



# **ADVISORY COMMITTEE ON REACTOR SAFEGUARD STATUTORY REQUIREMENTS FOR REVIEWING UTILIZATION AND PRODUCTION FACILITY LICENSES**



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## **ABSTRACT**

In accordance with the Atomic Energy Act of 1954, as amended, the Advisory Committee on Reactor Safeguards (ACRS) is required to review and report on utilization and production facility licenses. The purpose of this document is to (1) identify the statutory requirements associated with ACRS reviews, (2) identify the future utilization and production facility construction and operating licenses that will require ACRS reviews, and (3) identify the legislation, public laws, acts, regulations, and policy decisions associated with these statutory requirements.

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## ABBREVIATIONS

ACNW&M	Advisory Committee on Nuclear Waste and Materials
ACRS	Advisory Committee on Reactor Safeguards
AEA	Atomic Energy Act of 1954, as Amended
AEC	Atomic Energy Commission
FACA	<i>Federal Advisory Committee Act</i>
FR	<i>Federal Register</i>
CFR	<i>Code of Federal Regulations</i>
DOE	U.S. Department of Energy
GNEP	Global Nuclear Energy Partnership
NIST	National Institute of Standards and Technology
NRC	U. S. Nuclear Regulatory Commission
Pub. L.	Public Law
SRM	staff requirements memorandum
U.S.C	<i>United States Code</i>
USEC	United States Enrichment Corporation

## **1. BACKGROUND**

### **1.1 History of the Advisory Committee on Reactor Safeguards**<sup>1</sup>

The Atomic Energy Act of 1946 was designed to safeguard the United States monopoly of atomic bombs and to expand the military applications of the new technology. The Congress decided on civilian control of atomic energy, embodied in a five-member Atomic Energy Commission (AEC). During the period between 1946 and 1954, the AEC was responsible for the operation and safety of the military reactors employed for production of plutonium and tritium.

In June of 1947, the AEC established a panel of highly qualified individuals with backgrounds in appropriate scientific disciplines to serve on a Reactor Safeguards Committee reporting to the AEC general manager. In 1951, the AEC also established an Industrial Committee on Reactor Location Problems, which was comprised of members from industry, and reported to the AEC general manager.

In 1953, the AEC combined the two committees and renamed the new committee the Advisory Committee on Reactor Safeguards (ACRS). The ACRS was assigned the following functions.

- reviewing hazards summary reports prepared by organizations planning to build and operate reactor facilities
- advising the AEC regarding the consistency of proposed reactor locations with accepted industry safety standards, taking into account the proximity of surrounding population and property

In 1954, Congress passed the Atomic Energy Act of 1954 after much debate concerning the merits of public versus private power. Among other things the Atomic Energy Act of 1954 provided for a program to encourage widespread participation in the development and utilization of atomic energy for peaceful purposes to the maximum extent consistent with the common defense and security and the health and safety of the public. Appendix A of this document presents selected regulatory requirements contained in the Atomic Energy Act of 1954, as amended (AEA).

In 1955, the AEC formed a Division of Civilian Application to license reactors and established within this division a Hazards Evaluation Branch. The Hazards Evaluation Branch initially relied heavily on the opinions of the ACRS. The AEC used the reviews of the AEC Hazards Evaluation Branch and the ACRS as the basis for issuing construction licenses, however, the reports were never made public.

In 1956, the Commissioners, in a split vote, approved a construction application even though the AEC staff and the ACRS had raised safety questions. Consequently, a Joint Congressional Committee passed new legislation in 1957. The legislation established the ACRS as a statutory body and required the ACRS to review all applications for construction and operation of nuclear facilities. In addition, the legislation required the ACRS to make its review reports available to

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<sup>1</sup>

David Okrent, "Nuclear Reactor Safety On the History of the Regulatory Process," The University of Wisconsin Press, dated October 19, 1981.

the public.<sup>2</sup>

In 1959, Congress allowed the AEC to enter into agreements with States for discontinuance of the AEC's regulatory authority over some materials licensees within the States.<sup>3</sup> The States must show that their regulatory programs are compatible with the AEC's and adequate to protect public health and safety. The AEC retained authority over, among other things, nuclear power plants within the States and exports from the States.

In 1970, Congress issued a public law concerning licensing of demonstration power reactors (DPR) and nuclear power facilities (NPF).<sup>4</sup> Subsequently, the Atomic Energy Commission amended the AEA to require NPF applications received after December 19, 1970 to meet the requirements of section 103 of the AEA. The Atomic Energy Commission also amended the AEA requirements for DPR licenses issued prior to December 19, 1970. The amendment requires that the existing DPR meet the minimum regulatory requirements of section 104b of the AEA.

In October 1972, Congress issued the Federal Advisory Committee Act (FACA). Since the ACRS was independent of the AEC staff and reported to the AEC, it adhered to FACA requirements such as holding public meetings and providing an opportunity for members of the public to make oral statements during committee meetings. Details of FACA requirements, which still governs ACRS operational practices, are available on the World Wide Web at [http://www.gsa.gov/gsa/cm\\_attachments/GSA\\_BASIC/without\\_annotations\\_R2G-b4T\\_0Z5RDZ-i34K-pR.pdf](http://www.gsa.gov/gsa/cm_attachments/GSA_BASIC/without_annotations_R2G-b4T_0Z5RDZ-i34K-pR.pdf). [add input from John Szabo]

The Energy Reorganization Act of 1974 established the Nuclear Regulatory Commission (NRC). Under the Atomic Energy Act of 1954, a single agency, the AEC, had responsibility for the development and production of nuclear weapons and for both the development and the safe regulation of the civilian uses of nuclear materials. The Act of 1974 split these functions. The Department of Energy was assigned responsibility for the development and production of nuclear weapons, promotion of nuclear power, and other energy-related work, while the NRC was assigned the regulation of civilian uses of nuclear materials. The Act of 1974 also gave the NRC its collegial structure and established its major offices. NRC action under the AEA, must conform to the AEA's procedural requirements, which provide an opportunity for hearings and Federal judicial review.<sup>5</sup>

The application review process established by the NRC for new reactor facility consisted of an applicant submitting an application that included a preliminary safety analysis report, and NRC staff review that included a safety evaluation report. The ACRS responsibilities are described in

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<sup>2</sup> In 1957 Congress added Chapter 3, "Organization," section 29, and Chapter 16, "Judicial Review and Administrative Procedure," subsection 182b to the AEA.

<sup>3</sup> In 1959 Congress added Chapter 19, "Miscellaneous," section 274 to the AEA.

<sup>4</sup> Public Law 91-560(84 Stat. 1472)(1970), sections 3, 4, and 5.

<sup>5</sup> Chapter 16, "Judicial Review and Administrative Procedure," section 189 to the AEA.

## 10 CFR 1.13, “Advisory Committee on Reactor Safeguards.”

The Advisory Committee on Reactor Safeguards (ACRS) was established by section 29 of the Atomic Energy Act of 1954, as amended. Consisting of a maximum of 15 members, it reviews and reports on safety studies and applications for construction permits and facility operating licenses; advises the Commission with regard to hazards of proposed or existing reactor facilities and the adequacy of proposed reactor safety standards; upon request of the Department of Energy (DOE), reviews and advises with regard to the hazards of DOE nuclear activities and facilities; reviews any generic issues or other matters referred to it by the Commission for advice. The Committee, on its own initiative, may conduct reviews of specific generic matters or nuclear facility safety-related items.

Dr. David Okrent, who was a member of the ACRS, stated in October 1981 that:

It is important to emphasize that the statutory ACRS elects its own chairman, establishes its own agenda, selects its own consultants, and decides for itself when it is ready to write a report. And, while the ACRS has obligations to respond to the specific requests for advice from the commission, it can on its own initiative also take up matters falling in its general province of responsibility. That this very considerable independence of function should exist is, in a sense, remarkable. Such independence did not occur automatically.

The Atomic Energy Act of 1954, as amended (AEA), is the fundamental U.S. law on both the civilian and the military uses of nuclear materials. On the civilian side, it provides for both the development and the regulation of the uses of nuclear materials and facilities in the United States. The policy of the United States is that the development, use, and control of atomic energy shall be directed so as to promote world peace, improve the general welfare, increase the standard of living, and strengthen free competition in private enterprise.<sup>6</sup>

A more complete history of the AEC and ACRS is available on the World Wide Web at <http://www.nrc.gov/about-nrc/short-history.html#Licensing%20Process>.

The Advisory Committee on Nuclear Waste and Materials (ACNW&M) is not a statutory body and is not responsible for advising the Commission on the licensing of production and utilization facilities. Therefore, ACNW&M responsibilities and activities are not discussed in this document.

## **1.2 Citations for Laws and Regulations**

NUREG-0980, Volume 1, No. 7, Revision 1, errata, contains the latest version of the amended Atomic Energy Act of 1954, as Amended. This document identifies sections of the *United States Code* from which the different sections of the AEA were derived and the public laws that

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<sup>6</sup> In 1992 Congress added Chapter 1, “Declaration, Findings, and Purpose,” subsection 1b to the AEA.



required amending sections of the AEA.

### **1.2.1 United States Code**

The *United States Code* (U.S.C.) is the codification by subject matter of the general and permanent laws of the United States. It is divided by broad subjects into 50 titles and published by the Office of the Law Revision Counsel of the U.S. House of Representatives. Since 1926, the U.S.C. has been published every 6 years. In between editions, annual cumulative supplements are published which present the most current information.

Title 42 of the U.S.C. identifies the Congressional statutory requirements that are referenced and incorporated into the Atomic Energy Act of 1954. The U.S.C. is updated to incorporate Congressional changes made through public laws and statutes.

The format for citations of the U.S.C. is xx U.S.C. yyyy, where xx represents the title and yyyy represents the section. For example, the Atomic Energy Act of 1954, as amended can be found at 42 U.S.C 2011, et seq. The Latin phrase, et seq. (et sequentes) literally means “and the following.” This phrase can be interpreted to mean “and the subsequent sections.” The U.S.C. is available on the World Wide Web at <http://www.gpoaccess.gov/uscode/index.html>.

Appendix B to this document contains selected portions of 42 U.S.C. Chapter 23, “Development and Control of Atomic Energy.” The selected portions identify amendments to sections in Title 42 of the U.S.C. for organization, judicial review and administrative procedure, and atomic energy licenses.

### **1.2.2 Code of Federal Regulations**

The NRC uses the *Code of Federal Regulations* to implement the statutory requirements contained in the AEA. The AEA provides the NRC broad discretion to authorize licenses and establish rules and regulations. Appendix C to this document contains selected portions of 10 CFR Parts 1 – 150.

The format for a citation from the *Code of Federal Regulations* is xx CFR yyy, where xx represents the title and yyy represents the part. For example, the NRC regulations on environmental protection can be found at 10 CFR Part 51. The Code of Federal Regulations is available on the World Wide Web at <http://www.nrc.gov/reading-rm/doc-collections/cfr/>.

### **1.2.3 Federal Register**

The *Federal Register* is the official daily publication for rules, proposed rules, and notices of Federal agencies and organizations, as well as executive orders and other presidential documents. The Federal Register provides Statements of Consideration that explain rule changes and their effect on existing regulations.

The format for a citation from the *Federal Register* is xx FR yyyy, where xx is the volume number and yyyy is the page number. For example, the NRC’s final rule for license termination criteria can be found at 62 FR 39058. The *Federal Register* is available on the World Wide Web at <http://www.gpoaccess.gov/fr/index.html>.

## 2. STATUTORY REQUIREMENTS FOR ACRS REVIEWS

Chapter 16, “Judicial Review and Administrative Procedure,” subsection 182b, of the AEA contains the statutory requirement for ACRS review of utilization and production facility licenses. However, the statutory requirements of the AEA depend on the definitions of utilization and production facilities and the regulatory requirements for commercial, medical therapy, and research and development facilities.

### 2.1 Definitions of Utilization and Production Facilities

The intent of Congress in the definitions given in Chapter 2, “Definitions,” section 11, of the AEA should be construed from the words or phrases used in the definitions. Subsections 11v and 11cc of the AEA provide the following definitions for production and utilization facilities, respectively:

11v The term “*production facility*” means (1) any equipment or device determined by rule of the Commission to be capable of the production of special nuclear material in such quantity as to be of significance to the common defense and security or (2) any important component part especially designed for such equipment or device as determined by the Commission. Such term as used in Chapters 10 [Atomic Energy Licenses] and 16 [Judicial Review and Administrative Procedures] shall not include any equipment or device capable of separating the isotopes of uranium or enriching uranium in the isotope 235.

11cc The term “*utilization facility*” means (1) any equipment or device, except an atomic weapon, capable of making use of special nuclear material in such quantity as to be of significance to the common defense and security or (2) any important component part especially designed for such equipment or device as determined by the Commission.

In the *Code of Federal Regulations*, the NRC provides definitions for utilization and production facilities. The definitions in 10 CFR Part 2, “Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders,” and 10 CFR Part 30, “Rules of General Applicability to Domestic Licensing of Byproduct Material,” indicate that utilization and production facilities are defined in the regulations contained in 10 CFR Part 50, “Domestic Licensing of Production and Utilization Facilities.”

The definition of a *production facility* provided in 10 CFR 50.2, “Definitions,” is any nuclear reactor, separation facility, or facility that processes limited amounts of irradiated materials containing special nuclear material. The definition also provides exceptions for laboratory scale facilities, facilities that handle only enriched uranium and plutonium, and facilities licensed under 10 CFR Part 30 and 10 CFR Part 70, “Domestic Licensing of Special Nuclear Material.” Pursuant to subsection 11v of the AEA, the NRC may add to, or alter, the foregoing definition of production facility.

The definition of *utilization facility* provided in 10 CFR 50.2 is any nuclear reactor other than one designed or used primarily for the formation of plutonium or uranium-233. Pursuant to subsection 11cc, of the AEA, the NRC may add to, or alter, the foregoing definition of utilization facility.

The definition of *testing facility* provided in 10 CFR 50.2 is a nuclear reactor of a type described in Section 10 CFR 50.21, "Class 104 Licenses; for Medical Therapy and Research and Development Facilities," and for which an application has been filed for a license authorizing operation at a thermal power level in excess of 10 megawatts. The National Institute of Standards and Technology (NIST) reactor is the only research and development facility that meets the definition of a testing facility.

The definitions for enrichment and fuel cycle facilities that handle source material, special nuclear material, and byproduct facilities are separate and distinct from the definitions for utilization and production facilities. Consequently, the requirement for ACRS to review facility licenses applies only to reactors and testing facilities.

