NUCLEAR REGULATORY COMMISSION

10 CFR Part 110

RIN 3150–AG51

Export and Import of Nuclear Equipment and Materials

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending its regulations pertaining to the export and import of nuclear equipment and materials. This rulemaking is necessary to reflect the nuclear non-proliferation policies of the Executive Branch; U.S. Government reporting obligations to the International Atomic Energy Agency (IAEA) and under agreements for cooperation in the peaceful uses of nuclear energy; the multilateral export control recommendations of the Nuclear Suppliers Group (NSG) and the Nuclear Non-proliferation Treaty Exporters Committee (Zangger Committee), of which the U.S. is a member; and IAEA publication INFCIRC/225/Rev. 4, ''The Physical Protection of Nuclear Material and Nuclear Facilities.'' Also, this final rule makes certain editorial revisions, and corrects typographical errors.

DATES: Effective December 22, 2000.

The incorporation by reference of the material in this document is approved as of December 22, 2000.

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SUPPLEMENTARY INFORMATION:

Background

The tracking and reporting of government-to-government obligations attached to nuclear material or equipment is essential to fulfilling U.S. Government commitments under various agreements for cooperation in the peaceful uses of nuclear energy pursuant to Section 123 of the Atomic Energy Act (AEA). ''Obligations'' include controls, peaceful end-use assurances, and other conditions placed on the transfer of equipment or material. The U.S. Government is required to report to the governments of other countries the inventory of subject nuclear material held in the United States. To meet this requirement, NRC must keep adequate records showing obligations to countries that have exported nuclear material to the U.S., and track any nuclear material produced through the use of that material. The U.S. must also obtain consent before releasing obligated material to a third party.

For the past ten or more years, the situation has become more complicated, reflecting the growing complexity of the nuclear fuel cycle. To ensure that information regarding obligations is reported to the government in advance of shipments, in accordance with NRC's need to obtain prior consent for the retransfer of obligated material, this rulemaking institutes a change from solely reporting the country of origin of nuclear material to reporting all obligations attached to the material on NRC license applications. This rule extends the required prior notice on shipments of Canadian and Australian origin material to all shipments of obligated material, including, but not limited to, EURATOM and Japan.

This rulemaking is clear that as obligations are commitments made by the U.S. Government to another government on behalf of NRC licensees, the U.S. Government maintains the responsibility for informing industry of obligations attached to imported material and for approving changes to obligations on material while it is in the U.S.

Section by Section Analysis

Section 110.1 is amended by adding a paragraph to clarify that bond shipments, or shipments which are only passing through the U.S., do not require an NRC import or export license; however, they must comply with the Department of Transportation/IAEA packaging, and state transportation requirements.

Section 110.2 is amended to add definitions on subjects on which the NRC receives many public inquiries. These definitions are taken from the Atomic Energy Act (AEA), or are defined by the Executive Branch and the multilateral export control regimes of which the U.S. is a member, including the Nuclear Suppliers Group and the Zangger NPT Exporters Committee. They include byproduct material, depleted uranium, dual-use, heels, natural uranium, nuclear reactor internals, obligations, restricted destinations and source material. A citation in the definition of ''Nuclear Referral List'' is corrected, and the definition of ''Source material'' is revised.

In § 110.6, additional information is inserted on retransfers to satisfy prior consent reporting obligations on nuclear equipment and material subject to agreements for cooperation.

In § 110.7, paragraph (b) is updated to include § 110.23.

In § 110.8, reference to a new Appendix N on lithium isotope separation plant equipment and components and reference to a new Appendix O on fuel fabrication plant equipment and components are added. Plants for the conversion of plutonium are added to paragraph (f). A new paragraph is added on plants for the production of special nuclear material using accelerator-driven subcritical assembly systems capable of continuous operation above 5 MWe thermal.

In § 110.10, the reference to the completion of rulemaking proceedings is deleted in the interest of procedural efficiency.

In § 110.21, a new paragraph is added to indicate that uranium, enriched to less than 20 percent in U–235, in the form of UF6 heels in cylinders being returned to suppliers in EURATOM will no longer require a specific NRC license, but is subject to an NRC general license.

