct, through its own facilities, activities and studies of the types specified in subsection (a) above.

PRODUCTION OF FISSIONABLE MATERIAL

SEC. 4. (a) DEFINITION.—As used in this Act, the term “produce”, when used in relation to fissionable material, means to manufacture, produce, or refine fissionable material, as distinguished from source materials as defined in section 5 (b) (1), or to separate fissionable material from other substances in which such material may be contained or to produce new fissionable material.

(b) PROHIBITION.—It shall be unlawful for any person to own any facilities for the production of fissionable material or for any person to produce fissionable material, except to the extent authorized by subsection (c).

(c) OWNERSHIP AND OPERATION OF PRODUCTION FACILITIES.—

(1) OWNERSHIP OF PRODUCTION FACILITIES.—The Commission, as agent of and on behalf of the United States, shall be the exclusive owner of all facilities for the production of fissionable material other than facilities which (A) are useful in the conduct of research and development activities in the fields specified in section 3, and (B) do not, in the opinion of the Commission, have a potential production rate adequate to enable the operator of such facilities to produce within a reasonable period of time a sufficient quantity of fissionable material to produce an atomic bomb or any other atomic weapon.

(2) OPERATION OF THE COMMISSION'S PRODUCTION FACILITIES.—The Commission is authorized and directed to produce or to provide for the production of fissionable material in its own facilities. To the extent deemed necessary, the Commission is authorized to make, or to continue in effect, contracts with persons obligating them to produce fissionable material in facilities owned by the Commission. The Commission is also authorized to enter into research and development contracts authorizing the contractor to produce fissionable material in facilities owned by the Commission to the extent that the production of such fissionable material may be incident to the conduct of research and development activities under such contracts. Any contract entered into under this section shall contain provisions (A) prohibiting the contractor with the Commission from subcontracting any part of the work he is obligated to perform under the contract, except as authorized by the Commission, and (B) obligating the contractor to make such reports to the Commission as it may deem appropriate with respect to his activities under the contract, to submit to frequent inspection by employees of the Commission of all such activities, and to comply with all safety and security regulations which may be prescribed by the Commission. Any contract made under the provisions of this paragraph may be made without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under such contracts. The President shall determine at least once each year the quantities of fissionable material to be produced under this paragraph.

(3) OPERATION OF OTHER PRODUCTION FACILITIES.—Fissionable material may be produced in the conduct of research and development activities in facilities which, under paragraph (1) above, are not required to be owned by the Commission.

(d) IRRADIATION OF MATERIALS.—For the purpose of increasing the supply of radioactive materials, the Commission and persons lawfully producing or utilizing fissionable material are authorized to expose materials of any kind to the radiation incident to the processes of producing or utilizing fissionable material.

(e) MANUFACTURE OF PRODUCTION FACILITIES.—Unless authorized by a license issued by the Commission, no person may manufacture, produce, transfer, or acquire any facilities for the production of fissionable material. Licenses shall be issued in accordance with such procedures as the Commission may by regulation establish and shall be issued in accordance with such standards and upon such conditions as will restrict the production and distribution of such facilities to effectuate the policies and purposes of this Act. Nothing in this section shall be deemed to require a license for such manufacture, production, transfer, or acquisition incident to or for the conduct of research or development activities in the United States of the types specified in section 3, or to prohibit the Commission from manufacturing or producing such facilities for its own use.

CONTROL OF MATERIALS

SEC. 5. (a) FISSIONABLE MATERIALS.—

(1) DEFINITION.—As used in this Act, the term "fissionable material" means plutonium, uranium enriched in the isotope 235, any other material which the Commission determines to be capable of releasing substantial quantities of energy through nuclear chain reaction of the material, or any material artificially enriched by any of the foregoing; but does not include source materials, as defined in section 5 (b) (1).

(2) GOVERNMENT OWNERSHIP OF ALL FISSIONABLE MATERIAL.—All right, title, and interest within or under the jurisdiction of the United States, in or to any fissionable material, now or hereafter produced, shall be the property of the Commission, and shall be deemed to be vested in the Commission by virtue of this Act. Any person owning any interest in any fissionable material at the time of the enactment of this Act, or owning any interest in any material at the time when such material is hereafter determined to be a fissionable material, or who lawfully produces any fissionable material incident to privately financed research or development activities, shall be paid just compensation therefor. The Commission may, by action consistent with the provisions of paragraph (4) below, authorize any such person to retain possession of such fissionable material, but no person shall have any title in or to any fissionable material.

(3) PROHIBITION.—It shall be unlawful for any person, after sixty days from the effective date of this Act to (A) possess or transfer any fissionable material, except as authorized by the Commission, or (B) export from or import into the United States any fissionable material, or (C) directly or indirectly engage in the production of any fissionable material outside of the United States.