## **2.2 Atomic Energy Licenses**

Chapter 10 of the AEA provides the regulatory process for licensing utilization and production facilities for industrial or commercial purposes. The word Commission is used throughout the follow discussion. Depending on the time frame being discussed the word Commission can mean either the Atomic Energy Commission, which was in existence from 1946 to 1974, or the Nuclear Regulatory Commission, which was established in 1974.

Section 101 of the AEA states that it shall be unlawful for any person within the United States to perform any action for a utilization or production facility except under and in accordance with a license issued by the Commission.

Section 102 of the AEA states that any license issued for a utilization or production facility shall be issued pursuant to section 103 of the AEA. Subsection 102b indicates that licenses for demonstration power reactors issued before the enactment into law of this subsection shall be issued under subsection 104b. Subsection 102c of the AEA states that licenses previously issued under arrangement with the Commission or entered into under the Cooperative Power Reactor Demonstration Program shall be issued under subsection 104b. Subsections 102b and 102c of the AEA essentially grand fathered utilization and production facilities which were under construction or licensed prior to the issuance of the Atomic Energy Act of 1954.

The NRC implemented subsections 102b and 102c of the AEA by establishing licensing requirements in 10 CFR 50.21, "Class 104 Licenses; for Medical Therapy and Research and Development Facilities." The licensing requirements state that a class 104 licenses will be issued for:

(b)(1): A production or utilization facility the construction or operation of which was licensed pursuant to subsection 104b of the Act prior to December 19, 1970.

(b)(2): A production or utilization facility for industrial or commercial purposes constructed or operated under an agreement with the Administration entered into under the Cooperative Power Reactor Demonstration Program.

Section 103 of the AEA authorizes the Commission to issue licenses for utilization or production facilities for industrial or commercial purposes. Such licenses shall be issued in accordance with the provisions of Chapter 16 of the AEA and subject to such conditions as the Commission

may establish by rule or regulation to effectuate the purposes and provisions of the AEA.

Subsection 104b of the AEA authorizes the Commission to issue utilization and production facility licenses for industrial and commercial purposes. Subsection 104b directs the Commission to impose the minimum amount of regulations and terms of license as will permit the Commission to fulfill its statutory obligation.

As stated in 42 U.S.C. 2134(c), "Medical, Industrial, and Commercial Licenses," the Commission is authorized to issue licenses to persons applying for utilization and production facilities useful in the conduct of research and development activities. These types of facilities are not used for industrial or commercial purposes. The Commission is directed to impose only such minimum amount of regulation of the licensee as necessary to allow the Commission to fulfill its obligations under this chapter to promote the common defense and security, to protect the health and safety of the public, and to permit the conduct of widespread and diverse research and development.

Subsection 104c of the AEA authorizes the Commission to issue licenses for utilization and production facilities useful in the conduct of research and development activities. Section 104c also directs the Commission to impose only such minimum amount of regulation as is consistent with its obligations under the AEA. As directed, the Commission has established different levels of regulatory requirements for the critical assembly at Rensselaer Polytechnic Institute, the 31 test reactors, and the NIST testing facility. Even though these facilities have reduced regulatory requirements, each reactor facility is required to apply for a license.

## **2.3 ACRS Review of Utilization and Production Facility Licenses**

Chapter 16 of the AEA contains the requirements for preparing and submitting utilization and production facility license applications, and for reviewing and issuing the licenses. Subsection 182b of the AEA states the following:

the ACRS shall review

- each application under section 103 or subsection 104b for construction permit or an operating license for a facility (i.e. the 104 operating power reactors and applications for new reactors),
- any application under section 104c for a construction permit or an operating license for a testing facility (i.e. the NIST reactor),
- any application under subsections 104a or 104c specifically referred to it by the Commission, and
- any application for an amendment to a construction permit or an amendment to an operating license under section 103 or subsections 104a, 104b, or 104c specifically referred to it by the Commission,

and shall submit a report thereon which shall be made part of the record of the

application and available to the public except to the extent that security classification prevents disclosure.

Appendix D to this document contains a flow diagram of requirements in the AEA associated with ACRS review of facility licenses.

The *Code of Federal Regulations* contains the following requirements for ACRS review of facility licenses.

- 10 CFR 50.58, "Hearing and Report of Advisory Committee on Reactor Safeguards," states that each application for a construction permit or an operating license for a nuclear reactor shall be referred to the ACRS for a review and report. An application for an amendment to such a construction permit or operating license may be referred to the ACRS for a review and report.
- 10 CFR 52.23, "Referral to the ACRS," states that the Commission shall refer early site permit applications to the ACRS.
- 10 CFR 52.53, "Referral to the ACRS," states that the Commission shall refer standard design certification applications to the ACRS.
- 10 CFR 52.87, "Referral to the ACRS," states that the Commission shall refer combined license applications to the ACRS.
- 10 CFR 54.25, "Report of the Advisory Committee on Reactor Safeguards," states that each renewal application will be referred to the ACRS for a review and report. Any report will be made part of the record of the application and will be available to the public.

Subsection 182b of the AEA provides the statutory responsibility for the ACRS to review utilization and production facility licenses. However, exclusions in the AEA and subsequent legislation have reduced the scope of facility licenses that require ACRS review.

Presently, the ACRS is responsible for reviewing license renewal applications for (1) power reactors and the NIST testing facility, and (2) licenses for new power reactor construction permits and operating licenses, including early site permits, standard design certifications, and combined license applications.

## **2.4 Global Nuclear Energy Partnership**

The Congress proposed a Global Nuclear Energy Partnership (GNEP) that would involve receiving and reprocessing spent nuclear fuel from developing nations, thereby increasing the amount of high-level waste that would need to be stored in a repository. In a staff requirements memorandum (SRM) dated June 27, 2007, the Commission directed the NRC staff to develop the regulatory framework for licensing the proposed GNEP facility.<sup>7</sup> The Commission directed

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<sup>7</sup> Hyperlink to SRM dated June 27, 2007  
<http://www.nrc.gov/reading-rm/doc-collections/commission/srm/2007/2007-0081srm.pdf>

the staff to prepare technical basis documentation to support a rulemaking under 10 CFR Part 70, with revisions to 10 CFR Part 50 as appropriate. The Commission also directed the staff to complete a gap analysis for all NRC regulations (10 CFR Chapter I) to identify changes in regulatory requirements that would be necessary to license a reprocessing facility and advanced recycling reactor.

In the SRM, the Commission stated that the ACRS should be the lead advisory committee for the burner reactor and reprocessing facility, and should work jointly with the ACNW&M on matters of common interest. The GNEP burner reactor and reprocessing facility meet the definitions of utilization and production facilities found in 10 CFR Part 50 and require ACRS reviews of the facility licenses.

## **2.5 Enrichment Facilities**

In the AEA, Congress directed the Commission to regulate enrichment facilities differently than it does utilization and production facilities. On March 3, 1997, the NRC assumed responsibility for oversight of the United States Enrichment Corporation (USEC) gaseous diffusion facilities. The NRC defined the regulatory process for certifying gaseous diffusion plants in 10 CFR Part 76, "Certification of Gaseous Diffusion Plants." The scope of 10 CFR Part 76 applies only to those portions of the Portsmouth and Paducah gaseous diffusion plants USEC leases from the DOE.

A vendor that supplies nuclear components has discussed in the media the construction of enrichment facilities in the United States. The NRC staff will evaluate each plan for a proposed facilities to determine the applicable type of licensing or certification process.

## **2.6 Future Reactors**

Industry and universities are developing new reactor designs. For example, the Toshiba Corporation formally requested a pre-application review meeting with the NRC to discuss a new super-safe, small and simple (4S) reactor design, which would allow extended operations in remote locations. The University of Texas has discussed construction of a High-Temperature Teaching and Test Reactor.

The ACRS is responsible for reviewing the safety aspects of future reactor designs and licenses. In accordance with 10 CFR 52.53, the ACRS is required to review and report on any new Standard Design Certification. In accordance with 10 CFR 50.87, the ACRS is required to review and report on those portions of combined license applications that concern safety. The ACRS may decide, on its own initiative, to review the licenses of unique reactor facilities that do not meet the definition of utilization or production facility.

### **3. LICENSING REQUIREMENTS FOR FACILITIES OTHER THAN UTILIZATION AND PRODUCTION FACILITIES**

#### **3.1 General Exclusion**

In Chapter 10, “Atomic Energy Licenses,” section 110 of the AEA provides exclusions for licensing several distinct types of facilities. Section 110 states the following:

nothing in this chapter shall be deemed

a. to require a license for (1) the processing, fabricating, or refining of special nuclear material, or the separation of special nuclear material, or the separation of special nuclear material from other substances, under contract with and for the account of the Commission; or (2) the construction or operation of facilities under contract with and for the account of the Commission; or

b. to require a license for the manufacture, production, or acquisition by the Department of Defense of any utilization facility authorized pursuant to section 91 [Military Application of Atomic Energy], or for the use of such facility by the Department of Defense or a contractor thereof.

Therefore, facilities that are under contract to the NRC or the Department of Defense are excluded from utilization and production facility license requirements and ACRS reviews.

#### **3.2 U.S. Department of Energy**

The NRC regulations contain exemptions to licensing requirements for facilities associated with source material, special nuclear material, and byproduct material.

- For byproduct materials, 10 CFR 30.11, “Specific Exemptions,” states that DOE is exempt from the requirements of this part to the extent that its activities are subject to the requirements of 10 CFR Part 60, “Disposal of High-Level Radioactive Wastes in Geologic Repositories,” and 10 CFR Part 63, “Disposal of High-Level Radioactive Wastes in a Geologic Repository at Yucca Mountain, Nevada.”
- For source materials, 10 CFR 40.11, “Persons Using Source Material under Certain Department of Energy and Nuclear Regulatory Commission Contracts,” indicates that any DOE prime contractor is exempt from the requirements for a license set forth in sections 62, 63, and 64 of the AEA, and from the regulations in this part.
- For special nuclear materials, 10 CFR 70.11, “Persons Using Source Material under Certain Department of Energy and Nuclear Regulatory Commission Contracts,” indicates that any DOE prime contractor is exempt from the requirements for a license set forth in section 53 of the AEA and from the regulations in this part.

On the basis of exemptions in 10 CFR 30.11, 10 CFR 40.11, and 10 CFR 70.11, DOE facilities, such as fuel cycle facilities, associated with source material, special nuclear material, and byproduct materials are exempt from certain licensing requirements and ACRS reviews.

### 3.3 Enrichment Facilities

In 1990, Congress passed the Solar, Wind, Waste, and Geothermal Power Production Incentive Act of 1990. Among other things, this legislation amended the AEA to require licensing of uranium enrichment facilities under NRC regulations in 10 CFR Part 40, "Domestic Licensing of Source Material," and 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," rather than a two-step licensing process under 10 CFR Part 50. This legislation requires an adjudicatory hearing on the licensing of the construction and operation of enrichment facilities. The NRC must complete this hearing before issuing a license.

In a *Federal Register* notice dated April 30, 1992, (57 FR 18388), the Commission amended its regulations to conform to the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990. The amendments provided a single-step process for licensing uranium enrichment facilities and made 10 CFR Part 70 the basic regulation for licensing uranium enrichment facilities.

In a *Federal Register* notice dated September 23, 1994, (59 FR 48960) the Commission issued 10 CFR Part 76 that established the certification process for the USEC Paducah and Portsmouth gaseous diffusion plants.<sup>8</sup> This certification process replaced the license requirements in 10 CFR Part 50 for utilization and production facilities, and is limited to enrichment facilities leased by USEC.

In a *Federal Register* notice dated February 12, 1997, (62 FR 6670), the Commission amended the regulations by revising portions of 10 CFR Parts 2, "Rules of Practice for Licensing Proceedings and Issuance of Orders," 10 CFR Part 40, 10 CFR Part 70, and 10 CFR Part 76.<sup>9</sup> The NRC staff amendments conformed to Title II-United States Enrichment Corporation, Chapter 27, "Licensing and Regulation of Uranium Enrichment Facilities," subsection 1701(c)(1), of the AEA. The amended AEA required the NRC to establish a certification process to ensure that USEC complies with standards under subsection 1701(a), "Gaseous Diffusion Facilities, Issuance of Standards."<sup>10 11</sup>

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<sup>8</sup> See the Federal Register notice on the NRC public Web site at <http://frwebgate3.access.gpo.gov/cgi-bin/waisgate.cgi?WAIISdocID=60050117878+0+0+0&WAIISaction=retrieve>

<sup>9</sup> See the *Federal Register* notice on the NRC public Web site at <http://www.nrc.gov/reading-rm/doc-collections/cfr/fr/1997/19970212.html>.

<sup>10</sup> Added by Pub. L. 102-486 (106 Stat. 2951), October 24, 1992, as amended by Pub. 104-134, (110 Stat. 1321-349), April 26, 1996, Title III, Chapter 1, subchapter A, subsection 3116(b)(3); Pub. L. 105-362 (112 Stat. 3292), November 10, 1998, Title II, section 1202.

<sup>11</sup> Subsection 1701(a) will be repealed on privatization date. Act April 26, 1996, Pub. L. 104-134 (110 Stat. 1321-349), Title III, Chapter 1, subchapter A, subsection 3116(a), provides:  
Chapters 22 through 26 of the AEA (42 USC 2297-2297e-7) are repealed as of the privatization date.



On March 3, 1997, the gaseous diffusion plants came under NRC's oversight. Since 1997, the NRC has implemented the initial certification process and processed numerous certificate amendments.

In a *Federal Register* notice dated August 17, 1999, (64 FR 44645), the Commission issued a final rule that amended 10 CFR Part 76 by modifying the certification renewal and amendment process for USEC gaseous diffusion plants.<sup>12</sup> The scope of 10 CFR Part 76 applies only to those portions of the Portsmouth and Paducah gaseous diffusion plants that USEC lease from the DOE.

By enacting the above legislative changes, Congress directed the Commission to regulate enrichment facilities separate from utilization and production facilities. Section 193, of the AEA provides the regulatory requirements for licensing of uranium enrichment facilities. Title II—United States Enrichment Corporation, Chapter 27, of the AEA provides the requirements for a certification process and for NRC review of the USEC gaseous diffusion plants enrichment facilities. Consequently, the statutory requirements associated with enrichment facilities obviate the need for an ACRS review.