In § 110.22, a new paragraph is added to permit the export of uranium, enriched to less than 20 percent in U–235, in the form of UF6 heels in cylinders being returned to suppliers in EURATOM under an NRC general license. The specific license required previously is revoked.

In § 110.23, the export of byproduct material, californium–253 and –254, and neptunium–235 are added to bring NRC's regulations into conformance with NSG Guidelines. Yearly reporting requirements on exports of americium and neptunium are added to this section to fulfill a U.S. commitment to the IAEA on the voluntary tracking of these byproduct materials. Also, this section is clarified in an effort to make it more readable to the public.

In § 110.26 a paragraph is added to indicate that a general license for the export of nuclear reactor components, in final or semi-fabricated form, is amended to clarify that it covers components solely of U.S. origin. Also, this section is revised to include additional countries to which exports may go under a general license. The U.S. has received broad generic assurances from these countries under section 109(b) of the AEA that these components will not be used for explosive purposes or retransfered to a third country without U.S. permission. These countries include Bulgaria, Czech Republic, Latvia, Lithuania, New Zealand, and Romania. The NRC is revoking the general license for the export of nuclear reactor components to research reactors capable of continuous operation above 5MWe thermal, whether in final or semi-fabricated form,

to conform 10 CFR part 110 with 10 CFR part 810. A new paragraph is added to indicate that the general license for the export of nuclear reactor components does not authorize the export of components to research reactors, in final or semi-fabricated form, capable of continuous operation above 5 MWe thermal, and that a specific license is required for these exports.

Section 110.27 is revised by adding the words ''NRC or Agreement State'' after the word ''specific'' to clarify the fact that a consignee must have a general or specific domestic license to possess the material before it can be imported to the U.S.

In § 110.28, ''Sudan'' is added to the list of embargoed destinations for which a U.S. trade embargo is in effect.

In § 110.30, ''Belarus'', ''Cyprus'', ''Latvia'', ''Slovenia'', and ''Turkey'' are added as new NSG members.

In § 110.31, the title of the person with whom specific license applications are to be filed is updated.

In § 110.32, the information required in an application for a specific license (NRC Form 7) is clarified to satisfy reporting obligations on imported or exported nuclear equipment and material incurred by the U.S. Government pursuant to agreements for cooperation with other countries.

In § 110.44, the physical security standards are being revised to incorporate by reference the update and recommendations contained in the IAEA document, INFCIRC/225/Rev.4, June 1999, ''The Physical Protection of Nuclear Material and Nuclear Facilities.'' The standard that NRC continues to apply is that physical protection in recipient countries is sufficient to protect against the proliferation of nuclear weapons. Although the IAEA has included ''radiological sabotage'' as a distinct consideration of physical security, it is commonly understood in the international community to involve radiological health and safety rather than nuclear non-proliferation concerns. NRC is not required to consider foreign health and safety in its export licensing decisions. Also, the title of the person to whom communications are to be addressed, and specific license applications are to be filed, is updated.

In § 110.50, the title of the notifying official is updated to Deputy Director. A requirement is added that licensees must notify the Deputy Director of the Office of International Programs (OIP) in writing at least 40 days before the export of foreign-origin nuclear material or equipment, and may not ship this material or equipment until authorized by the Deputy Director, OIP. This information is needed to satisfy U.S. Government obligations under various agreements for cooperation with other countries, as defined in § 110.2, which require prior consent for shipment of foreign-origin nuclear material or equipment. Foreign-origin material and equipment exports subject to such obligations include, but are not limited to, those going to Australia, Canada, EURATOM, and Japan.

In § 110.70, an exception is inserted for exports of heavy water to Canada.

In § 110.82, the length of time to file hearing requests and intervention petitions after receipt of license applications in the Public Document Room is expanded from 15 to 30 days in the interest of procedural efficiency.

In appendix A to part 110, a correction is made to delete ''specially designed'', and insert ''especially designed.''

In appendix B to part 110, an editorial error in the power range of 50–100 volt amps is corrected to read 50–1000 volt amps. The corresponding power range in the NSG Trigger List is 50–1000 volts amps.