(4) DISTRIBUTION OF FISSIONABLE MATERIAL.—Without prejudice to its continued ownership thereof, the Commission is authorized to

distribute fissionable material owned by it, with or without charge, to applicants requesting such material (A) for the conduct of research or development activities either independently or under contract or other arrangement with the Commission, (B) for use in medical therapy, or (C) for use pursuant to a license issued under the authority of section 7. Such material shall be distributed in such quantities and on such terms that no applicant will be enabled to obtain an amount sufficient to construct a bomb or other military weapon. The Commission is directed to distribute sufficient fissionable material to permit the conduct of widespread independent research and development activity, to the maximum extent practicable. In determining the quantities of fissionable material to be distributed, the Commission shall make such provisions for its own needs and for the conservation of fissionable material as it may determine to be necessary in the national interest for the future development of atomic energy. The Commission shall not distribute any material to any applicant, and shall recall any distributed material from any applicant, who is not equipped to observe or who fails to observe such safety standards to protect health and to minimize danger from explosion or other hazard to life or property as may be established by the Commission, or who uses such material in violation of law or regulation of the Commission or in a manner other than as disclosed in the application therefor.

(5) The Commission is authorized to purchase or otherwise acquire any fissionable material or any interest therein outside the United States, or any interest in facilities for the production of fissionable material, or in real property on which such facilities are located, without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under contracts for such purposes. The Commission is further authorized to take, requisition, or condemn, or otherwise acquire any interest in such facilities or real property, and just compensation shall be made therefor.

(b) SOURCE MATERIALS.—

(1) DEFINITION.—As used in this Act, the term "source material" means uranium, thorium, or any other material which is determined by the Commission, with the approval of the President, to be peculiarly essential to the production of fissionable materials; but includes ores only if they contain one or more of the foregoing materials in such concentration as the Commission may by regulation determine from time to time.

(2) LICENSE FOR TRANSFERS REQUIRED.—Unless authorized by a license issued by the Commission, no person may transfer or deliver, receive possession of or title to, or export from the United States any source material after removal from its place of deposit in nature, except that licenses shall not be required for quantities of source materials which, in the opinion of the Commission, are unimportant.

(3) ISSUANCE OF LICENSES.—The Commission shall establish such standards for the issuance, refusal, or revocation of licenses as it may deem necessary to assure adequate source materials for production, research, or development activities pursuant to this Act or to prevent

the use of such materials in a manner inconsistent with the national welfare. Licenses shall be issued in accordance with such procedures as the Commission may by regulation establish.

(4) **REPORTING.**—The Commission is authorized to issue such regulations or orders requiring reports of ownership, possession, extraction, refining, shipment, or other handling of source materials as it may deem necessary, except that such reports shall not be required with respect to (A) any source material prior to removal from its place of deposit in nature, or (B) quantities of source materials which in the opinion of the Commission are unimportant or the reporting of which will discourage independent prospecting for new deposits.

(5) **ACQUISITION.**—The Commission is authorized and directed to purchase, take, requisition, condemn, or otherwise acquire, supplies of source materials or any interest in real property containing deposits of source materials to the extent it deems necessary to effectuate the provisions of this Act. Any purchase made under this paragraph may be made without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made thereunder. The Commission may establish guaranteed prices for all source materials delivered to it within a specified time. Just compensation shall be made for any property taken, requisitioned, or condemned under this paragraph.

(6) **EXPLORATION.**—The Commission is authorized to conduct and enter into contracts for the conduct of exploratory operations, investigations, and inspections to determine the location, extent, mode of occurrence, use, or conditions of deposits or supplies of source materials, making just compensation for any damage or injury occasioned thereby. Such exploratory operations may be conducted only with the consent of the owner, but such investigations and inspections may be conducted with or without such consent.

(7) **PUBLIC LANDS.**—All uranium, thorium, and all other materials determined pursuant to paragraph (1) of this subsection to be peculiarly essential to the production of fissionable material, contained, in whatever concentration, in deposits in the public lands are hereby reserved for the use of the United States subject to valid claims, rights, or privileges existing on the date of the enactment of this Act: *Provided, however,* That no individual, corporation, partnership, or association, which had any part, directly or indirectly, in the development of the atomic bomb project, may benefit by any location, entry, or settlement upon the public domain made after such individual, corporation, partnership, or association took part in such project, if such individual, corporation, partnership, or association, by reason of having had such part in the development of the atomic bomb project, acquired confidential official information as to the existence of deposits of such uranium, thorium, or other materials in the specific lands upon which such location, entry, or settlement is made, and subsequent to the date of the enactment of this Act made such location, entry, or settlement or caused the same to be made for his, its, or their benefit. The Secretary of the Interior shall cause to be inserted in every patent, conveyance, lease, permit, or other authorization hereafter granted to use the public lands or their mineral resources,

under any of which there might result the extraction of any materials so reserved, a reservation to the United States of all such materials, whether or not of commercial value, together with the right of the United States through its authorized agents or representatives at any time to enter upon the land and prospect for, mine, and remove the same, making just compensation for any damage or injury occasioned thereby. Any lands so patented, conveyed, leased, or otherwise disposed of may be used, and any rights under any such permit or authorization may be exercised, as if no reservation of such materials had been made under this subsection; except that, when such use results in the extraction of any such material from the land in quantities which may not be transferred or delivered without a license under this subsection, such material shall be the property of the Commission and the Commission may require delivery of such material to it by any possessor thereof after such material has been separated as such from the ores in which it was contained. If the Commission requires the delivery of such material to it, it shall pay to the person mining or extracting the same, or to such other person as the Commission determines to be entitled thereto, such sums, including profits, as the Commission deems fair and reasonable for the discovery, mining, development, production, extraction, and other services performed with respect to such material prior to such delivery, but such payment shall not include any amount on account of the value of such material before removal from its place of deposit in nature. If the Commission does not require delivery of such material to it, the reservation made pursuant to this paragraph shall be of no further force or effect.