### **3.3 Conclusion**

Congress has directed that enrichment and materials facility license/certification requirements be separate and distinct from the statutory licensing requirements for utilization and production facilities. Therefore, an ACRS review of enrichment and fuel cycle facility licenses is not required.

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(The “privatization date” is defined at 42 USCS subsection 2297h(9) as the date on which 100 percent of the ownership of the United States Enrichment Corporation has been transferred to private investors.)

<sup>12</sup> Hyperlink to Federal Notice dated August 17, 1999, (64 FR 44645)  
<http://www.nrc.gov/reading-rm/doc-collections/cfr/fr/1999/19990817.html>

#### **4. CONCLUSIONS**

On the basis of subsection 182b of the AEA, the ACRS is required to review power reactor and testing facility licenses and renewed licenses. The license renewal process requires an ACRS review and results in issuance of a new license.

Presently the ACRS plans to review license renewal applications for power reactors and the NIST testing facility. In the future, the ACRS will be responsible for reviewing new power reactor construction permits and operating licenses, including early site permits, standard design certifications, and combined license applications.

Congress has directed that enrichment facility license/certification requirements be separate and distinct from the license requirements for utilization and production facilities. On the basis of Title II—United States Enrichment Corporation of the AEA and 10 CFR Part 30, 10 CFR Part 40, 10 CFR Part 70, and 10 CFR Part 76 regulatory requirements, an ACRS review is obviated for facilities other than utilization and production facilities. However, the Commission may refer specific material facility licenses to the ACRS for review, or the ACRS, on its own initiative, may conduct reviews of generic matters or facility safety-related items.

# Nuclear Regulatory Legislation

109th Congress; 2d Session

Date Published: June 2006

Revised November 2006:

Tab 1 - Atomic Energy Act of 1954, as Amended

Tab 3 - Low Level Radioactive Waste Policy Act, Amended

**Office of the General Counsel  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001**

**THE ATOMIC ENERGY ACT OF 1954**  
**Public Law 83–703 68 Stat. 919**  
**August 30, 1954**  
**TITLE I– ATOMIC ENERGY**

The purpose of this enclosure is to provide the reader the sections or subsections of the Atomic Energy Act, as amended, which are cited in this NUREG. The complete sections or subsections that are associated with the requirements for the Advisory Committee on Reactor Safeguards to review utilization and production facility licenses are provided below.

**CHAPTER 1–DECLARATION, FINDINGS, AND PURPOSE**

**Sec. 2. Findings.**

[42 USC 2012.](#)

[Findings.](#)

The Congress of the United States hereby makes the following findings concerning the development, use and control of atomic energy:

c. The processing and utilization of source, byproduct, and special nuclear material affect interstate and foreign commerce and must be regulated in the national interest.

d. The processing and utilization of source, byproduct, and special nuclear material must be regulated in the national interest and in order to provide for the common defense and security and to protect the health and safety of the public.

e. Source and special nuclear material, production facilities, and utilization facilities are affected with the public interest, and regulation by the United States of the production and utilization of atomic energy and of the facilities used in connection therewith is necessary in the national interest to assure common defense and security and to protect the health and safety of the public.

**Sec. 11. Definitions.**

[42 USC 2014.](#) [Definitions.](#)

The intent of Congress in the definitions as given in this section should be construed from the words or phrases used in the definitions. As used in this Act:

[Byproduct material.](#)

e. The term "byproduct material" means–

(1) any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material;

(2) the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content;

(3) (A) any discrete source of radium–226 that is produced, extracted, or converted after extraction, before, on, or after August 8, 2005, for use for a commercial, medical, or research activity; or

(B) any material that–

(i) has been made radioactive by use of a particle accelerator; and

- (ii) is produced, extracted, or converted after extraction, before, on, or after the date of enactment of this paragraph for use for a commercial, medical, or research activity; and
- (4) any discrete source of naturally occurring radioactive material, other than source material, that –
  - (A) the Commission, in consultation with the Administrator of the Environmental Protection Agency, the Secretary of Energy, the Secretary of Homeland Security, and the head of any other appropriate Federal agency, determines would pose a threat similar to the threat posed by a discrete source of radium-226 to the public health and safety or the common defense and security; and
  - (B) before, on, or after August 8, 2005 is extracted or converted after extraction for use in a commercial, medical, or research activity.

#### **Production facility.**

v. The term "production facility" means

- (1) any equipment or device determined by rule of the Commission to be capable of the production of special nuclear material in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public; or
- (2) any important component part especially designed for such equipment or device as determined by the Commission.

Except with respect to the export of a uranium enrichment production facility, such term as used in Chapters 10 and 16 shall not include any equipment or device (or important component part especially designed for such equipment or device) capable of separating the isotopes of uranium or enriching uranium in the isotope 235.

#### **Special nuclear material.**

aa. The term "special nuclear material" means

- (1) plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the Commission, pursuant to the provisions of section 51, determines to be special nuclear material, but does not include source material; or
- (2) any material artificially enriched by any of the foregoing, but does not include source material.

#### **Utilization facility.**

cc. The term "utilization facility" means

- (1) any equipment or device, except an atomic weapon, determined by rule of the Commission to be capable of making use of special nuclear material in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public, or peculiarly adapted for making use of atomic energy in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public; or
- (2) any important component part especially designed for such equipment or device as determined by the Commission.

## Chapter 5—PRODUCTION OF SPECIAL NUCLEAR MATERIAL

### Sec. 41. Ownership and Operation of Production Facilities.

#### 42 USC 2061. Ownership and operation of production facilities.

a. Ownership of Production Facilities.—The Commission, as agent of and on behalf of the United States, shall be the exclusive owner of all production facilities other than facilities which (1) are useful in the conduct of research and development activities in the fields specified in section 31, and do not, in the opinion of the Commission, have a potential production rate adequate to enable the user of such facilities to produce within a reasonable period of time a sufficient quantity of special nuclear material to produce an atomic weapon; (2) are licensed by the Commission pursuant under this title; or (3) are owned by the United States Enrichment Corporation.

## Chapter 6—SPECIAL NUCLEAR MATERIAL

### Sec. 53. Domestic Distribution of Special Nuclear Material.

#### 42 USC 2073. Nuclear material licenses

a. The Commission is authorized

- (i) to issue licenses to transfer or receive in interstate commerce, transfer, deliver, acquire, possess, own, receive possession of or title to, import, or export under the terms of an agreement for cooperation arranged pursuant to section 123, special nuclear material,
- (ii) to make special nuclear material available for the period of the license, and,
- (iii) to distribute special nuclear material within the United States to qualified applicants requesting such material—
  - (1) for the conduct of research and development activities of the types specified in section 31;
  - (2) for use in the conduct of research and development activities or in medical therapy under a license issued pursuant to section 104;
  - (3) for use under a license issued pursuant to section 103;
  - (4) for such other uses as the Commission determines to be appropriate to carry out the purposes of this Act.

b. The Commission shall establish, by rule, minimum criteria for the issuance of specific or general licenses for the distribution of special nuclear material depending upon the degree of importance to the common defense and security or to the health and safety of the public of—

- (1) the physical characteristics of the special nuclear material to be distributed;
- (2) the quantities of special nuclear material to be distributed; and
- (3) the intended use of the special nuclear material to be distributed.

#### Distribution.

c. (1) The Commission may distribute special nuclear material licensed under this section by sale, lease, lease with option to buy, or grant.

*Provided however,* That unless otherwise authorized by law, the Commission shall not after December 31, 1970, distribute special nuclear material except by sale<sup>54</sup> to any person who possesses or operates a utilization facility under a license pursuant to section 103 or 104b. for use in the course of activities under such license; nor shall the Commission permit any such person after June 30, 1973, to continue leasing for use in the course of such activities special nuclear material previously leased to such person by the Commission.

## **Sec. 57. Prohibition.**

### **Certain exemptions.**

d. The Commission is authorized to establish classes of special nuclear material and to exempt certain classes or quantities of special nuclear material or kinds of uses or users from the requirements for a license set forth in this section when it makes a finding that the exemption of such classes or quantities of special nuclear material or such kinds of uses or users would not be inimical to the common defense and security and would not constitute unreasonable risk to the health and safety of the public.

## **Chapter 7—SOURCE MATERIAL**

## **Sec. 63. Domestic Distribution of Source Material.**

### **42 USC 2093. Domestic distribution of source material.**

a. The Commission is authorized to issue licenses for and to distribute source material within the United States to qualified applicants requesting such material—

- (1) for the conduct of research and development activities of the types specified in section 31;
- (2) for use in the conduct of research and development activities or in medical therapy under a license issued pursuant to section 104;
- (3) for use under a license issued pursuant to section 103; or
- (4) for any other use approved by the Commission as an aid to science or industry.

### **Charges.**

c. The Commission may make a reasonable charge determined pursuant to subsection 161m. for the source material licensed and distributed under subsection 63a.(1), subsection 63a.(2), or subsection 63a.(4), and shall make a reasonable charge determined pursuant to subsection 161m., for the source material licensed and distributed under subsection 63a.(3). The Commission shall establish criteria in writing for the determination of whether a charge will be made for the source material licensed and distributed under subsection 63a.(1), subsection 63a.(2), or subsection 63a.(4), considering, among other things, whether the licensee is a nonprofit or eleemosynary institution and the purposes for which the source material will be used.

## **Chapter 8—BYPRODUCT MATERIAL**

## **Sec. 81. Domestic Distribution.**

### **42 USC 2111. Domestic distribution.**

a. IN GENERAL—No person may transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, own, possess, import, or export any byproduct material, except to the extent authorized by this section, section 82 or section 84.83. The Commission is authorized to issue general or specific licenses to applicants seeking to use byproduct material for research or development purposes, for medical therapy, industrial uses, agricultural uses, or such other useful applications as may be developed. The Commission may distribute, sell, loan, or lease such byproduct material as it owns to qualified applicants with or without charge: ...

The Commission is authorized to establish classes of byproduct material and to exempt certain classes or quantities of material or kinds of uses or users from the requirements for a license set forth in this section when it makes a finding that the exemption of such classes or quantities of such material or such kinds of uses or users will not constitute an unreasonable risk to the common defense and security and to the health and safety of the public.

## **Chapter 10—ATOMIC ENERGY LICENSES**

### **Sec. 101. License Required.**

#### **42 USC 2131. License required.**

It shall be unlawful, except as provided in section 91, for any person within the United States to transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, possess, use,<sup>96</sup> import, or export any utilization or production facility except under and in accordance with a license issued by the Commission pursuant to section 103 or section 104.

### **Sec. 102. Utilization and Production Facilities for Industrial or Commercial Purposes.**

#### **42 USC 2132.**

- a. Except as provided in subsections b. and c., or otherwise specifically authorized by law, any license hereafter issued for a utilization or production facility for industrial or commercial purposes shall be issued pursuant to section 103.
- b. Any license hereafter issued for a utilization or production facility for industrial or commercial purposes, the construction or operation of which was licensed pursuant to subsection 104b. prior to enactment into law of this subsection, shall be issued under subsection 104b.
- c. Any license for a utilization or production facility for industrial or commercial purposes constructed or operated under an arrangement with the Commission entered into under the Cooperative Power Reactor Demonstration Program shall, except as otherwise specifically required by applicable law, be issued under subsection 104b.

### **Sec. 103. Commercial Licenses.**

#### **42 USC 2133. Commercial licenses.**

- a. The Commission is authorized to issue licenses to persons applying therefor to transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, possess, use, import, or export under the terms of an agreement for cooperation arranged pursuant to section 123, utilization or production facilities for industrial or commercial purposes. Such licenses shall be issued in accordance with the provisions of chapter 16 and subject to such conditions as the Commission may by rule or regulation establish to effectuate the purposes and provisions of this Act.
- c. Each such license shall be issued for a specified period, as determined by the Commission, depending on the type of activity to be licensed, but not exceeding forty years from the authorization to commence operation<sup>100</sup> and may be renewed upon the expiration of such period.

### **Sec. 104. Medical Therapy And Research And Development.**

#### **42 USC 2134. Medical therapy and research and development.**

- a. The Commission is authorized to issue licenses to persons applying therefore for utilization facilities for use in medical therapy. In issuing such licenses the Commission is directed to permit the widest amount of effective medical therapy possible with the amount of special nuclear material available for such purposes and to impose the minimum amount of regulation consistent with its obligations under this Act to promote the common defense and security and to protect the health and safety of the public.



b. As provided for in subsection 102b., or 102c., or where specifically authorized by law, the Commission is authorized to issue licenses under this subsection to persons applying therefor for utilization and production facilities for industrial and commercial purposes. In issuing licenses under this subsection, the Commission shall impose the minimum amount of such regulations and terms of license as will permit the Commission to fulfill its obligations under this Act.

c. The Commission is authorized to issue licenses to persons applying therefor for utilization and production facilities useful in the conduct of research and development activities of the types specified in section 31 and which are not facilities of the type specified in subsection 104b. The Commission is directed to impose only such minimum amount of regulation of the licensee as the Commission finds will permit the Commission to fulfill its obligations under this Act to promote the common defense and security and to protect the health and safety of the public and will permit the conduct of widespread and diverse research and development.

#### **Sec. 106. Classes Of Facilities.**

[42 USC 2136. Classes of facilities.](#)

The Commission may—

- a. group the facilities licensed either under section 103 or under section 104 into classes which may include either production or utilization facilities or both, upon the basis of the similarity of operating and technical characteristics of the facilities;
- b. define the various activities to be carried on at each such class of facility; and
- c. designate the amounts of special nuclear material available for use by each such facility.

#### **Sec. 109. Component And Other Parts Of Facilities.**

[42 USC 2139. Domestic activities licenses, issuance, authorization.](#)

a. With respect to those utilization and production facilities which are so determined by the Commission pursuant to subsection 11v.(2) or 11cc.(2) the Commission may issue general licenses for domestic activities required to be licensed under section 101, if the Commission determines in writing that such general licensing will not constitute an unreasonable risk to the common defense and security.

#### **Sec. 110. Exclusions.**

[42 USC 2140. Exclusions.](#)

Nothing in this chapter shall be deemed

a. to require a license for

(1) the processing, fabricating, or refining of special nuclear material, or the separation of special nuclear material, or the separation of special nuclear material from other substances, under contract with and for the account of the Commission; or

(2) the construction or operation of facilities under contract with and for the account of the Commission; or

b. to require a license for the manufacture, production, or acquisition by the Department of Defense of any utilization facility authorized pursuant to section 91, or for the use of such facility by the Department of Defense or a contractor thereof.