In appendix J to part 110, the heading is revised to add plutonium. Following the Note, a subheading (a) on uranium conversion plant equipment is added and a new paragraph on especially designed or prepared systems for the conversion of UO_2 to UCl_4 as feed for electromagnetic enrichment and plants for plutonium conversion to bring part 110 into conformance with current NSG guidelines. Also, a note, subheading (b) on plutonium conversion plant equipment, and two paragraphs are added to cover especially designed or prepared plant equipment for the conversion of plutonium from one chemical species to another, including PuO_2 to PuF_4 and of PuF_4 to plutonium metal.

In Appendix K to Part 110, a paragraph is added on complete heavy water upgrade systems or columns.

In appendix L to part 110, the radio nuclides ''californium–253'' and ''californium–254'', and ''neptunium–235'' are added to bring Part 110 into conformance with current NSG guidelines.

Appendix N to part 110 is added to illustrate the entry in § 110.8(c) on plants for the separation of the isotopes of lithium and especially designed or prepared assemblies and components for these plants.

Appendix O to part 110 is added to illustrate the entry in § 110.8(e) on plants for the fabrication of nuclear reactor fuel elements, and especially designed or prepared equipment and components for these plants.

Because the substance of this rule involves a foreign affairs function of the United States, the notice and comment provisions of the Administrative Procedure Act do not apply (5 U.S.C. 553(a)(1)). In addition, solicitation of public comments would delay United States conformance with its international obligations, and would be contrary to the public interest (5 U.S.C. 553(b)).

Small Business Regulatory Enforcement Fairness Act

In accordance with the Small Business Regulatory Enforcement Fairness Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs of OMB. The rule is necessary to conform the nuclear non-proliferation policies of the United States with international export guidelines.

Environmental Impact: Categorical Exclusion

The NRC has determined that this final rule is the type of action described in categorical exclusion 10 CFR 51.22(c)(1) and (c)(2). Therefore, neither an environmental impact statement nor an environmental assessment has been prepared for this final rule.

Paperwork Reduction Act Statement

This final rule increases the burden on exporters of americium and neptunium to submit an annual reports of shipments made. The public burden for this information collection is estimated to average .5 hour(s) per request. Because the burden for this information collection is insignificant, Office of Management and Budget (OMB) clearance is not required. Existing requirements were approved by OMB approval number 3150–0036.

Public Protection Notification

If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

Regulatory Flexibility Certification

As required by the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the Commission certifies that this rule does not have a significant impact on a substantial number of small entities. This rule is necessary to reflect the nuclear non-proliferation policies of the executive branch and U.S. Government obligations under nuclear agreements for cooperation, and to update the

export controls of the United States in respect to the multilateral export control recommendations of the Nuclear Non-proliferation Treaty Exporters Committee (Zangger Committee) and the Nuclear Suppliers Group (NSG), of which the United States is a member.

Voluntary Consensus Standards

The National Technology Transfer Act of 1995, Pub. L.104–113, requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless the use of such a standard is inconsistent with applicable law or otherwise impractical. The changes in this rulemaking are not inconsistent with any voluntary consensus standard.

Backfit Analysis

The NRC has determined that the backfit rule, 10 CFR 50.109, does not apply to this final rule and a backfit analysis is not required, because these amendments do not involve any provisions that would impose backfits as defined in 10 CFR 50.109. The rule does not constitute a backfit because it does not propose any changes or additions to requirements for existing structures, systems, components, procedures, organizations or designs associated with the construction or operation of a facility.

List of Subjects in 10 CFR Part 110

Administrative practice and procedure, Classified information, Criminal penalties, Exports, Imports, Incorporation by reference, Intergovernmental relations, Nuclear materials, Nuclear power plants and reactors, Reporting and recordkeeping requirements, Scientific equipment.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and 5 U.S.C. 552 and 553, the NRC is adopting the following amendments to 10 CFR part 110.

PART 110—EXPORT AND IMPORT OF NUCLEAR EQUIPMENT AND MATERIAL

1. The authority citation for part 110 continues to read as follows:

Authority: Secs. 51, 53, 54, 57, 63, 64, 65, 81, 82, 103, 104, 109, 111, 126, 127, 128, 129, 161, 181, 182, 183, 187, 189, 68 Stat. 929, 930, 931, 932, 933, 936, 937, 948, 953, 954, 955, 956, as amended (42 U.S.C. 2071, 2073, 2074, 2077, 2092–2095, 2111, 2112, 2133, 2134, 2139, 2139a, 2141, 2154–2158, 2201, 2231–2233, 2237, 2239); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841); sec. 5, Pub. L. 101–575, 104 Stat. 2835 (42 U.S.C. 2243).