(c) **BYPRODUCT MATERIALS.**—

(1) **DEFINITION.**—As used in this Act, the term “byproduct material” means any radioactive material (except fissionable material) yielded in or made radioactive by exposure to the radiation incident to the processes of producing or utilizing fissionable material.

(2) **DISTRIBUTION.**—The Commission is authorized to distribute, with or without charge, byproduct materials to applicants seeking such materials for research or development activity, medical therapy, industrial uses, or such other useful applications as may be developed. In distributing such materials, the Commission shall give preference to applicants proposing to use such materials in the conduct of research and development activity or medical therapy. The Commission shall not distribute any byproduct materials to any applicant, and shall recall any distributed materials from any applicant, who is not equipped to observe or who fails to observe such safety standards to protect health as may be established by the Commission or who uses such materials in violation of law or regulation of the Commission or in a manner other than as disclosed in the application therefor.

(d) **GENERAL PROVISIONS.**—The Commission shall not—

(1) distribute any fissionable material to (A) any person for a use which is not under or within the jurisdiction of the United States, (B) any foreign government, or (C) any person within the United States if, in the opinion of the Commission, the distribution of such fissionable material to such person would be inimical to the common defense and security.

(2) license any person to transfer or deliver, receive possession of or title to, or export from the United States any source material if, in the opinion of the Commission, the issuance of a license to such person for such purpose would be inimical to the common defense and security.

MILITARY APPLICATIONS OF ATOMIC ENERGY

SEC. 6 (a) AUTHORITY.—The Commission is authorized to—

- (1) conduct experiments and do research and development work in the military application of atomic energy; and
- (2) engage in the production of atomic bombs, atomic bomb parts, or other military weapons utilizing fissionable materials; except that such activities shall be carried on only to the extent that the express consent and direction of the President of the United States has been obtained, which consent and direction shall be obtained at least once each year.

The President from time to time may direct the Commission (1) to deliver such quantities of fissionable materials or weapons to the armed forces for such use as he deems necessary in the interest of national defense or (2) to authorize the armed forces to manufacture, produce, or acquire any equipment or device utilizing fissionable material or atomic energy as a military weapon.

(b) PROHIBITION.—It shall be unlawful for any person to manufacture, produce, transfer, or acquire any equipment or device utilizing fissionable material or atomic energy as a military weapon, except as may be authorized by the Commission. Nothing in this subsection shall be deemed to modify the provisions of section 4 of this Act, or to prohibit research activities in respect of military weapons, or to permit the export of any such equipment or device.

UTILIZATION OF ATOMIC ENERGY

SEC. 7. (a) LICENSE REQUIRED.—It shall be unlawful, except as provided in sections 5 (a) (4) (A) or (B) or 6 (a), for any person to manufacture, produce, or export any equipment or device utilizing fissionable material or atomic energy or to utilize fissionable material or atomic energy with or without such equipment or device, except under and in accordance with a license issued by the Commission authorizing such manufacture, production, export, or utilization. No license may permit any such activity if fissionable material is produced incident to such activity, except as provided in sections 3 and 4. Nothing in this section shall be deemed to require a license for the conduct of research or development activities relating to the manufacture of such equipment or devices or the utilization of fissionable material or atomic energy, or for the manufacture or use of equipment or devices for medical therapy.

(b) REPORT TO CONGRESS.—Whenever in its opinion any industrial, commercial, or other nonmilitary use of fissionable material or atomic energy has been sufficiently developed to be of practical value, the Commission shall prepare a report to the President stating all the facts with respect to such use, the Commission's estimate of the social, political, economic, and international effects of such use and the Commission's recommendations for necessary or desirable supplemental legislation. The President shall then transmit this report to the

Congress together with his recommendations. No license for any manufacture, production, export, or use shall be issued by the Commission under this section until after (1) a report with respect to such manufacture, production, export, or use has been filed with the Congress; and (2) a period of ninety days in which the Congress was in session has elapsed after the report has been so filed. In computing such period of ninety days, there shall be excluded the days on which either House is not in session because of an adjournment of more than three days.