## Chapter 16–JUDICIAL REVIEW AND ADMINISTRATIVE PROCEDURE

### **Sec. 182. License Applications.**

#### **42 USC 2232. License applications.**

a. In connection with applications for licenses to operate production or utilization facilities, the applicant shall state such technical specifications, including information of the amount, kind, and source of special nuclear material required, the place of the use, the specific characteristics of the facility, and such other information as the Commission may, by rule or regulation, deem necessary in order to enable it to find that the utilization or production of special nuclear material will be in accord with the common defense and security and will provide adequate protection to the health and safety of the public. Such technical specifications shall be a part of any license issued. The Commission may at any time after the filing of the original application, and before the expiration of the license, require further written statements in order to enable the Commission to determine whether the application should be granted or denied or whether a license should be modified or revoked. All applications and statements shall be signed by the applicant or licensee. Applications for, and statements made under oath or affirmation. The Commission may require any other applications or statements to be made under oath or affirmation.

#### **ACRS Report.**

b. The Advisory Committee on Reactor Safeguards shall review each application under section 103 or section 104 b. for a construction permit or an operating license for a facility, any application under section 104c. for a construction permit or an operating license for a testing facility, any application under section 104a. or c. specifically referred to it by the Commission, and any application for an amendment to a construction permit or an amendment to an operating license under section 103 or 104a., b., or c. specifically referred to it by the Commission, and shall submit a report thereon which shall be made part of the record of the application and available to the public except to the extent that security classification prevents disclosure.

d. The Commission, in issuing any license for a utilization or production facility for the generation of commercial power under section 103, shall give preferred consideration to applications for such facilities which will be located in high cost power areas in the United States if there are conflicting applications for a limited opportunity for such license. Where such conflicting applications resulting from limited opportunity for such license include those submitted by public or cooperative bodies such applications shall be given preferred consideration.

### **Sec. 183. Terms of Licenses.**

#### **42 USC 2233. Terms of licenses.**

Each license shall be in such form and contain such terms and conditions as the Commission may, by rule or regulation, prescribe to effectuate the provisions of this Act ...

**Sec. 192. Temporary Operating License.**

42 USC 2133, 42 USC 2134, and 42 USC 2242.

Post. p. 2073.

Temporary licensing authority.

Initial petition.

a. ... The initial petition for a temporary operating license for each such facility may be filed at any time after the filing of:

- (1) the report of the Advisory Committee on Reactor Safeguards required by section 182b.;
- (2) the filing of the initial Safety Evaluation Report by the Nuclear Regulatory Commission staff and the Nuclear Regulatory Commission staff's first supplement to the report prepared in response to the report of the Advisory Committee on Reactor Safeguards for the facility;
- (3) the Nuclear Regulatory Commission staff's final detailed statement on the environmental impact of the facility prepared pursuant to section 102(2)(C) of the National Environmental Policy Act of 1969 (42 USC 4332(2)(C)); and
- (4) a State, local, or utility emergency preparedness plan for the facility.

**Sec. 193. Licensing of Uranium Enrichment Facilities.**

42 USC 2243.

(a) Environmental Impact Statement.—

(1) Major Federal Action.—The issuance of a license under sections 53 and 63 for the construction and operation of any uranium enrichment facility shall be considered a major Federal action significantly affecting the quality of the human environment for purposes of the National Environmental Policy Act of 1969 (42 USC 4321 *et seq.*).

(2) Timing.—An environmental impact statement prepared under paragraph (1) shall be prepared before the hearing on the issuance of a license for the construction and operation of a uranium enrichment facility is completed.

(b) Adjudicatory Hearing.—

(1) In General.—The Commission shall conduct a single adjudicatory hearing on the record with regard to the licensing of the construction and operation of a uranium enrichment facility under sections 53 and 63.

(2) Timing.—Such hearing shall be completed and a decision issued before the issuance of a license for such construction and operation.

(3) Single Proceeding.—No further Commission licensing action shall be required to authorize operation.

(c) Inspection and Operation.—Prior to commencement of operation of a uranium enrichment facility licensed hereunder, the Commission shall verify through inspection that the facility has been constructed in accordance with the requirements of the license for construction and operation.

## Chapter 19–MISCELLANEOUS

### **Sec. 274. Cooperation With States.**

[42 USC 2021.](#)

#### [Cooperation with States.](#)

a.355 It is the purpose of this section–

- (1) to recognize the interests of the States in the peaceful uses of atomic energy, and to clarify the respective responsibilities under this Act of the States and the Commission with respect to the regulation of byproduct, source, and special nuclear materials;
- (2) to recognize the need, and establish programs for cooperation between the States and the Commission with respect to control of radiation hazards associated with use of such materials;
- (3) to promote an orderly regulatory pattern between the Commission and State governments with respect to nuclear development and use and regulation of byproduct, source, and special nuclear materials;
- (4) to establish procedures and criteria for discontinuance of certain of the Commission's regulatory responsibilities with respect to byproduct, source, and special nuclear materials, and the assumption thereof by the States;
- (5) to provide for coordination of the development of radiation standards for the guidance of Federal agencies and cooperation with the States; and
- (6) to recognize that, as the States improve their capabilities to regulate effectively such materials, additional legislation may be desirable.

#### [Agreements with States.](#)

b. Except as provided in subsection c., the Commission is authorized to enter into agreements with the Governor of any State providing for discontinuance of the regulatory authority of the Commission under Chapters 6, 7, and 8, and section 161 of this Act, with respect to any one or more of the following materials within the State:

- (1) Byproduct materials (as defined in section 11e.).
- (2) Source materials;
- (3) Special nuclear materials in quantities not sufficient to form a critical mass. During the duration of such an agreement it is recognized that the State shall have authority to regulate the materials covered by the agreement for the protection of the public health and safety from radiation hazards.

c. No agreement entered into pursuant to subsection b. shall provide for discontinuance of any authority and the Commission shall retain authority and responsibility with respect to regulation of–

- (1) the construction and operation of any production or utilization facility or any uranium enrichment facility;
- (2) the export from or import into the United States of byproduct, source, or special nuclear material, or of any production or utilization facility;
- (3) the disposal into the ocean or sea of byproduct, source, or special nuclear waste materials as defined in regulations or orders of the Commission;
- (4) the disposal of such other byproduct, source, or special nuclear material as the Commission determines by regulation or order should, because of the hazards or potential hazards thereof, not be so disposed of without a license from the Commission.

[42 USC 2014.](#)

The Commission shall also retain authority under any such agreement to make a determination that all applicable standards and requirements have been met prior to termination of a license for byproduct material, as defined in section 11e.(2).358

#### Conditions.

Notwithstanding any agreement between the Commission and any State pursuant to subsection b., the Commission is authorized by rule, regulation, or order to require that the manufacturer, processor, or producer of any equipment, device, commodity, or other product containing source, byproduct, or special nuclear material shall not transfer possession or control of such product except pursuant to a license issued by the Commission.

d. The Commission shall enter into an agreement under subsection b. of this section with any State if—

(1) The Governor of that State certifies that the State has a program for the control of radiation hazards adequate to protect the public health and safety with respect to the materials within the State covered by the proposed agreement, and that the State desires to assume regulatory responsibility for such materials; and

(2) the Commission finds that the State program is in accordance with the requirements of subsection o. and in all other respects compatible with the Commission's program for regulation of such materials, and that the State program is adequate to protect the public health and safety with respect to the materials covered by the proposed agreement.

#### Publication in F.R.

e. (1) Before any agreement under subsection b. is signed by the Commission, the terms of the proposed agreement and of proposed exemptions pursuant to subsection f. shall be published once each week for four consecutive weeks in the Federal Register; and such opportunity for comment by interested persons on the proposed agreement and exemptions shall be allowed as the Commission determines by regulation or order to be appropriate.

(2) Each proposed agreement shall include the proposed effective date of such proposed agreement or exemptions. The agreement and exemptions shall be published in the Federal Register within thirty days after signature by the Commission and the Governor.

#### Exemptions.

##### Licensing requirements.

f. The Commission is authorized and directed, by regulation or order, to grant such exemptions from the licensing requirements contained in Chapters 6, 7, and 8, and from its regulations applicable to licensees as the Commission finds necessary or appropriate to carry out any agreement entered into pursuant to subsection b. of this section.

g. The Commission is authorized and directed to cooperate with the States in the formulation of standards for protection against hazards of radiation to assure that State and Commission programs for protection against hazards of radiation will be coordinated and compatible.

#### Inspections.

i. The Commission in carrying out its licensing and regulatory responsibilities under this Act is authorized to enter into agreements with any State, or group of States, to perform inspections or other functions on a cooperative basis as the Commission deems appropriate. The Commission is also authorized to provide training, with or without charge, to employees of, and such other assistance to, any such State or political subdivision thereof or group of States as the Commission deems appropriate. Any such provision or assistance by the Commission shall take into account the additional expenses that may be incurred by a State as a consequence of the State's entering into an agreement with the Commission pursuant to subsection b.

#### Termination of agreement.

j. (1) The Commission, upon its own initiative after reasonable notice and opportunity for hearing to the State with which an agreement under subsection b. has become effective, or upon request of the Governor of such State, may terminate or suspend all or part of its

agreement with the State and reassert the licensing and regulatory authority vested in it under this Act, if the Commission finds that (1) such termination or suspension is required to protect the public health and safety, or (2) the State has not complied with one or more of the requirements of this section. The Commission shall periodically review such agreements and actions taken by the States under the agreements to insure compliance with the provisions of this section.

(2) The Commission, upon its own motion or upon request of the Governor of any State, may, after notifying the Governor, temporarily suspend all or part of its agreement with the State without notice or hearing if, in the judgment of the Commission:

#### **Sec. 275. Health And Environmental Standards for Uranium Mill Tailings.**

[42 USC 2014.](#)

[42 USC 7401 note.](#)

e. Nothing in this Act applicable to byproduct material, as defined in section 11e.(2) of this Act, shall affect the authority of the Administrator (EPA) under the Clean Air Act of 1970, as amended, or the Federal Water Pollution Control Act, as amended.

[Uranium mill licensing requirement regulations.](#)

f.(1) Prior to January 1, 1983, the Commission shall not implement or enforce the provisions of the Uranium Mill Licensing Requirements published as final rules at 45 Federal Register 65521 to 65538 on October 3, 1980 (hereinafter in this subsection referred to as the "October 3 regulations").

[Implementation and Enforcement.](#)

After December 31, 1982, the Commission is authorized to implement and enforce the provisions of such October 3 regulations (and any subsequent modifications or additions to such regulations which may be adopted by the Commission), except as otherwise provided in paragraphs (2) and (3) of this subsection.

[Review, public comment, and suspension.](#)

(2) Following the proposal by the Administrator of standards under subsection b., the Commission shall review the October 3 regulations, and, not later than 90 days after the date of such proposal, suspend implementation and enforcement of any provision of such regulations which the Commission determines after notice and opportunity for public comment to require a major action or major commitment by licensees which would be unnecessary if—

(A) the standards proposed by the Administrator are promulgated in final form without modification, and

(B) the Commission's requirements are modified to conform to such standards.

Such suspension shall terminate on the earlier of April 1, 1984 or the date on which the Commission amends the October 3 regulations to conform to final standards promulgated by the Administrator under subsection b. During the period of such suspension, the Commission shall continue to regulate byproduct material (as defined in section 11e.(2)) under this Act on a licensee-by-licensee basis as the Commission deems necessary to protect public health, safety, and the environment.

(3) Not later than 6 months after the date on which the Administrator promulgates final standards pursuant to subsection b. of this section, the Commission shall, after notice and opportunity for public comment, amend the October 3 regulations, and adopt such modifications, as the Commission deems necessary to conform to such final standards of the Administrator.

[42 USC 2114.](#)

(4) Nothing in this subsection may be construed as affecting the authority or responsibility of the Commission under section 84 to promulgate regulations to protect the public health and safety and the environment.

## **Chapter 21—DEFENSE NUCLEAR FACILITIES SAFETY BOARD**

### **Sec. 312. Functions Of The Board.**

#### **42 USC 2286a.**

(4) Review Of Facility Design And Construction.—The Board shall review the design of a new Department of Energy defense nuclear facility before construction of such facility begins and shall recommend to the Secretary, within a reasonable time, such modifications of the design as the Board considers necessary to ensure adequate protection of public health and safety. During the construction of any such facility, the Board shall periodically review and monitor the construction and shall submit to the Secretary, within a reasonable time, such recommendations relating to the construction of that facility as the Board considers necessary to ensure adequate protection of public health and safety. An action of the Board, or a failure to act, under this paragraph may not delay or prevent the Secretary of Energy from carrying out the construction of such a facility.

(5) Recommendations.—The Board shall make such recommendations to the Secretary of Energy with respect to Department of Energy defense nuclear facilities, including operations of such facilities, standards, and research needs, as the Board determines are necessary to ensure adequate protection of public health and safety. In making its recommendations the Board shall consider the technical and economic feasibility of implementing the recommended measures.



## **TITLE II—UNITED STATES ENRICHMENT CORPORATION**

### **Chapter 22—GENERAL PROVISIONS**

#### **SEC. 1201. DEFINITIONS.**

[42 USC 2297](#). For purposes of this title:

- (1) The term “alternative technologies for uranium enrichment” means technologies to enrich uranium by methods other than the gaseous diffusion process.
- (2) The term “AVLIS” means atomic vapor laser isotope separation technology.
- (3) The term “Board” means the Board of Directors of the Corporation established under section 1304.
- (4) The term “Corporation” means the United States Enrichment Corporation.

### **Chapter 24—RIGHTS, PRIVILEGES, AND ASSETS OF THE CORPORATION**

#### **SEC. 1403. LEASING OF GASEOUS DIFFUSION FACILITIES OF DEPARTMENT.**

[42 USC 2297c-2](#).

(a) IN GENERAL.—The Corporation shall lease the Paducah Gaseous Diffusion Plant in Paducah, Kentucky, the Portsmouth Gaseous Diffusion Plant in Piketon, Ohio, and related property of the Department, for a period of 6 years from the transition date. Thereafter, the Corporation shall have the exclusive option to lease such facilities and related property for additional periods.

### **Chapter 27—LICENSING AND REGULATION OF URANIUM ENRICHMENT FACILITIES**

#### **SEC. 1701. GASEOUS DIFFUSION FACILITIES**

[42 USC 2297f](#).