Sections 110.1(b)(2) and 110.1(b)(3) also issued under Pub. L. 96–92, 93 Stat. 710 (22 U.S.C. 2403). Section 110.11 also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152) and secs. 54c and 57d, 88 Stat. 473, 475 (42 U.S.C. 2074). Section 110.27 also issued under sec. 309(a), Pub. L. 99–440. Section 110.50(b)(3) also issued under sec. 123, 92 Stat. 142 (42 U.S.C. 2153). Section 110.51 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 110.52 also issued under sec. 186, 68 Stat. 955 (42 U.S.C. 2236). Sections 110.80–110.113 also issued under 5 U.S.C. 552, 554. Sections 110.130–110.135 also issued under 5 U.S.C. 553. Sections 110.2 and 110.42(a)(9) also issued under sec. 903, Pub. L. 102–496 (42 U.S.C. 2151 *et seq.*).

2. In § 110.1, paragraph (b)(6) is added to read as follows:

§ 110.1 Purpose and scope.

* * * * *

(b) * * *

(6) Shipments which are only passing through the U.S. (in bond shipments) do not require an NRC import or export license; however, they must comply with the Department of Transportation/IAEA packaging, and state transportation requirements.

3. In § 110.2, the definitions for ''Byproduct material'', ''Nuclear Referral List'', and ''Source material'' are revised, and definitions for ''Depleted uranium'', ''Dual-use'', ''Embargoed'', ''Heels'', ''Natural uranium'', ''Nuclear reactor internals'', ''Obligations'', and ''Restricted destinations'' are added in alphabetical order to read as follows:

§ 110.2 Definitions.

* * * * *

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 using special nuclear material (as in a reactor); and

(2) The tailings or wastes produced by the extraction or concentration or uranium or thorium from ore (see 10 CFR 20.1003).

* * * * *

Depleted uranium means uranium having a percentage of uranium-235 less than the naturally occurring distribution of U–235 found in natural uranium (less than 0.711 weight percent U–235). It is obtained from spent (used) fuel elements or as byproduct tails or residues from uranium isotope separation.

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Dual-use means equipment and materials that may be used in nuclear or non-nuclear applications.

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Embargoed means that no nuclear material or equipment can be exported to certain countries under an NRC general license because there is a U.S. trade embargo in effect.

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Heels means small quantities of natural, depleted or low-enriched uranium (to a maximum of 20 percent), in the form of UF6 left in emptied transport cylinders being returned to suppliers after delivery of the product.

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Natural uranium means uranium as found in nature, containing about 0.711 percent of Uranium 235, 99.283 percent of uranium-238, and a trace (0.006 percent) of uranium-234.

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Nuclear reactor internals means the major structures within a reactor vessel that have one or more functions such as supporting the core, maintaining fuel alignment, directing primary coolant flow, providing radiation shields for the reactor vessel, and guiding in-core instrumentation.

Nuclear Referral List (NRL) means the nuclear-related, dual-use commodities on the Commerce Control List that are subject to the nuclear non-proliferation export licensing controls of the Department of Commerce. They are contained in 15 CFR part 774 of the Department of Commerce's Export Administration Regulations and are designated by the symbol (NP) as the reason for control.

Obligations means the commitments entered into by the U.S. Government under Atomic Energy Act (AEA) section 123 agreements for cooperation in the peaceful uses of atomic energy. Imports and exports of material or equipment pursuant to such agreements are subject to these commitments, which in some cases involve an exchange of information on imports, exports, retransfers with foreign governments, peaceful end-use assurances, and other conditions placed on the transfer of the material or equipment. The U.S. Government informs the licensee of obligations attached to material or equipment being imported into the U.S. and approves changes to those obligations.

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Restricted destinations means countries that are not parties to the NPT or are listed for reasons recommended by the executive branch.

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Source material means:

(1) Natural or depleted uranium, or thorium, other than special nuclear material; or

(2) Ores that contain by weight 0.05 percent or more of uranium, thorium or depleted uranium.