(c) **ISSUANCE OF LICENSES.**—After such ninety-day period, unless hereafter prohibited by law, the Commission may license such manufacture, production, export, or use in accordance with such procedures and subject to such conditions as it may by regulation establish to effectuate the provisions of this Act. The Commission is authorized and directed to issue licenses on a nonexclusive basis and to supply to the extent available appropriate quantities of fissionable material to licensees (1) whose proposed activities will serve some useful purpose proportionate to the quantities of fissionable material to be consumed; (2) who are equipped to observe such safety standards to protect health and to minimize danger from explosion or other hazard to life or property as the Commission may establish; and (3) who agree to make available to the Commission such technical information and data concerning their activities pursuant to such licenses as the Commission may determine necessary to encourage similar activities by as many licensees as possible. Each such license shall be issued for a specified period, shall be revocable at any time by the Commission in accordance with such procedures as the Commission may establish, and may be renewed upon the expiration of such period. Where activities under any license might serve to maintain or to foster the growth of monopoly, restraint of trade, unlawful competition, or other trade position inimical to the entry of new, freely competitive enterprises in the field, the Commission is authorized and directed to refuse to issue such license or to establish such conditions to prevent these results as the Commission, in consultation with the Attorney General, may determine. The Commission shall report promptly to the Attorney General any information it may have with respect to any utilization of fissionable material or atomic energy which appears to have these results. No license may be given to any person for activities which are not under or within the jurisdiction of the United States, to any foreign government, or to any person within the United States if, in the opinion of the Commission, the issuance of a license to such person would be inimical to the common defense and security.

(d) **BYPRODUCT POWER.**—If energy which may be utilized is produced in the production of fissionable material, such energy may be used by the Commission, transferred to other Government agencies, or sold to public or private utilities under contracts providing for reasonable resale prices.

INTERNATIONAL ARRANGEMENTS

SEC. 8. (a) DEFINITION.—As used in this Act, the term “international arrangement” shall mean any treaty approved by the Senate or international agreement hereafter approved by the Congress, during the time such treaty or agreement is in full force and effect.

(b) **EFFECT OF INTERNATIONAL ARRANGEMENTS.**—Any provision of this Act or any action of the Commission to the extent that it conflicts with the provisions of any international arrangement made after the date of enactment of this Act shall be deemed to be of no further force or effect.

(c) **POLICIES CONTAINED IN INTERNATIONAL ARRANGEMENTS.**—In the performance of its functions under this Act, the Commission shall give maximum effect to the policies contained in any such international arrangement.

PROPERTY OF THE COMMISSION

SEC. 9. (a) The President shall direct the transfer to the Commission of all interests owned by the United States or any Government agency in the following property:

(1) All fissionable material; all atomic weapons and parts thereof; all facilities, equipment, and materials for the processing, production, or utilization of fissionable material or atomic energy; all processes and technical information of any kind, and the source thereof (including data, drawings, specifications, patents, patent applications, and other sources (relating to the processing, production, or utilization of fissionable material or atomic energy; and all contracts, agreements, leases, patents, applications for patents, inventions and discoveries (whether patented or unpatented), and other rights of any kind concerning any such items;

(2) All facilities, equipment, and materials, devoted primarily to atomic energy research and development; and

(3) Such other property owned by or in the custody or control of the Manhattan Engineer District or other Government agencies as the President may determine.

(b) In order to render financial assistance to those States and localities in which the activities of the Commission are carried on and in which the Commission has acquired property previously subject to State and local taxation, the Commission is authorized to make payments to State and local governments in lieu of property taxes. Such payments may be in the amounts, at the times, and upon the terms the Commission deems appropriate, but the Commission shall be guided by the policy of not making payments in excess of the taxes which would have been payable for such property in the condition in which it was acquired, except in cases where special burdens have been cast upon the State or local government by activities of the Commission, the Manhattan Engineer District or their agents. In any such case, any benefit accruing to the State or local government by reason of such activities shall be considered in determining the amount of the payment. The Commission, and the property, activities, and income of the Commission, are hereby expressly exempted from taxation in any manner or form by any State, county, municipality, or any subdivision thereof.

CONTROL OF INFORMATION

SEC. 10. (a) POLICY.—It shall be the policy of the Commission to control the dissemination of restricted data in such a manner as to assure the common defense and security. Consistent with such policy, the Commission shall be guided by the following principles:

(1) That until Congress declares by joint resolution that effective and enforceable international safeguards against the use of atomic energy for destructive purposes have been established, there shall be no exchange of information with other nations with respect to the use of atomic energy for industrial purposes; and

(2) That the dissemination of scientific and technical information relating to atomic energy should be permitted and encouraged so as to provide that free interchange of ideas and criticisms which is essential to scientific progress.

(b) RESTRICTIONS.—

(1) The term "restricted data" as used in this section means all data concerning the manufacture or utilization of atomic weapons, the production of fissionable material, or the use of fissionable material in the production of power, but shall not include any data which the Commission from time to time determines may be published without adversely affecting the common defense and security.

(2) Whoever, lawfully or unlawfully, having possession of, access to, control over, or being entrusted with, any document, writing, sketch, photograph, plan, model, instrument, appliance, note or information involving or incorporating restricted data—

(A) communicates, transmits, or discloses the same to any individual or person, or attempts or conspires to do any of the foregoing, with intent to injure the United States or with intent to secure an advantage to any foreign nation, upon conviction thereof, shall be punished by death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by a fine of not more than \$20,000 or imprisonment for not more than twenty years, or both;

(B) communicates, transmits, or discloses the same to any individual or person, or attempts or conspires to do any of the foregoing, with reason to believe such data will be utilized to injure the United States or to secure an advantage to any foreign nation, shall, upon conviction, be punished by a fine of not more than \$10,000 or imprisonment for not more than ten years, or both.