(a) ISSUANCE OF STANDARDS.—Within 2 years after the date of the enactment of this title [enacted October 24, 1992], the Nuclear Regulatory Commission shall establish by regulation such standards as are necessary to govern the gaseous diffusion uranium enrichment facilities of the Department in order to protect the public health and safety from radiological hazard and provide for the common defense and security. Regulations promulgated pursuant to this subsection shall, among other things, require that adequate safeguards (within the meaning of section 147) are in place.

(c) CERTIFICATION PROCESS.—

(1) ESTABLISHMENT.—The Nuclear Regulatory Commission shall establish a certification process to ensure that the Corporation complies with standards established under subsection (a).

(3) TREATMENT OF CERTIFICATE OF COMPLIANCE.—The requirement for a certificate of compliance under paragraph (1) shall be in lieu of any requirement for a license for any gaseous diffusion facility of the Department leased by the Corporation.

(4) NRC REVIEW.—

(A) IN GENERAL.—The Nuclear Regulatory Commission, in consultation with the Environmental Protection Agency, shall review the operations of the Corporation with respect to any gaseous diffusion uranium enrichment facilities of the Department leased by the Corporation to ensure that public health and safety are adequately protected.



## **SEC. 1702. LICENSING OF OTHER TECHNOLOGIES.**

[42 USC 2297f-1.](#)

(a) IN GENERAL.—Corporation facilities using alternative technologies for uranium enrichment, including than AVLIS, shall be licensed under sections 53, 63, and 193. (SNM, source material, and licensing of uranium enrichment facilities)

### **TITLE III—RESCISSIONS AND OFFSETS** **Chapter 1—ENERGY AND WATER DEVELOPMENT URANIUM** **ENRICHMENT CAPACITY**

#### **SUBCHAPTER A—UNITED STATES ENRICHMENT CORPORATION PRIVATIZATION**

## **SEC. 3101. SHORT TITLE.**

[42 USC 2011 note.](#)

[USEC Privatization Act.](#)

[42 USC 2297h.](#)

This subchapter may be cited as the “USEC Privatization Act.”

## **SEC. 3102. DEFINITIONS.**

For purposes of this subchapter:

(1) The term “AVLIS” means atomic vapor laser isotope separation technology.

(2) The term “Corporation” means the United States Enrichment Corporation and, unless the context otherwise requires, includes the private corporation and any successor thereto following privatization.

(3) The term “gaseous diffusion plants” means the Paducah Gaseous Diffusion Plant at Paducah, Kentucky and the Portsmouth Gaseous Diffusion Plant at Piketon, Ohio.

## **SEC. 3103. SALE OF THE CORPORATION.**

[42 USC 2297h-1.](#)

(a) Authorization.—The Board of Directors of the Corporation, with the approval of the Secretary of the Treasury, shall transfer the interest of the United States in the United States Enrichment Corporation to the private sector in a manner that provides for the long-term viability of the Corporation, provides for the continuation by the Corporation of the operation of the Department of Energy’s gaseous diffusion plants, provides for the protection of the public interest in maintaining a reliable and economical domestic source of uranium mining, enrichment and conversion services, and, to the extent not inconsistent with such purposes, secures the maximum proceeds to the United States.

**42 UNITED STATES CODE**

42 USC Sec. 2039

Atomic Energy Act, Sec. 29, ACRS

TITLE 42 - THE PUBLIC HEALTH AND WELFARE

CHAPTER 23 - DEVELOPMENT AND CONTROL OF ATOMIC ENERGY

Division A - Atomic Energy

SUBCHAPTER II - ORGANIZATION

Sec. 2039. Advisory Committee on Reactor Safeguards; composition; tenure; duties; compensation

**-STATUTE-**

There is established an Advisory Committee on Reactor Safeguards consisting of a maximum of fifteen members appointed by the Commission for terms of four years each. The Committee shall review safety studies and facility license applications referred to it and shall make reports thereon, shall advise the Commission with regard to the hazards of proposed or existing reactor facilities and the adequacy of proposed reactor safety standards, and shall perform such other duties as the Commission may request. One member shall be designated by the Committee as its Chairman. The members of the Committee shall receive a per diem compensation for each day spent in meetings or conferences, or other work of the Committee, and all members shall receive their necessary traveling or other expenses while engaged in the work of the Committee. The provisions of section 2203 of this title shall be applicable to the Committee.

**-SOURCE-**

(Aug. 1, 1946, ch. 724, title I, Sec. 29, as added Pub. L. 85-256, Sec. 5, Sept. 2, 1957, 71 Stat. 579; amended Pub. L. 95-209, Sec. 5, Dec. 13, 1977, 91 Stat. 1483; renumbered title I, Pub. L. 102-486, title IX, Sec. 902(a)(8), Oct. 24, 1992, 106 Stat. 2944; Pub. L. 105-362, title XII, Sec. 1201(a), Nov. 10, 1998, 112 Stat. 3292.)

**-MISC1-**

**AMENDMENTS**

1998 - Pub. L. 105-362 struck out at end "In addition to its other duties under this section, the committee, making use of all available sources, shall undertake a study of reactor safety research and prepare and submit annually to the Congress a report containing the results of such study. The first such report shall be submitted to the Congress not later than December 31, 1977." 1977 - Pub. L. 95-209 inserted provisions which called for a study of reactor safety research and an annual report on results of study.

**-TRANS-**

**TRANSFER OF FUNCTIONS**

Atomic Energy Commission abolished and functions transferred by sections 5814 and 5841 of this title. See also Transfer of Functions notes set out under those sections.

**-MISC2-**

**TERMINATION OF ADVISORY COMMITTEES**

Advisory committees in existence on Jan. 5, 1973, to terminate not later than the expiration of the 2-year period following Jan. 5, 1973, unless, in the case of a committee established by the President or an officer of the Federal Government, such committee is renewed by appropriate action prior to the expiration of such 2-year period, or in the case of a committee established by the Congress, its duration is otherwise provided by law. See section 14 of Pub. L. 92-463, Oct. 6, 1972, 86 Stat. 776, set out in the Appendix to Title 5, Government Organization and Employees.

42 USC Sec. 2133  
Atomic Energy Act, Sec. 103, Commercial Licences

TITLE 42 - THE PUBLIC HEALTH AND WELFARE  
CHAPTER 23 - DEVELOPMENT AND CONTROL OF ATOMIC ENERGY  
Division A - Atomic Energy  
SUBCHAPTER IX - ATOMIC ENERGY LICENSES

-COD-

Amended by Pub. L. 109-58, sec. 621, 119 Stat. 782.

TITLE 42 - THE PUBLIC HEALTH AND WELFARE  
CHAPTER 23 - DEVELOPMENT AND CONTROL OF ATOMIC ENERGY  
Division A - Atomic Energy  
SUBCHAPTER IX - ATOMIC ENERGY LICENSES

Sec. 2133. Commercial licenses

-STATUTE-

(a) Conditions

The Commission is authorized to issue licenses to persons applying therefor to transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, possess, use, import, or export under the terms of an agreement for cooperation arranged pursuant to section 2153 of this title, utilization or production facilities for industrial or commercial purposes. Such licenses shall be issued in accordance with the provisions of subchapter XV of this division and subject to such conditions as the Commission may by rule or regulation establish to effectuate the purposes and provisions of this chapter.

(b) Nonexclusive basis

The Commission shall issue such licenses on a nonexclusive basis to persons applying therefor (1) whose proposed activities will serve a useful purpose proportionate to the quantities of special nuclear material or source material to be utilized; (2) who are equipped to observe and who agree to observe such safety standards to protect health and to minimize danger to life or property as the Commission may by rule establish; and (3) who agree to make available to the Commission such technical information and data concerning activities under such licenses as the Commission may determine necessary to promote the common defense and security and to protect the health and safety of the public. All such information may be used by the Commission only for the purposes of the common defense and security and to protect the health and safety of the public.

(c) License period

Each such license shall be issued for a specified period, as determined by the Commission, depending on the type of activity to be licensed, but not exceeding forty years, and may be renewed upon the expiration of such period.

(d) Limitations

No license under this section may be given to any person for activities which are not under or within the jurisdiction of the United States, except for the export of production or utilization facilities under terms of an agreement for cooperation arranged pursuant to section 2153 of this

title, or except under the provisions of section 2139 of this title. No license may be issued to an alien or any any (!1) corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government. In any event, no license may be issued 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 or to the health and safety of the public.

(f) (2) Accident notification condition; license revocation; license amendment to include condition

Each license issued for a utilization facility under this section or section 2134(b) of this title shall require as a condition thereof that in case of any accident which could result in an unplanned release of quantities of fission products in excess of allowable limits for normal operation established by the Commission, the licensee shall immediately so notify the Commission. Violation of the condition prescribed by this subsection may, in the Commission's discretion, constitute grounds for license revocation. In accordance with section 2237 of this title, the Commission shall promptly amend each license for a utilization facility issued under this section or section 2134(b) of this title which is in effect on June 30, 1980, to include the provisions required under this subsection.

#### -SOURCE-

(Aug. 1, 1946, ch. 724, title I, Sec. 103, as added Aug. 30, 1954, ch. 1073, Sec. 1, 68 Stat. 936; amended Aug. 6, 1956, ch. 1015, Secs. 12, 13, 70 Stat. 1071; Pub. L. 91-560, Sec. 4, Dec. 19, 1970, 84 Stat. 1472; Pub. L. 96-295, title II, Sec. 201, June 30, 1980, 94 Stat. 786; renumbered title I, Pub. L. 102-486, title IX, Sec. 902(a)(8), Oct. 24, 1992, 106 Stat. 2944.)

#### -MISC1-

##### AMENDMENTS

1980 - Subsec. (f). Pub. L. 96-295 added subsec. (f).

1970 - Subsec. (a). Pub. L. 91-560 struck out requirement of a finding of practical value under section 2132 and substituted "utilization and production facilities for industrial or commercial purposes" for "such type of utilization or production facility".

1956 - Subsec. (a). Act Aug. 6, 1956, Sec. 12, inserted "use," after "possess,".  
Subsec. (d). Act Aug. 6, 1956, Sec. 13, inserted "an alien or any" after "issued to".

#### -TRANS-

##### TRANSFER OF FUNCTIONS

Atomic Energy Commission abolished and functions transferred by sections 5814 and 5841 of this title. See also Transfer of Functions notes set out under those sections.

#### -FOOTNOTE-

(!1) So in original.

(!2) So in original. Probably should be "(e)".

42 USC Sec. 2134

Atomic Energy Act, Sec. 104, Medical Therapy and Research and Development

TITLE 42 - THE PUBLIC HEALTH AND WELFARE  
CHAPTER 23 - DEVELOPMENT AND CONTROL OF ATOMIC ENERGY  
Division A - Atomic Energy  
SUBCHAPTER IX - ATOMIC ENERGY LICENSES

Sec. 2134. Medical, industrial, and commercial licenses

-STATUTE-

(a) Medical therapy

The Commission is authorized to issue licenses to persons applying therefor for utilization facilities for use in medical therapy. In issuing such licenses the Commission is directed to permit the widest amount of effective medical therapy possible with the amount of special nuclear material available for such purposes and to impose the minimum amount of regulation consistent with its obligations under this chapter to promote the common defense and security and to protect the health and safety of the public.

(b) Industrial and commercial purposes

As provided for in subsection (b) or (c) of section 2132 of this title, or where specifically authorized by law, the Commission is authorized to issue licenses under this subsection to persons applying therefor for utilization and production facilities for industrial and commercial purposes. In issuing licenses under this subsection, the Commission shall impose the minimum amount of such regulations and terms of license as will permit the Commission to fulfill its obligations under this chapter.

(c) Research and development activities

The Commission is authorized to issue licenses to persons applying therefor for utilization and production facilities useful in the conduct of research and development activities of the types specified in section 2051 of this title and which are not facilities of the type specified in subsection (b) of this section. The Commission is directed to impose only such minimum amount of regulation of the licensee as the Commission finds will permit the Commission to fulfill its obligations under this chapter to promote the common defense and security and to protect the health and safety of the public and will permit the conduct of widespread and diverse research and development.

(d) Limitations

No license under this section may be given to any person for activities which are not under or within the jurisdiction of the United States, except for the export of production or utilization facilities under terms of an agreement for cooperation arranged pursuant to section 2153 of this title or except under the provisions of section 2139 of this title. No license may be issued to any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government. In any event, no license may be issued 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 or to the health and safety of the public.

-SOURCE-

(Aug. 1, 1946, ch. 724, title I, Sec. 104, as added Aug. 30, 1954, ch. 1073, Sec. 1, 68 Stat. 937; amended Pub. L. 91-560, Sec. 5, Dec. 19, 1970, 84 Stat. 1472; renumbered title I, Pub. L. 102-486, title IX, Sec. 902(a)(8), Oct. 24, 1992, 106 Stat. 2944.)

-MISC1-

#### AMENDMENTS

1970 - Subsec. (b). Pub. L. 91-560 substituted provisions authorizing the issue of licenses for utilization or production facilities for industrial or commercial purposes (i) where specifically authorized by law or (ii) where the facility was constructed or operated under an arrangement with the Commission entered into under the cooperative power reactor demonstration program, and the applicable statutory authorization does not require licensing under section 2133, or (iii) where the facility was theretofore licensed under section 2134(b), for provisions authorizing the issue of licenses for utilization and production facilities involved in the conduct of research and development activities leading to the demonstration of the practical value of such facilities for industrial and commercial purposes.

#### TRANS-TRANSFER OF FUNCTIONS

Atomic Energy Commission abolished and functions transferred by sections 5814 and 5841 of this title. See also Transfer of Functions notes set out under those sections.

42 USC Sec. 2232  
Atomic Energy Act, Sec. 182, License Applications

TITLE 42 - THE PUBLIC HEALTH AND WELFARE  
CHAPTER 23 - DEVELOPMENT AND CONTROL OF ATOMIC ENERGY  
Division A - Atomic Energy  
SUBCHAPTER XV - JUDICIAL REVIEW AND ADMINISTRATIVE PROCEDURE

Sec. 2232. License applications

-STATUTE-

(a) Contents and form

Each application for a license hereunder shall be in writing and shall specifically state such information as the Commission, by rule or regulation, may determine to be necessary to decide such of the technical and financial qualifications of the applicant, the character of the applicant, the citizenship of the applicant, or any other qualifications of the applicant as the Commission may deem appropriate for the license. In connection with applications for licenses to operate production or utilization facilities, the applicant shall state such technical specifications, including information of the amount, kind, and source of special nuclear material required, the place of the use, the specific characteristics of the facility, and such other information as the Commission may, by rule or regulation, deem necessary in order to enable it to find that the utilization or production of special nuclear material will be in accord with the common defense and security and will provide adequate protection to the health and safety of the public. Such technical specifications shall be a part of any license issued. The Commission may at any time after the filing of the original application, and before the expiration of the license, require further written statements in order to enable the Commission to determine whether the application should be granted or denied or whether a license should be modified or revoked. All applications and statements shall be signed by the applicant or licensee. Applications for, and statements made in connection with, licenses under sections 2133 and 2134 of this title shall be made under oath or affirmation. The Commission may require any other applications or statements to be made under oath or affirmation.