* * * * *

§ 110.4 [Amended]

4. In § 110.4, in the first sentence, the words ''Director for Nonproliferation, Exports, and Multilateral Relations'' are revised to read ''Deputy Director, Office of International Programs''.

§ 110.6 [Amended]

5. Section 110.6 is amended by adding the following sentence at the end of paragraph (a): ''Department of Energy authorization is also required for the retransfer of obligated nuclear equipment and material (see definition of ''obligated'' in § 110.2).''

6. In § 110.7, paragraph (b) is revised to read as follows:

§ 110.7 Information collection requirements: OMB approval.

* * * * *

(b) The approved information collection requirements contained in this part appear in §§ 110.7a, 110.23, 110.26, 110.27, 110.31, 110.32, 110.50, 110.51, 110.52, and 110.53

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§ 110.8 [Amended]

7. Section 110.8 is amended as follows:

a. Paragraphs (a), (d), (f), and (g) are amended by revising the word ''appendix'' to read ''Appendix'';

b. Paragraph (c) is amended by adding ''(See Appendix N to this part)'' at the end of the paragraph;

c. Paragraph (e) is amended by adding ''(See Appendix O to this part)'' at the end of the paragraph;

d. Paragraph (f) is amended by adding after the word ''uranium'' the words ''and plutonium'';

e. Paragraph (h) is redesignated as paragraph (i); and

f. A new paragraph (h) is added to read as follows:

* * * * *

(h) Plants for the production of special nuclear material using accelerator-driven subcritical assembly systems capable of continuous operation above 5 MWe thermal.

* * * * *

§ 110.10 [Amended]

8. Section 110.10(b) is amended by removing the words ''and after completion of rulemaking proceedings under subpart K of this part''.

9. Section 110.21 is amended by adding a new paragraph (b)(3) to read as follows:

§ 110.21 General license for the export of special nuclear material.

* * * * *

(b) * * *

(3) Uranium, enriched to less than 20 percent in U–235, in the form of UF6 heels in cylinders being returned to suppliers in EURATOM.

* * * * *

10. In § 110.22, paragraphs (c) through (f) are redesignated as (d) through (g), and a new paragraph (c) is added to read as follows:

§ 110.22 General license for the export of source material.

* * * * *

(c) A general license is issued to any person to export uranium, enriched to less than 20 percent in U–235, in the form of UF6 heels in cylinders being returned to suppliers in EURATOM.

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11. Section 110.23 is revised to read as follows:

§ 110.23 General license for the export of byproduct material.

(a) A general license is issued to any person to export byproduct material (see appendix L to this part) except that:

(1) This section does not authorize the export of byproduct material to any embargoed country listed in § 110.28, or byproduct material in radioactive waste, or tritium for recovery or recycle purposes.

(2) Actinium-225 and -227, americium-241 and -242m, californium-248, -249, -250, -251, -252, -253, and -254, curium-240, -241, -242, -243, -244, -245, -246 and -247, einsteinium-252, -253, -254 and -255, fermium-257, gadolinium-148, mendelevium-258, neptunium-235 and -237, polonium-210, and radium-223 must be contained in a device, or a source for use in a device, in quantities of less than 100 millicurie of alpha activity (see § 110.2 for specific activity) per device or source, unless the export is to a country listed in § 110.30. Exports of americium and neptunium are subject to the reporting requirements listed in paragraph (b) of this section.

(3) For americium-241, exports must not exceed one curie (308 milligrams) per shipment or 100 curies (30.8 grams) per year to any country listed in § 110.29, and must be contained in industrial process control equipment or petroleum exploration equipment in quantities not to exceed 20 curies (6.16 grams) per device or 200 curies (61.6 grams) per year to any one country.

(4) For neptunium-235 and -237, exports must not exceed individual shipments of one gram, not to exceed 10 grams per year to any one country.

(5) For polonium-210, the material must be contained in static eliminators and may not exceed 100 curies (22 grams) per individual shipment.