(3) Whoever, with intent to injure the United States or with intent to secure an advantage to any foreign nation, acquires or attempts or conspires to acquire any document, writing, sketch, photograph, plan, model, instrument, appliance, note or information involving or incorporating restricted data shall, upon conviction thereof, be punished by death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by a fine of not more than \$20,000 or imprisonment for not more than twenty years, or both.

(4) Whoever, with intent to injure the United States or with intent to secure an advantage to any foreign nation, removes, conceals, tampers with, alters, mutilates, or destroys any document, writing, sketch, photograph, plan, model, instrument, appliance, or note involving or incorporating restricted data and used by any individual or person in connection with the production of fissionable material, or

research or development relating to atomic energy, conducted by the United States, or financed in whole or in part by Federal funds, or conducted with the aid of fissionable material, shall be punished by death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by a fine of not more than \$20,000 or imprisonment for not more than twenty years or both.

(5) (A) No person shall be prosecuted for any violation under this section unless and until the Attorney General of the United States has advised the Commission with respect to such prosecution and no such prosecution shall be commenced except upon the express direction of the Attorney General of the United States.

(B) (i) No arrangement shall be made under section 3, no contract shall be made or continued in effect under section 4, and no license shall be issued under section 4 (e) or 7, unless the person with whom such arrangement is made, the contractor or prospective contractor, or the prospective licensee agrees in writing not to permit any individual to have access to restricted data until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual and the Commission shall have determined that permitting such person to have access to restricted data will not endanger the common defense or security.

(ii) Except as authorized by the Commission in case of emergency, no individual shall be employed by the Commission until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual.

(iii) Notwithstanding the provisions of subparagraphs (i) and (ii), during such period of time after the enactment of this Act as may be necessary to make the investigation, report, and determination required by such paragraphs, (a) any individual who was permitted access to restricted data by the Manhattan Engineer District may be permitted access to restricted data and (b) the Commission may employ any individual who was employed by the Manhattan Engineer District.

(iv) To protect against the unlawful dissemination of restricted data and to safeguard facilities, equipment, materials, and other property of the Commission, the President shall have authority to utilize the services of any Government agency to the extent he may deem necessary or desirable.

(C) All violations of this Act shall be investigated by the Federal Bureau of Investigation of the Department of Justice.

(6) This section shall not exclude the applicable provisions of any other laws, except that no Government agency shall take any action under such other laws inconsistent with the provisions of this section.

(c) **INSPECTIONS, RECORDS, AND REPORTS.**—The Commission is—

(1) authorized by regulation or order to require such reports and the keeping of such records with respect to, and to provide for such inspections of, activities and studies of types specified in section 3 and of activities under licenses issued pursuant to

section 7 as may be necessary to effectuate the purposes of this Act;

(2) authorized and directed by regulation or order to require regular reports and records with respect to, and to provide for frequent inspections of, the production of fissionable material in the conduct of research and development activities.

PATENTS AND INVENTIONS

SEC. 11. (a) PRODUCTION AND MILITARY UTILIZATION.

(1) No patent shall hereafter be granted for any invention or discovery which is useful solely in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon. Any patent granted for any such invention or discovery is hereby revoked, and just compensation shall be made therefor.

(2) No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon. Any rights conferred by any patent heretofore granted for any invention or discovery are hereby revoked to the extent that such invention or discovery is so used, and just compensation shall be made therefor.

(3) Any person who has made or hereafter makes any invention or discovery useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon shall file with the Commission a report containing a complete description thereof, unless such invention or discovery is described in an application for a patent filed in the Patent Office by such person within the time required for the filing of such report. The report covering any such invention or discovery shall be filed on or before whichever of the following is the latest: (A) The sixtieth day after the date of enactment of this Act; (B) the sixtieth day after the completion of such invention or discovery; or (C) the sixtieth day after such person first discovers or first has reason to believe that such invention or discovery is useful in such production or utilization.

(b) USE OF INVENTIONS FOR RESEARCH.—No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the conduct of research or development activities in the fields specified in section 3. Any rights conferred by any patent heretofore granted for any invention or discovery are hereby revoked to the extent that such invention or discovery is so used, and just compensation shall be made therefor.

(c) NONMILITARY UTILIZATION.—

(1) It shall be the duty of the Commission to declare any patent to be affected with the public interest if (A) the invention or discovery covered by the patent utilizes or is essential in the utilization of fissionable material or atomic energy; and (B) the licensing of such invention or discovery under this subsection is necessary to effectuate the policies and purposes of this Act.

(2) Whenever any patent has been declared, pursuant to paragraph (1), to be affected with the public interest—

(A) The Commission is hereby licensed to use the invention or discovery covered by such patent in performing any of its powers under this Act; and

(B) Any person to whom a license has been issued under section 7 is hereby licensed to use the invention or discovery covered by such patent to the extent such invention or discovery is used by him in carrying on the activities authorized by his license under section 7.

The owner of the patent shall be entitled to a reasonable royalty fee for any use of an invention or discovery licensed by this subsection. Such royalty fee may be agreed upon by such owner and the licensee, or in the absence of such agreement shall be determined by the Commission.