(b) Review of applications by Advisory Committee on Reactor Safeguards; report

The Advisory Committee on Reactor Safeguards shall review each application under section 2133 or section 2134(b) of this title for a construction permit or an operating license for a facility, any application under section 2134(c) of this title for a construction permit or an operating license for a testing facility, any application under subsection (a) or (c) of section 2134 of this title specifically referred to it by the Commission, and any application for an amendment to a construction permit or an amendment to an operating license under section 2133 or 2134(a), (b), or (c) of this title specifically referred to it by the Commission, and shall submit a report thereon which shall be made part of the record of the application and available to the public except to the extent that security classification prevents disclosure.

(c) Commercial power; publication

The Commission shall not issue any license under section 2133 of this title for a utilization or production facility for the generation of commercial power until it has given notice in writing to such regulatory agency as may have jurisdiction over the rates and services incident to the proposed activity; until it has published notice of the application in such trade or news

publications as the Commission deems appropriate to give reasonable notice to municipalities, private utilities, public bodies, and cooperatives which might have a potential interest in such utilization or production facility; and until it has published notice of such application once each week for four consecutive weeks in the Federal Register, and until four weeks after the last notice.

(d) Preferred consideration

The Commission, in issuing any license for a utilization or production facility for the generation of commercial power under section 2133 of this title, shall give preferred consideration to applications for such facilities which will be located in high cost power areas in the United States if there are conflicting applications for a limited opportunity for such license. Where such conflicting applications resulting from limited opportunity for such license include those submitted by public or cooperative bodies such applications shall be given preferred consideration.

-SOURCE-

(Aug. 1, 1946, ch. 724, title I, Sec. 182, as added Aug. 30, 1954, ch. 1073, Sec. 1, 68 Stat. 953; amended Aug. 6, 1956, ch. 1015, Sec. 5, 70 Stat. 1069; Pub. L. 85-256, Sec. 6, Sept. 2, 1957, 71 Stat. 579; Pub. L. 87-615, Sec. 3, Aug. 29, 1962, 76 Stat. 409; Pub. L. 91-560, Sec. 9, Dec. 19, 1970, 84 Stat. 1474; renumbered title I, Pub. L. 102-486, title IX, Sec. 902(a)(8), Oct. 24, 1992, 106 Stat. 2944.)

-MISC1-

AMENDMENTS

1970 - Subsec. (c). Pub. L. 91-560 substituted provisions requiring notification by publication giving reasonable notice to municipalities, private utilities, public bodies, and cooperatives which might have a potential interest in such utilization or production facility, for provisions requiring notice in writing to municipalities, private utilities, public bodies and cooperatives within transmission distance authorized to engage in the distribution of electric energy.

1962 - Subsec. (b). Pub. L. 87-615 substituted provisions requiring review of applications under section 2133 or 2134(b) of this title for a construction permit or an operating license for a facility, or under section 2134(c) of this title for a testing facility, for provisions which required review of license applications for such facilities, and inserted provisions requiring review of any application for an amendment to a construction permit or operating license under section 2133 or 2134(a), (b), or (c) of this title specifically referred to it by the Commission.

1957 - Subsecs. (b) to (d). Pub. L. 85-256 added subsec. (b) and redesignated former subsecs. (b) and (c) as (c) and (d), respectively.

1956 - Subsec. (a). Act Aug. 6, 1956, struck out "under oath or affirmation" from last sentence, and inserted two sentences at end requiring applications and statements in connection with sections 2133 and 2134 to be made under oath or affirmation and authorizing Commission to require any other applications or statements to be made under oath or affirmation.

-TRANS-

TRANSFER OF FUNCTIONS

Atomic Energy Commission abolished and functions transferred by sections 5814 and 5841 of this title. See also Transfer of Functions notes set out under those sections.



-MISC2-

#### TERMINATION OF ADVISORY COMMITTEES

Advisory committees in existence on Jan. 5, 1973, to terminate not later than the expiration of the 2-year period following Jan. 5, 1973, unless, in the case of a committee established by the President or an officer of the Federal Government, such committee is renewed by appropriate action prior to the expiration of such 2- year period, or in the case of a committee established by the Congress, its duration is otherwise provided by law. See section 14 of Pub. L. 92-463, Oct. 6, 1972, 86 Stat. 776, set out in the Appendix to Title 5, Government Organization and Employees.

**10 CODE OF FEDERAL REGULATIONS  
SELECTED SECTIONS FROM PARTS 1—150**

The purpose of this enclosure is to provide the reader the 10 Code of Federal Regulation (CFR) citations used in this NUREG. The complete sections of the 10 CFR requirements, which are associated with the requirements for the Advisory Committee on Reactor Safeguards (ACRS) to review utilization and production facility licenses, are provided below.

Part 1—Statement of Organization and General Information

§ 1.13 Advisory Committee on Reactor Safeguards.

The Advisory Committee on Reactor Safeguards (ACRS) was established by section 29 of the Atomic Energy Act of 1954, as amended. Consisting of a maximum of 15 members, it reviews and reports on safety studies and applications for construction permits and facility operating licenses; advises the Commission with regard to hazards of proposed or existing reactor facilities and the adequacy of proposed reactor safety standards; upon request of the Department of Energy (DOE), reviews and advises with regard to the hazards of DOE nuclear activities and facilities; reviews any generic issues or other matters referred to it by the Commission for advice. The Committee, on its own initiative, may conduct reviews of specific generic matters or nuclear facility safety-related items. The ACRS conducts studies of reactor safety research and submits reports thereon to the U.S. Congress and the NRC as appropriate.

§ 1.18 Advisory Committee on Nuclear Waste.

The Advisory Committee on Nuclear Waste (ACNW) provides advice to the Commission on all aspects of nuclear waste management, as appropriate, within the purview of NRC's regulatory responsibilities. The primary emphasis of the ACNW is disposal but will also include other aspects of nuclear waste management such as handling, processing, transportation, storage, and safeguarding of nuclear wastes including spent fuel, nuclear wastes mixed with other hazardous substances, and uranium mill tailings. In performing its work, the committee examines and reports on specific areas of concern referred to it by the Commission or designated representatives of the Commission, and undertakes studies and activities on its own initiative as appropriate to carry out its responsibilities. The committee interacts with representatives of NRC, other Federal agencies, state and local governments, Indian Tribes, and private organizations, as appropriate, to fulfill its responsibilities.

[54 FR 53314, Dec. 28, 1989]

## Part 2—Rules of Practice for Domestic Licensing Proceedings

### § 2.4 Definitions.

As used in this part,

*ACRS* means the Advisory Committee on Reactor Safeguards established by the Act.

*Act* means the Atomic Energy Act of 1954, as amended (68 Stat. 919).

*Facility* means a production facility or a utilization facility as defined in § 50.2 of this chapter.

### § 2.809 Participation by the Advisory Committee on Reactor Safeguards.

(a) In its advisory capacity to the Commission, the ACRS may recommend that the Commission initiate rulemaking in a particular area. The Commission will respond to such rulemaking recommendation in writing within 90 days, noting its intent to implement, study, or defer action on the recommendation. In the event the Commission decides not to accept or decides to defer action on the recommendation, it will give its reasons for doing so. Both the ACRS recommendation and the Commission's response will be made available at the NRC Web site, <http://www.nrc.gov>, following transmittal of the Commission's response to the ACRS.

(b) When a rule involving nuclear safety matters within the purview of the ACRS is under development by the NRC Staff, the Staff will ensure that the ACRS is given an opportunity to provide advice at appropriate stages and to identify issues to be considered during rulemaking hearings.

[46 FR 22358, Apr. 17, 1981, as amended at 64 FR 48948, Sept. 9, 1999]

## Part 30—Rules of General Applicability to Domestic Licensing of Byproduct Material

### § 30.4 Definitions

*Production facility* means production facility as defined in the regulations contained in part 50 of this chapter.

*Utilization facility* means a utilization facility as defined in the regulations contained in part 50 of the chapter.

### § 30.11 Specific exemptions.

(a) The Commission may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this part and parts 31 through 36 and 39 of this chapter as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest.

(d) Except as specifically provided in part 61 of this chapter, any licensee is exempt from the requirements of this part to the extent that its activities are subject to the requirements of part 61 of this chapter.

## Part 40—Domestic Licensing of Source Material

### § 40.2a Coverage of inactive tailings sites.

(a) Prior to the completion of the remedial action, the Commission will not require a license pursuant to 10 CFR chapter I for possession of residual radioactive materials as defined in this part that are located at a site where milling operations are no longer active, if the site is covered by the remedial action program of title I of the Uranium Mill Tailings Radiation Control Act of 1978, as amended. The Commission will exert its regulatory role in remedial actions primarily through concurrence and consultation in the execution of the remedial action pursuant to title I of the Uranium Mill Tailings Radiation Control Act of 1978, as amended. After remedial actions are completed, the Commission will license the long-term care of sites, where residual radioactive materials are disposed, under the requirements set out in § 40.27.

b) The Commission will regulate byproduct material as defined in this part that is located at a site where milling operations are no longer active, if such site is not covered by the remedial action program of title I of the Uranium Mill Tailings Radiation Control Act of 1978. The criteria in appendix A of this part will be applied to such sites.

[45 FR 65531, Oct. 3, 1980, as amended at 55 FR 45598, Oct. 30, 1990]

### § 40.11 Persons using source material under certain Department of Energy and Nuclear Regulatory Commission contracts.

Except to the extent that Department facilities or activities of the types subject to licensing pursuant to section 202 of the Energy Reorganization Act of 1974 or the Uranium Mill Tailings Radiation Control Act of 1978 are involved, any prime contractor of the Department is exempt from the requirements for a license set forth in sections 62, 63, and 64 of the Act and from the regulations in this part to the extent that such contractor, under his prime contract with the Department, receives, possesses, uses, transfers or delivers source material for:

- (a) The performance of work for the Department at a United States Government-owned or controlled site, including the transportation of source material to or from such site and the performance of contract services during temporary interruptions of such transportation;
- (b) research in, or development, manufacture, storage, testing or transportation of, atomic weapons or components thereof; or
- (c) the use or operation of nuclear reactors or other nuclear devices in a United States Government-owned vehicle or vessel.

In addition to the foregoing exemptions, and subject to the requirement for licensing of Department facilities and activities pursuant to section 202 of the Energy Reorganization Act of 1974 or the Uranium Mill Tailings Radiation Control Act of 1980, any prime contractor or subcontractor of the Department or the Commission is exempt from the requirements for a license set forth in sections 62, 63, and 64 of the Act and from the regulations in this part to the extent that such prime contractor or subcontractor receives, possesses, uses, transfers or delivers source material under his prime contract or subcontract when the Commission determines that the exemption of the prime contractor or subcontractor is authorized by law; and that, under the terms of the contract or subcontract, there is adequate assurance that the work thereunder can be accomplished without undue risk to the public health and safety.

[40FR8787, Mar. 3, 1975, as amended at 43FR6923, Feb. 17, 1978; 45FR65531, Oct. 3, 1980]

## Part 50—Domestic Licensing of Production and Utilization Facilities

### § 50.2 Definitions.

As used in this part,

*Act* means the Atomic Energy Act of 1954 (68 Stat. 919) including any amendments thereto.

*Production facility* means:

- (1) Any nuclear reactor designed or used primarily for the formation of plutonium or uranium-233; or
- (2) Any facility designed or used for the separation of the isotopes of plutonium, except laboratory scale facilities designed or used for experimental or analytical purposes only; or
- (3) Any facility designed or used for the processing of irradiated materials containing special nuclear material, except
  - (i) laboratory scale facilities designed or used for experimental or analytical purposes,
  - (ii) facilities in which the only special nuclear materials contained in the irradiated material to be processed are uranium enriched in the isotope U-235 and plutonium produced by the irradiation, if the material processed contains not more than 106 grams of plutonium per gram of U-235 and has fission product activity not in excess of 0.25 millicuries of fission products per gram of U-235, and
  - (iii) facilities in which processing is conducted pursuant to a license issued under parts 30 and 70 of this chapter, or equivalent regulations of an Agreement State, for the receipt, possession, use, and transfer of irradiated special nuclear material, which authorizes the processing of the irradiated material on a batch basis for the separation of selected fission products and limits the process batch to not more than 100 grams of uranium enriched in the isotope 235 and not more than 15 grams of any other special nuclear material.

*Testing facility* means a nuclear reactor which is of a type described in § 50.21(c) of this part and for which an application has been filed for a license authorizing operation at:

- (1) A thermal power level in excess of 10 megawatts; or
- (2) A thermal power level in excess of 1 megawatt, if the reactor is to contain:
  - (i) A circulating loop through the core in which the applicant proposes to conduct fuel experiments; or
  - (ii) A liquid fuel loading; or
  - (iii) An experimental facility in the core in excess of 16 square inches in cross-section.

*Utilization facility* means any nuclear reactor other than one designed or used primarily for the formation of plutonium or U-233.

## Classification and Description of Licenses

### § 50.20 Two classes of licenses.

Licenses will be issued to named persons applying to the Commission therefore, and will be either class 104 or class 103.

§ 50.21 Class 104 licenses; for medical therapy and research and development facilities.

A class 104 license will be issued, to an applicant who qualifies, for any one or more of the following: to transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, possess, or use.

- (a) A utilization facility for use in medical therapy; or
- (b)
  - (1) A production or utilization facility the construction or operation of which was licensed pursuant to subsection 104b of the Act prior to December 19, 1970;
  - (2) A production or utilization facility for industrial or commercial purposes constructed or operated under an arrangement with the Administration entered into under the Cooperative Power Reactor Demonstration Program, except as otherwise specifically required by applicable law; and
  - (3) A production or utilization facility for industrial or commercial purposes, when specifically authorized by law.
- (c) A production or utilization facility, which is useful in the conduct of research and development activities of the types specified in section 31 of the Act, and which is not a facility of the type specified in paragraph (b) of this section or in § 50.22.

[21 FR 355, Jan. 19, 1956, as amended at 31 FR 15145 Dec. 2, 1966; 35 FR 19659, Dec. 29, 1970; 38 FR 11446, May 8, 1973; 43 FR 6924, Feb. 17, 1978]

§ 50.22 Class 103 licenses; for commercial and industrial facilities.

A class 103 license will be issued, to an applicant who qualifies, for any one or more of the following: To transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, possess, or use a production or utilization facility for industrial or commercial purposes; *Provided, however,* That in the case of a production or utilization facility which is useful in the conduct of research and development activities of the types specified in section 31 of the Act, such facility is deemed to be for industrial or commercial purposes if the facility is to be used so that more than 50 percent of the annual cost of owning and operating the facility is devoted to the production of materials, products, or energy for sale or commercial distribution, or to the sale of services, other than research and development or education or training.

[38 FR 11446, May 8, 1973, as amended at 43 FR 6924, Feb. 17, 1978]

§ 50.23 Construction permits.

A construction permit for the construction of a production or utilization facility will be issued prior to the issuance of a license if the application is otherwise acceptable, and will be converted upon due completion of the facility and Commission action into a license as provided in § 50.56 of this part. A construction permit for the alteration of a production or utilization facility will be issued prior to the issuance of an amendment of a license, if the application for amendment is otherwise acceptable, as provided in § 50.91.

[21 FR 355, June 19, 1956, as amended at 35 FR 11461, July 17, 1970]

§ 50.58 Hearings and report of the Advisory Committee on Reactor Safeguards.

(a) Each application for a construction permit or an operating license for a facility which is of a type described in § 50.21(b) or § 50.22, or for a testing facility, shall be referred to the Advisory Committee on Reactor Safeguards for a review and report. An application for an amendment to such a construction permit or operating license may be referred to the Advisory Committee on Reactor Safeguards for review and report. Any report shall be made part of the record of the application and available to the public, except to the extent that security classification prevents disclosure.

## Part 52—Early Site Permits; Standard Design Certifications; Combined Licenses

### § 52.23 Referral to the ACRS [Early Site Permits].

The Commission shall refer a copy of the application to the Advisory Committee on Reactor Safeguards (ACRS). The ACRS shall report on those portions of the application which concern safety

### § 52.53 Referral to the ACRS. [Standard Design Certification]

The Commission shall refer a copy of the application to the Advisory Committee on Reactor Safeguards (ACRS). The ACRS shall report on those portions of the application which concern safety

### § 52.87 Referral to the ACRS. [Combined Licenses]

The Commission shall refer a copy of the application to the Advisory Committee on Reactor Safeguards (ACRS). The ACRS shall report on those portions of the application which concern safety and shall apply the criteria set forth in § 52.81, in accordance with the finality provisions of this part.

## Part 54—Requirements for Renewal of Operating Licenses

### § 54.25 Report of the Advisory Committee on Reactor Safeguards.

Each renewal application will be referred to the Advisory Committee on Reactor Safeguards for a review and report. Any report will be made part of the record of the application and made available to the public, except to the extent that security classification prevents disclosure.

## Part 70—Domestic Licensing of Special Nuclear Material

### § 70.1 Purpose.

(a) Except as provided in paragraphs (c) and (d) of this section, the regulations of this part establish procedures and criteria for the issuance of licenses to receive title to, own, acquire, deliver, receive, possess, use, and transfer special nuclear material; and establish and provide for the terms and conditions upon which the Commission will issue such licenses.

(b) The regulations contained in this part are issued pursuant to the Atomic Energy Act of 1954, as amended (68 Stat. 919) and Title II of the Energy Reorganization Act of 1974 (88 Stat. 1242).

(c) The regulations in part 72 of this chapter establish requirements, procedures, and criteria for the issuance of licenses to possess:

(1) Spent fuel, power reactor-related Greater than Class C (GTCC) waste, and other radioactive materials associated with spent fuel storage in an independent spent fuel storage installation (ISFSI), or

(2) Spent fuel, high-level radioactive waste, power reactor-related GTCC waste, and other radioactive materials associated with the storage in a monitored retrievable storage installation (MRS), and the terms and conditions under which the Commission will issue such licenses.

(d) As provided in part 76 of this chapter, the regulations of this part establish procedures and criteria for physical security and material control and accounting for the issuance of a certificate of compliance or the approval of a compliance plan.

(e) As provided in the Atomic Energy Act of 1954, as amended, the regulations in this part establish requirements, procedures, and criteria for the issuance of licenses to uranium enrichment facilities.

[21 FR 764, Feb. 3, 1956, as amended at 32 FR 4056, Mar. 15, 1967; 40 FR 8791, Mar. 3, 1975; 43 FR 6924, Feb. 17, 1978; 45 FR 74712, Nov. 12, 1980; 53 FR 31682, Aug. 19, 1988; 59 FR 48960, Sept. 23, 1994; 62 FR 6669, Feb. 12, 1997; 66 FR 51838, Oct. 11, 2001]

### § 70.4 Definitions.

Act means the Atomic Energy Act of 1954 (68 Stat 919), including any amendments thereto;

*Contiguous sites* means licensee controlled locations, deemed by the Commission to be in close enough proximity to each other, that the special nuclear material must be considered in the aggregate for the purpose of physical protection.

Corporation means the United States Enrichment Corporation (USEC), or its successor, a Corporation that is authorized by statute to lease the gaseous diffusion enrichment plants in Paducah, Kentucky, and Piketon, Ohio, from the Department of Energy, or any person authorized to operate one or both of the gaseous diffusion plants, or other facilities, pursuant to a plan for the privatization of USEC that is approved by the President.

*Critical mass* of special nuclear material (SNM), as used in Subpart H, means special nuclear material in a quantity exceeding 700 grams of contained uranium-235; 520 grams of uranium-233; 450 grams of plutonium; 1500 grams of contained uranium-235, if no uranium enriched to more than 4 percent by weight of uranium-235 is present; 450 grams of any combination thereof; or one-half such quantities if massive moderators or reflectors made of graphite, heavy water, or beryllium may be present.



*Department and Department of Energy* means the Department of Energy Organization Act (Pub. L. 95-91, 91 Stat. 565, 42 U.S.C. 7101 et seq.), to the extent that the Department, or its duly authorized representatives, exercises functions formerly vested in the U.S. Atomic Energy Commission, its Chairman, members, officers and components and transferred to the U.S. Energy Research and Development Administration and to the Administrator thereof pursuant to sections 104(b), (c) and (d) of the Energy Reorganization Act of 1974 (Pub. L. 93-438, 88 Stat. 1233 at 1237, 42 U.S.C. 5814) and retransferred to the Secretary of Energy pursuant to section 301(a) of the Department of Energy Organization Act (Pub. L. 95-91, 91 Stat. 565 at 577-578, 42 U.S.C. 7151).

*Government agency* means any executive department, commission, independent establishment, corporation, wholly or partly owned by the United States of America which is an instrumentality of the United States, or any board, bureau, division, service, office, officer, authority, administration, or other establishment in the executive branch of the Government;

*Items relied on for safety* mean structures, systems, equipment, components, and activities of personnel that are relied on to prevent potential accidents at a facility that could exceed the performance requirements in § 70.61 or to mitigate their potential consequences. This does not limit the licensee from identifying additional structures, systems, equipment, components, or activities of personnel (i.e., beyond those in the minimum set necessary for compliance with the performance requirements) as items relied on for safety.

*License*, except where otherwise specified, means a license issued pursuant to the regulations in this part;

*Plutonium processing and fuel fabrication plant* means a plant in which the following operations or activities are conducted:

- (1) Operations for manufacture of reactor fuel containing plutonium including any of the following:
  - (i) Preparation of fuel material;
  - (ii) formation of fuel material into desired shapes;
  - (iii) application of protective cladding;
  - (iv) recovery of scrap material; and
  - (v) storage associated with such operations; or
- (2) Research and development activities involving any of the operations described in paragraph (1) of this definition except for research and development activities utilizing unsubstantial amounts of plutonium.

*Principal activities*, as used in this part, means activities authorized by the license which are essential to achieving the purpose(s) for which the license was issued or amended. Storage during which no licensed material is accessed for use or disposal and activities incidental to decontamination or decommissioning are not principal activities.

*Produce*, when used in relation to special nuclear material, means (1) to manufacture, make, produce, or refine special nuclear material; (2) to separate special nuclear material from other substances in which such material may be contained; or (3) to make or to produce new special

nuclear material;

*Source material* means source material as defined in section 11z. of the Act and in the regulations contained in part 40 of this chapter;

*Special nuclear material* means (1) plutonium, uranium 233, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the Commission, pursuant to the provisions of section 51 of the act, determines to be special nuclear material, but does not include source material; or (2) any material artificially enriched by any of the foregoing but does not include source material;

*Uranium enrichment facility* means:

(1) Any facility used for separating the isotopes of uranium or enriching uranium in the isotope 235, except laboratory scale facilities designed or used for experimental or analytical purposes only; or

(2) Any equipment or device, or important component part especially designed for such equipment or device, capable of separating the isotopes of uranium or enriching uranium in the isotope 235.

[21 FR 764, Feb. 3, 1956]

§ 70.11 Persons using special nuclear material under certain Department of Energy and Nuclear Regulatory Commission contracts.

Except to the extent that Department facilities or activities of the types subject to licensing pursuant to section 202 of the Energy Reorganization Act of 1974 are involved, any prime contractor of the Department is exempt from the requirements for a license set forth in section 53 of the Act and from the regulations in this part to the extent that such contractor, under his prime contract with the Department receives title to, owns, acquires, delivers, receives, possesses, uses, or transfers special nuclear material for:

- (a) The performance of work for the Department at a United States Government-owned or controlled site, including the transportation of special nuclear material to or from such site and the performance of contract services during temporary interruptions of such transportation;
- (b) research in, or development, manufacture, storage, testing or transportation of, atomic weapons or components thereof; or
- (c) the use or operation of nuclear reactors or other nuclear devices in a United States Government-owned vehicle or vessel.

In addition to the foregoing exemptions, and subject to the requirement for licensing of Department facilities and activities pursuant to section 202 of the Energy Reorganization Act of 1974, any prime contractor or subcontractor of the Department or the Commission is exempt from the requirements for a license set forth in section 53 of the Act and from the regulations in this part to the extent that such prime contractor or subcontractor receives title to, owns, acquires, delivers, receives, possesses, uses, or transfers special nuclear material under his prime contract or subcontract when the Commission determines that the exemption of the prime contractor or subcontractor is authorized by law; and that, under the terms of the contract or subcontract there is adequate assurance that the work thereunder can be accomplished without undue risk to the public health and safety.

[40 FR 14085, Mar. 28, 1975; 40 FR 16047, Apr. 9, 1975; as amended at 43 FR 6924, Feb. 17, 1978; 65 FR 54950, Sept. 12, 2000]

§ 70.23 Requirements for the approval of applications.

(a) An application for a license will be approved if the Commission determines that:

(1) The special nuclear material is to be used for the conduct of research or development activities of a type specified in section 31 of the Act, in activities licensed by the Commission under section 103 or 104 of the Act, or for such other uses as the Commission determines to be appropriate to carry out the purposes of the Act;

§ 70.23a Hearing required for uranium enrichment facility.

The Commission will hold a hearing under 10 CFR part 2, subparts A, C, G, and I, on each application for issuance of a license for construction and operation of a uranium enrichment facility. The Commission will publish public notice of the hearing in the Federal Register at least thirty (30) days before the hearing.

[57 FR 18392, Apr. 30, 1992; 69 FR 2280, Jan. 14, 2004]

Part 76—Certification of Gaseous Diffusion Plants  
(as Amended by FRN issued February 12, 1997)

§ 76.1 Purpose.

(a) This part establishes requirements that will govern the operation of those portions of the Portsmouth and Paducah Gaseous Diffusion Plants located in Piketon, Ohio, and Paducah, Kentucky, respectively, that are leased by the United States Enrichment Corporation. These requirements are promulgated to protect the public health and safety from radiological hazards and provide for the common defense and security. This part also establishes the certification process that will be used to ensure compliance with the established requirements.

(b) The regulations contained in this part are issued pursuant to the Atomic Energy Act of 1954, as amended (68 Stat. 919); Title II of the Energy Reorganization Act of 1974, as amended (88 Stat. 1242); and Titles IX and XI of the Energy Policy Act of 1992 (106 Stat. 2923, 2951).

§ 76.4 Definitions.

As used in this part:

*Act* means the Atomic Energy Act of 1954 (68 Stat 919), and includes any amendments to the Act.

*Director* means the Director, or his or her designee, of the Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission.

§ 76.39 Public meeting.

(a) A public meeting will be held on an application for renewal if the Director, in his or her discretion, determines that a meeting is in the public interest with respect to a decision on the application for renewal.

(b) Conduct of public meeting.

(1) The Director shall conduct any public meeting held on the application for renewal.

(2) Public meetings will take place near the locale of the subject plant, unless otherwise specified by the Director.

(3) A public meeting will be open to all interested members of the public and be conducted as deemed appropriate by the Director.

(4) Members of the public will be given an opportunity during a public meeting to make their views regarding the application for renewal known to the Director.

(5) A transcript will be kept of each public meeting.

(6) No Restricted Data, Classified National Security Information, Unclassified Controlled Nuclear Information, Safeguards Information, Proprietary Data, or other withholdable information may be introduced at the meeting.

[59 FR 48960, Sept. 23, 1994, as amended at 64 FR 44649, Aug. 17, 1999]

§ 76.43 Date for decision.

The Director will render a decision on an application within 6 months of the receipt of the application unless the Director alters the date for decision and publishes notice of the new date in the Federal Register.

[62 FR 6670, Feb. 12, 1997]

## Part 100—Reactor Site Criteria

### § 100.2 Scope.

The siting requirements contained in this part apply to applications for site approval for the purpose of constructing and operating stationary power and testing reactors pursuant to the provisions of part 50 or part 52 of this chapter.