(3) No court shall have jurisdiction or power to stay, restrain, or otherwise enjoin the use of any invention or discovery by a licensee, to the extent that such use is licensed by paragraph (2) above, on the ground of infringement of any patent. If in any action for infringement against such licensee the court shall determine that the defendant is exercising such license, the measure of damages shall be the royalty fee determined pursuant to this section, together with such costs, interest, and reasonable attorney's fees as may be fixed by the court. If no royalty fee has been determined, the court shall stay the proceeding until the royalty fee is determined pursuant to this section. If any such licensee shall fail to pay such royalty fee, the patentee may bring an action in any court of competent jurisdiction for such royalty fee, together with such costs, interest, and reasonable attorney's fees as may be fixed by the court.

(d) ACQUISITION OF PATENTS.—The Commission is authorized to purchase, or to take, requisition, or condemn, and make just compensation for, (1) any invention or discovery which is useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon, or which utilizes or is essential in the utilization of fissionable material or atomic energy, or (2) any patent or patent application covering any such invention or discovery. The Commissioner of Patents shall notify the Commission of all applications for patents heretofore or hereafter filed which in his opinion disclose such inventions or discoveries and shall provide the Commission access to all such applications.

(e) COMPENSATION AWARDS, AND ROYALTIES.—

(1) PATENT COMPENSATION BOARD.—The Commission shall designate a Patent Compensation Board, consisting of two or more employees of the Commission, to consider applications under this subsection.

(2) ELIGIBILITY.—

(A) Any owner of a patent licensed under subsection (c) (2) or any licensee thereunder may make application to the Commission for the determination of a reasonable royalty fee in accordance with such procedures as it by regulation may establish.

(B) Any person seeking to obtain the just compensation provided in subsections (a), (b), or (d) shall make application therefor to the Commission in accordance with such procedures as it may by regulation establish.

(C) Any person making any invention or discovery useful in the production of fissionable material or in the utilization of

fissionable material or atomic energy for a military weapon who is not entitled to compensation therefor under subsection (a) and who has complied with subsection (a) (3) above may make application to the Commission for, and the Commission may grant, an award.

(D) Any person making application under this subsection shall have the right to be represented by counsel.

(3) STANDARDS.—

(A) In determining such reasonable royalty fee, the Commission shall take into consideration any defense, general or special, that might be pleaded by a defendant in an action for infringement, the extent to which, if any, such patent was developed through federally financed research, the degree of utility, novelty, and importance of the invention or discovery, and may consider the cost to the owner of the patent of developing such invention or discovery or acquiring such patent.

(B) In determining what constitutes just compensation under subsection (a), (b), or (d) above, the Commission shall take into account the considerations set forth in paragraph (A) above, and the actual use of such invention or discovery, and may determine that such compensation be paid in periodic payments or in a lump sum.

(C) In determining the amount of any award under paragraph (2) (C) of this subsection, the Commission shall take into account the considerations set forth in paragraph (A) above, and the actual use of such invention or discovery. Awards so made may be paid by the Commission in periodic payments or in a lump sum.

(4) JUDICIAL REVIEW.—Any person aggrieved by any determination of the Commission of an award or of a reasonable royalty fee may obtain a review of such determination in the Court of Appeals for the District of Columbia by filing in such court, within thirty days after notice of such determination, a written petition praying that such determination be set aside. A copy of such petition shall be forthwith served upon the Commission and thereupon the Commission shall file with the court a certified transcript of the entire record in the proceeding, including the findings and conclusions upon which the determination was based. Upon the filing of such transcript the court shall have exclusive jurisdiction upon the record certified to it to affirm the determination in its entirety or set it aside and remand it to the Commission for further proceedings. The findings of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. The court's judgment shall be final, subject, however, to review by the Supreme Court of the United States upon writ of certiorari on petition therefor under section 240 of the Judicial Code (U. S. C., title 28, sec. 347), by the Commission or any party to the court proceeding.

GENERAL AUTHORITY

SEC. 12. (a) In the performance of its functions the Commission is authorized to—

(1) establish advisory boards to advise with and make recommendations to the Commission on legislation, policies, administration, research, and other matters;

(2) establish by regulation or order such standards and instructions to govern the possession and use of fissionable and byproduct materials as the Commission may deem necessary or desirable to protect health or to minimize danger from explosions and other hazards to life or property;

(3) make such studies and investigations, obtain such information, and hold such hearings as the Commission may deem necessary or proper to assist it in exercising any authority provided in this Act, or in the administration or enforcement of this Act, or any regulations or orders issued thereunder. For such purposes the Commission is authorized to administer oaths and affirmations, and by subpoena to require any person to appear and testify, or to appear and produce documents, or both, at any designated place. No person shall be excused from complying with any requirements under this paragraph because of his privilege against self-incrimination, but the immunity provisions of the Compulsory Testimony Act of February 11, 1893 (U. S. C., title 49, sec. 46), shall apply with respect to any individual who specifically claims such privilege. Witnesses subpoenaed under this subsection shall be paid the same fees and mileage as are paid witnesses in the district courts of the United States;

(4) appoint and fix the compensation of such officers and employees as may be necessary to carry out the functions of the Commission. Such officers and employees shall be appointed in accordance with the civil-service laws and their compensation fixed in accordance with the Classification Act of 1923, as amended, except that to the extent the Commission deems such action necessary to the discharge of its responsibilities, personnel may be employed and their compensation fixed without regard to such laws. The Commission shall make adequate provision for administrative review of any determination to dismiss any employee;