[61 FR 65175, Dec. 11, 1996]

## Part 150—Exemptions and Continued Regulatory Authority in Agreement States

### § 150.1 Purpose.

The regulations in this part provide certain exemptions to persons in Agreement States from the licensing requirements contained in chapters 6, 7, and 8 of the Act and from the regulations of the Commission imposing requirements upon persons who receive, possess, use or transfer byproduct material, source, or special nuclear material in quantities not sufficient to form a critical mass; and to define activities in Agreement States and in offshore waters over which the regulatory authority of the Commission continues. The provisions of the Act, and regulations of the Commission apply to all persons in Agreement States and in offshore waters engaging in activities over which the regulatory authority of the Commission continues.

[46 FR 44151, Sept. 3, 1981]

### § 150.2 Scope.

The regulations in this part apply to all States that have entered into agreements with the Commission or the Atomic Energy Commission pursuant to subsection 274b of the Act. This part also gives notice to all persons who knowingly provide to any licensee, applicant for a license or certificate or quality assurance program approval, holder of a certificate or quality assurance program approval, contractor, or subcontractor, any components, equipment, materials, or other goods or services that relate to a licensee's, certificate holder's, quality assurance program approval holder's or applicant's activities subject to this part, that they may be individually subject to NRC enforcement action for violation of §§ 30.10, 40.10, 70.10, and 71.11.

[63 FR 1901, Jan. 13, 1998]

### § 150.3 Definitions

As used in this part:

**Act** means the Atomic Energy Act of 1954 (68 Stat. 919) including any amendments thereto;

**Agreement State** means any State with which the Commission or the Atomic Energy Commission has entered into an effective agreement under subsection 274b of the Act.

**Nonagreement State** means any other State.

**Byproduct material** means: (1) Any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material; or (2) the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content, including discrete surface wastes resulting from solution extraction processes.

Underground ore bodies depleted by such solution extraction operations do not constitute

byproduct material within the definition.

*Production facility* means:

- (1) Any equipment or device determined by rule of the Commission to be capable of the production of special nuclear material in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public, including a uranium enrichment facility; or
- (2) Any important component part especially designed for such equipment or device as determined by the Commission.

*Source material* means: (1) Uranium, thorium, or any other material which is determined by the Commission pursuant to the provisions of section 61 of the Act to be source material; or (2) ores containing one or more of the foregoing materials, in such concentration as the Commission may by regulation determine from time to time;

*Special nuclear material* means: (1) Plutonium, uranium 233, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the Commission, pursuant to the provisions of section 51 of the Act, determines to be special nuclear material, but does not include source material; or (2) any material artificially enriched by any of the foregoing but does not include source material;

*State* means any State, the District of Columbia, Puerto Rico, and any territory or possession of the United States.

*Uranium enrichment facility* means: (1) Any facility used for separating the isotopes of uranium or enriching uranium in the isotope 235, except laboratory scale facilities designed or used for experimental or analytical purposes only; or

(2) Any equipment or device, or important component part especially designed for such equipment or device, capable of separating the isotopes of uranium or enriching uranium in the isotope 235.

*Utilization facility* means: (1) Any equipment or device, except an atomic weapon, determined by rule of the Commission to be capable of making use of special nuclear material in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public, or peculiarly adapted for making use of atomic energy in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public; or (2) any important component part especially designed for such equipment or device as determined by the Commission.

[27 FR 1352, Feb. 14, 1962, as amended at 31 FR 15145, Dec. 2, 1966; 40 FR 8794, Mar. 3, 1975; 44 FR 55327, Sept. 26, 1979; 45 FR 18906, Mar. 24, 1980; 46 FR 44152, Sept. 3, 1981; 57 FR 18394, Apr. 30, 1992; 68 FR 10365, Mar. 5, 2003]

#### Continued Commission Regulatory Authority in Offshore Waters

§ 150.7 Persons in offshore waters not exempt.

Persons in offshore waters are not exempt from the Commission's licensing and regulatory requirements with respect to byproduct, source, and special nuclear materials.

[46 FR 44152, Sept. 3, 1981]

### Exemptions in Agreement States

#### § 150.10 Persons exempt.

Except as provided in §§ 150.15, 150.16, 150.17, 150.17a, 150.18, and 150.19, any person in an Agreement State who manufactures, produces, receives, possesses, uses, or transfers byproduct material, source material, or special nuclear material in quantities not sufficient to form a critical mass is exempt from the requirements for a license contained in Chapters 6, 7, and 8 of the Act, regulations of the Commission imposing licensing requirements upon persons who manufacture, produce, receive, possess, use, or transfer such materials, and from regulations of the Commission applicable to licensees. The exemptions in this section do not apply to agencies of the Federal government as defined in § 150.3.

[37 FR 9208, May 6, 1972, as amended at 45 FR 50718, July 31, 1980]

### Continued Commission Regulatory Authority in Agreement States

#### § 150.15 Persons not exempt.

(a) Persons in agreement States are not exempt from the Commission's licensing and regulatory requirements with respect to the following activities:

(1) The construction and operation of any production or utilization facility. As used in this subparagraph, operation of a facility includes, but is not limited to (i) the storage and handling of radioactive wastes at the facility site by the person licensed to operate the facility, and (ii) the discharge of radioactive effluents from the facility site.

(2) The export from or import into the United States of byproduct, source, or special nuclear material, or of any production or utilization facility.

(b) Notwithstanding any exemptions provided in this part, the Commission may from time to time by rule, regulation, or order, require that the manufacturer, processor, or producer of any equipment, device, commodity, or other product containing source, byproduct, or special nuclear material shall not transfer possession or control of such product except pursuant to a license or an exemption from licensing issued by the Commission.

[27 FR 1352, Feb. 14, 1962, as amended at 34 FR 7369, May 7, 1969; 53 FR 31683, Aug. 19, 1988; 66 FR 51843, Oct. 11, 2001]

**CHRONOLOGY, DIAGRAM, AND TABLES**

Chronology of the Statutory Requirements for ACRS Review of Utilization and Production Facility Licenses.

- 1946 Congress issues the Atomic Energy Act of 1946 that creates the Atomic Energy Commission (AEC)
- 1953 AEC creates the Advisory Committee on Reactor Safeguards (ACRS)
- 1954 Congress issues the Atomic Energy Act 1954
- 1956 AEC approves a reactor license even though the ACRS and AEC staff identified safety concerns
- 1957 Congress amends the Atomic Energy Act of 1954 to require ACRS review of utilization and production facility licenses. The ACRS becomes a statutory committee.
- 1959 Congress amends the Atomic Energy Act of 1954 to allow States to regulate the use of radioactive materials, but not reactor facilities.
- 1970 Utilization and production facilities licensed prior to December 19, 1970, are grandfathered by sections 102 and 104b of the Atomic Energy Act, as amended (AEA) to meet minimal regulatory requirements. Facilities requesting a license after December 19, 1970 are required to meet the requirements of section 103 of the AEA.
- 1972 Congress issues the Federal Advisory Committee Act
- 1974 Congress issues the Energy Reorganization Act of 1974 that creates the Nuclear Regulatory Commission (NRC) and abolishes the AEC.



DIAGRAM OF STATUTORY REQUIREMENTS FOR  
ACRS REVIEW OF UTILIZATION AND PRODUCTION FACILITY LICENSES

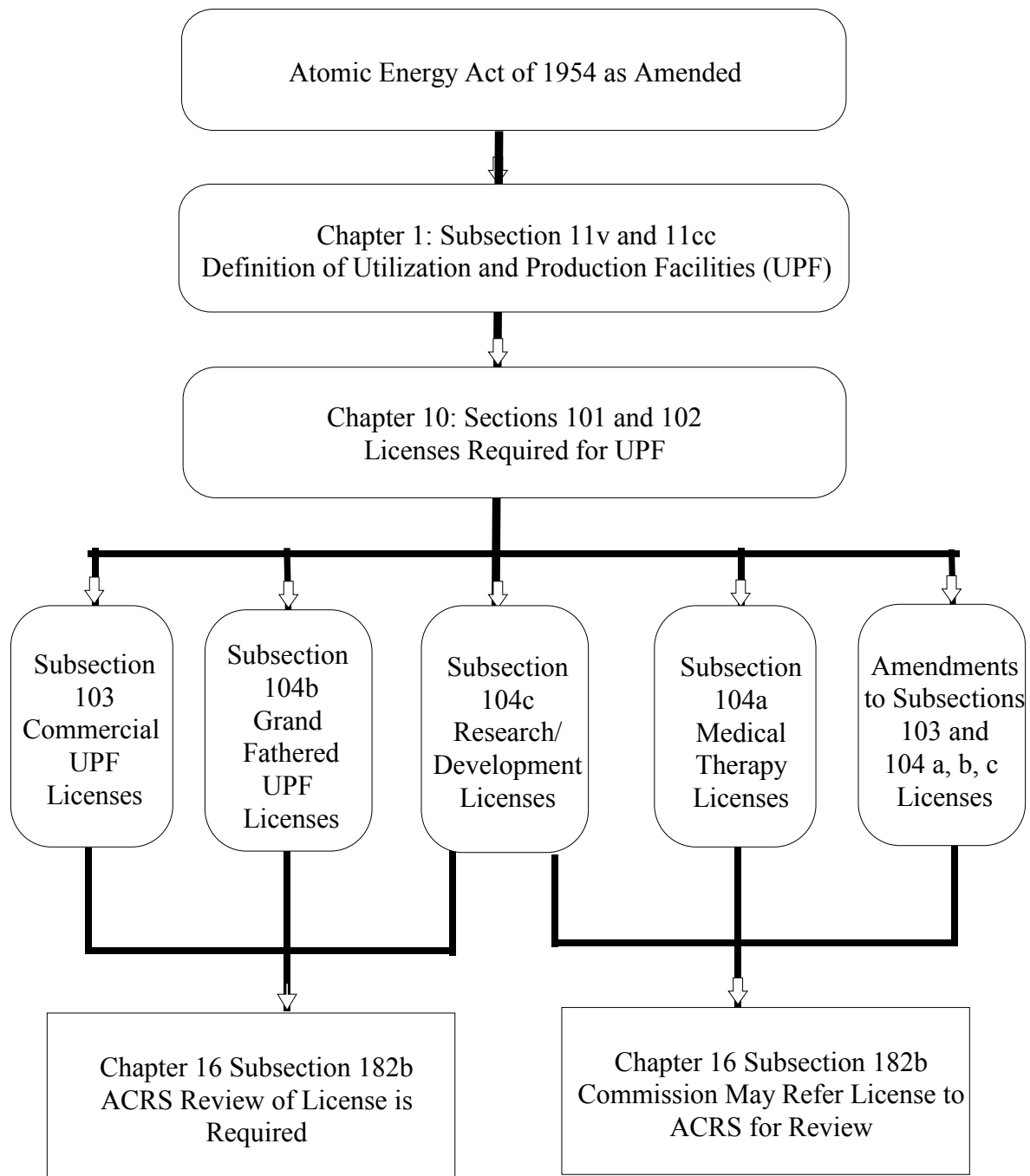


TABLE OF STATUTORY REQUIREMENTS FOR ACRS REVIEW OF  
UTILIZATION AND PRODUCTION FACILITY LICENSES

Type of License	42 USC (United States Code)	AEA Chapter 10, "Atomic Energy Licenses"	AEA Chapter 16, "Judicial Review and Administrative Procedure," Sec. 182b, ACRS Report	10 CFR Requirements
Nuclear Power Facility	2132 2133 2232	Sec. 102, "Utilization and Production Facilities for Industrial or Commercial Purposes"  Sec. 103, "Commercial Licenses"	The ACRS shall review each application under section 103 for a construction permit or an operating license for a facility,	10 CFR 50.58 License for a nuclear reactor under §50.22 shall be referred to the ACRS for a review and report
Demonstration Power Reactor	2132 2134 2232	Sec. 102, "Utilization and Production Facilities for Industrial or Commercial Purposes"  Sec. 104b "Medical Therapy and Research and Development"	The ACRS shall review each application under section 104b for a construction permit or an operating license for a facility,	10 CFR 50.58 License for a nuclear reactor under §50.21(b) shall be referred to the ACRS for a review and report
License Renewal	2132 2133 2232	Sec. 102, "Utilization and Production Facilities for Industrial or Commercial Purposes"  Sec. 103, "Commercial Licenses"	any application or an amendment to an operating license under section 103, 401b or c. specifically referred to it by the Commission.	10 CFR 54.25 Each renewal application will be referred to the ACRS for a review and report.

Type of License	42 USC (United States Code)	AEA Chapter 10, "Atomic Energy Licenses"	AEA Chapter 16, "Judicial Review and Administrative Procedure," Sec. 182b, ACRS Report	10 CFR Requirements
Testing Facility	2134	Sec. 104c "Medical Therapy and Research and Development"	The ACRS shall review any application under section 104c for a construction permit or an operating license for a testing facility,	10 CFR 50.58 License for a testing facility shall be referred to the ACRS for a review and report.
New Reactors	2132 2133 2232	Sec. 102, "Utilization and Production Facilities for Industrial or Commercial Purposes" Sec. 103, "Commercial Licenses"	The ACRS shall review each application under section 103 or section 104b for a construction permit or an operating license for a facility,	10 CFR 52.23 ACRS shall review early site permit applications  10 CFR 52.53 ACRS shall review standard design certification applications  10 CFR 52.87 ACRS shall review combined license applications

TABLE OF UTILIZATION AND PRODUCTION FACILITY LICENSES  
REVIEWED BY THE ACRS <sup>13</sup>

The following table identifies the existing utilization and production facility licenses for which the statutory requirements for ACRS reviews were applied.

Type of Facility	Type of License	Number of Facilities	Atomic Energy Act of 1954, Chapter 10	ACRS Review Requirements
Commercial Nuclear Power Reactors	Demonstration Power Reactor	54	104b	Section 182 b of the Act:  b. The ACRS shall review each application under section 103 or section 104b for a construction permit or an operating license for a facility,
	Nuclear Power Facility	50	103	
Research and Development Reactors	Testing Facility	1 National Institute of Standards and Technology	104c	Section 182b of the Act:  any application under section 104c for a construction permit or an operating license for a testing facility,
Research and Development Reactors	Research	31	104c	Section 182b of the Act:  any application under section 104a. or c. specifically referred to it by the Commission,
	Critical Assembly	1 Rensselaer Polytechnic Institute	104c	

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<sup>13</sup> Information taken from NUREG-1350, Volume 18, "NRC Information Digest, 2006-2007 Edition," issued August 2006, and NUREG-0980, Vol. 1, No 7, Rev. 1, Errata, "Nuclear Regulatory Legislation, 109<sup>th</sup> Congress; 2<sup>nd</sup> Session," issued November 2006.