(5) acquire such materials, property, equipment, and facilities, establish or construct such buildings and facilities, and modify such buildings and facilities from time to time as it may deem necessary, and construct, acquire, provide, or arrange for such facilities and services (at project sites where such facilities and services are not available) for the housing, health, safety, welfare, and recreation of personnel employed by the Commission as it may deem necessary;

(6) with the consent of the agency concerned, utilize or employ the services or personnel of any Government agency or any State or local government, or voluntary or uncompensated personnel, to perform such functions on its behalf as may appear desirable;

(7) acquire, purchase, lease, and hold real and personal property as agent of and on behalf of the United States and to sell, lease, grant, and dispose of such real and personal property as provided in this Act; and

(8) without regard to the provisions of the Surplus Property Act of 1944 or any other law, make such disposition as it may deem desirable of (A) radioactive materials, and (B) any other property the special disposition of which is, in the opinion of the Commission, in the interest of the national security.

(b) **SECURITY.**—The President may, in advance, exempt any specific action of the Commission in a particular matter from the provisions of law relating to contracts whenever he determines that such action is essential in the interest of the common defense and security.

(c) **ADVISORY COMMITTEES.**—The members of the General Advisory Committee established pursuant to section 2 (b) and the members of advisory boards established pursuant to subsection (a) (1) of this section may serve as such without regard to the provisions of sections 109 and 113 of the Criminal Code (18 U. S. C., secs. 198 and 203) or section 19 (e) of the Contract Settlement Act of 1944, except insofar as such sections may prohibit any such member from receiving compensation in respect of any particular matter which directly involves the Commission or in which the Commission is directly interested.

COMPENSATION FOR PRIVATE PROPERTY ACQUIRED

SEC. 13. (a). The United States shall make just compensation for any property or interests therein taken or requisitioned pursuant to sections 5 and 11. The Commission shall determine such compensation. If the compensation so determined is unsatisfactory to the person entitled thereto, such person shall be paid 50 per centum of the amount so determined, and shall be entitled to sue the United States in the Court of Claims or in any district court of the United States in the manner provided by sections 24 (20) and 145 of the Judicial Code to recover such further sum as added to said 50 per centum will make up such amount as will be just compensation.

(b) In the exercise of the rights of eminent domain and condemnation, proceedings may be instituted under the Act of August 1, 1888 (U. S. C., title 40, sec. 257), or any other applicable Federal statute. Upon or after the filing of the condemnation petition, immediate possession may be taken and the property may be occupied, used, and improved for the purposes of this Act, notwithstanding any other law. Real property acquired by purchase, donation, or other means of transfer may also be occupied, used, and improved for the purposes of this Act, prior to approval of title by the Attorney General.

JUDICIAL REVIEW AND ADMINISTRATIVE PROCEDURE

Sec. 14. (a) Notwithstanding the provisions of section 12 of the Administrative Procedure Act (Public Law 404, Seventy-ninth Congress, approved June 11, 1946) which provide when such Act shall take effect, section 10 of such Act (relating to judicial review) shall be applicable, upon the enactment of this Act, to any agency action under the authority of this Act or by any agency created by or under the provisions of this Act.

(b) Except as provided in subsection (a), no provision of this Act shall be held to supersede or modify the provisions of the Administrative Procedure Act.

(c) As used in this section the terms "agency action" and "agency" shall have the same meaning as is assigned to such terms in the Administrative Procedure Act.

JOINT COMMITTEE ON ATOMIC ENERGY

Sec. 15. (a) There is hereby established a Joint Committee on Atomic Energy to be composed of nine Members of the Senate to be

appointed by the President of the Senate, and nine Members of the House of Representatives to be appointed by the Speaker of the House of Representatives. In each instance not more than five members shall be members of the same political party.

(b) The joint committee shall make continuing studies of the activities of the Atomic Energy Commission and of problems relating to the development, use, and control of atomic energy. The Commission shall keep the joint committee fully and currently informed with respect to the Commission's activities. All bills, resolutions, and other matters in the Senate or the House of Representatives relating primarily to the Commission or to the development, use, or control of atomic energy shall be referred to the joint committee. The members of the joint committee who are Members of the Senate shall from time to time report to the Senate, and the members of the joint committee who are Members of the House of Representatives shall from time to time report to the House, by bill or otherwise, their recommendations with respect to matters within the jurisdiction of their respective Houses which are (1) referred to the joint committee or (2) otherwise within the jurisdiction of the joint committee.

(c) Vacancies in the membership of the joint committee shall not affect the power of the remaining members to execute the functions of the joint committee, and shall be filled in the same manner as in the case of the original selection. The joint committee shall select a chairman and a vice chairman from among its members.

(d) The joint committee, or any duly authorized subcommittee thereof, is authorized to hold such hearings, to sit and act at such places and times, to require, by subpoena or otherwise, the attendance of such witnesses and the production of such books, papers, and documents, to administer such oaths, to take such testimony, to procure such printing and binding, and to make such expenditures as it deems advisable. The cost of stenographic services to report such hearings shall not be in excess of 25 cents per hundred words. The provisions of sections 102 to 104, inclusive, of the Revised Statutes shall apply in case of any failure of any witness to comply with a subpoena or to testify when summoned under authority of this section.

(e) The joint committee is empowered to appoint and fix the compensation of such experts, consultants, technicians, and clerical and stenographic assistants as it deems necessary and advisable, but the compensation so fixed shall not exceed the compensation prescribed under the Classification Act of 1923, as amended, for comparable duties. The committee is authorized to utilize the services, information, facilities, and personnel of the departments and establishments of the Government.

ENFORCEMENT

SEC. 16. (a) Whoever willfully violates, attempts to violate, or conspires to violate, any provision of sections 4 (b), 4 (e), 5 (a) (3), or 6 (b) shall, upon conviction thereof, be punished by a fine of not more than \$10,000 or by imprisonment for not more than five years, or both, except that whoever commits such an offense with intent to injure the United States or with intent to secure an advantage to any foreign nation shall, upon conviction thereof, be punished by death or imprisonment for life (but the penalty of death or imprisonment

for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by a fine of not more than \$20,000 or by imprisonment for not more than twenty years, or both.

(b) Whoever willfully violates, attempts to violate, or conspires to violate, any provision of this Act other than those specified in subsection (a) and other than section 10 (b); or of any regulation or order prescribed or issued under sections 5 (b) (4), 10 (c), or 12 (a) (2), shall, upon conviction thereof, be punished by a fine of not more than \$5,000 or by imprisonment for not more than two years, or both, except that whoever commits such an offense with intent to injure the United States or with intent to secure an advantage to any foreign nation shall, upon conviction thereof, be punished by a fine of not more than \$20,000 or by imprisonment for not more than twenty years, or both.

(c) Whenever in the judgment of the Commission any person has engaged or is about to engage in any acts or practices which constitute or will constitute a violation of any provision of this Act, or any regulation or order issued thereunder, it may make application to the appropriate court for an order enjoining such acts or practices, or for an order enforcing compliance with such provision, and upon a showing by the Commission that such person has engaged or is about to engage in any such acts or practices a permanent or temporary injunction, restraining order, or other order may be granted.

(d) In case of failure of refusal to obey a subpoena served upon any person pursuant to section 12 (a) (3), the district court for any district in which such person is found or resides or transacts business, upon application by the Commission, shall have jurisdiction to issue an order requiring such person to appear and give testimony or to appear and produce documents, or both, in accordance with the subpoena; and any failure to obey such order of the court may be punished by such court as a contempt thereof.

REPORTS

SEC. 17. The Commission shall submit to the Congress, in January and July of each year, a report concerning the activities of the Commission. The Commission shall include in such report, and shall at such other times as it deems desirable submit to the Congress, such recommendations for additional legislation as the Commission deems necessary or desirable.

DEFINITIONS

SEC. 18. As used in this Act—

(a) The term "atomic energy" shall be construed to mean all forms of energy released in the course of or as a result of nuclear fission or nuclear transformation.

(b) The term "Government agency" means any executive department, commission, independent establishment, corporation wholly or partly owned by the United States which is an instrumentality of the United States, board, bureau, division, service, office, officer, authority, administration, or other establishment, in the executive branch of the Government.

(c) The term "person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, the United States or any agency thereof, any government other than the United States, any political subdivision of any such government, and any legal successor, representative, agent, or agency of the foregoing, or other entity, but shall not include the Commission or officers or employees of the Commission in the exercise of duly authorized functions.

(d) The term "United States", when used in a geographical sense, includes all Territories and possessions of the United States and the Canal Zone.

(e) The term "research and development" means theoretical analysis, exploration, and experimentation, and the extension of investigative findings and theories of a scientific or technical nature into practical application for experimental and demonstration purposes, including the experimental production and testing of models, devices, equipment, materials, and processes.

(f) The term "equipment or device utilizing fissionable material or atomic energy" shall be construed to mean any equipment or device capable of making use of fissionable material or peculiarly adapted for making use of atomic energy and any important component part especially designed for such equipment or devices, as determined by the Commission.

(g) The term "facilities for the production of fissionable material" shall be construed to mean any equipment or device capable of such production and any important component part especially designed for such equipment or devices, as determined by the Commission.

APPROPRIATIONS

SEC. 19. There are hereby authorized to be appropriated such sums as may be necessary and appropriate to carry out the provisions and purposes of this Act. The Acts appropriating such sums may appropriate specified portions thereof to be accounted for upon the certification of the Commission only. Funds appropriated to the Commission shall, if obligated by contract during the fiscal year for which appropriated, remain available for expenditure for four years following the expiration of the fiscal year for which appropriated. After such four-year period, the unexpended balances of appropriations shall be carried to the surplus fund and covered into the Treasury.

SEPARABILITY OF PROVISIONS

SEC. 20. If any provision of this Act, or the application of such provision to any person or circumstances, is held invalid, the remainder of this Act or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

SHORT TITLE

SEC. 21. This Act may be cited as the "Atomic Energy Act of 1946".
Approved August 1, 1946.