(6) For tritium in any dispersed form, except for recovery or recycle purposes (e.g., luminescent light sources and paint, accelerator targets, calibration standards, labeled compounds), exports must not exceed the quantity of 10 curies (1.03 milligrams) or less per item, not to exceed 1,000 curies (103 milligrams) per shipment or 10,000 curies (1.03 grams) per year to any one country. Exports of tritium to the countries listed in § 110.30 must not exceed the quantity of 40 curies (4.12 milligrams) or less per item, not to exceed 1,000 curies (103 milligrams) per shipment or 10,000 curies (1.03 grams) per year to any one country, and exports of tritium in luminescent safety devices installed in aircraft must not exceed a quantity of 40 curies (4.12 milligrams) or less per light source.

(b) Persons making exports under the general license established by paragraph (a) of this section shall submit by February 1 of each year one copy of a report of all americium and neptunium shipments during the previous calendar year. The report must include:

(1) A description of the material, including quantity;

(2) Approximate shipment dates; and

(3) A list of recipient countries, end users, and intended use keyed to the items shipped.

(c) Persons using a general license issued under paragraph (a) of this section as authority to export byproduct material as incidental radioactive material shall file a completed NRC Form 7 before the export takes place if the total weight of the shipment exceeds 100 kilograms.

12. Section 110.26 is amended as follows:

a. Paragraphs (a)(1) and (a)(2) are redesignated as (a)(2) and (a)(3), respectively;

b. Newly redesignated paragraph (a)(3) is amended by adding ''Bulgaria'', ''Czech Republic'', ''Latvia'', ''Lithuania'', ''New Zealand'', and ''Romania'' in alphabetical order;

c. Paragraphs (b) and (c) are redesignated as (c) and (d), respectively; and

d. New paragraphs (a)(1) and (b) are added to read as follows:

§ 110.26 General license for the export of nuclear reactor components.

(a) * * *

(1) The component is of U.S. origin,

* * * * *

(b) This general license does not authorize the export of components, in

final or semi-fabricated form, for research reactors capable of continuous operation above 5 MWe thermal.

* * * * *

§ 110.27 [Amended]

13. Section 110.27(a)(3) is amended by adding the words ''NRC or Agreement State'' after the word ''specific''.

§ 110.28 [Amended]

14. Section 110.28 is amended by adding ''Sudan'' after ''North Korea''.

§ 110.30 [Amended]

15. Section 110.30 is amended by adding ''Belarus'', ''Cyprus'', ''Latvia'', ''Slovenia'', and ''Turkey'' in alphabetical order.

§ 110.31 [Amended]

16. Section 110.31(a) is amended by removing the words ''Director for Nonproliferation, Exports, and Multilateral Relations'' and adding in their place ''Deputy Director, Office of International Programs''.

§ 110.32 [Amended]

17. Section 110.32(c) is amended by removing ''if known.'' and adding the following in their place: ''and any other countries that have processed the material prior to its import into the U.S.

(Note: This is meant to include all obligations attached to the material, according to the definition of obligations in § 110.2. Licensees must keep records of obligations attached to material which they own or is in their possession.)''

18. In § 110.44, paragraphs (a) and (b)(1) are revised to read as follows:

§ 110.44 Physical security standards.

(a) Physical security measures in recipient countries must provide protection at least comparable to the recommendations in the current version of IAEA publication INFCIRC/225/Rev. 4 (corrected), June 1999, ''The Physical Protection of Nuclear Material and Nuclear Facilities,'' and is incorporated by reference in this part. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Notice of any changes made to the material incorporated by reference will be published in the **Federal Register**. Copies of INFCIRC/225/Rev. 4 may be obtained from the Deputy Director, Office of International Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, and are available for inspection at the NRC library, 11545 Rockville Pike, Rockville, Maryland 20852–2738. A copy is available for inspection at the library of the Office of the Federal Register, 800 N. Capitol Street, NW., Suite 700, Washington, DC.

(b) * * *

(1) Receipt of written assurances from recipient countries that physical security measures providing protection at least comparable to the recommendations set forth in INFCIRC/225/Rev. 4 (corrected).

* * * * *

19. In § 110.50 paragraph (b)(3) is revised to read as follows:

§ 110.50 Terms.

* * * * *

(b) * * *

(3) Unless a license specifically authorizes the export of foreign-origin nuclear material or equipment, a licensee may not ship such material or equipment until;

(i) the licensee has given at least 40 days advance notice of the intended shipment in writing to the Deputy Director, Office of International Programs (OIP), and

(ii) the Deputy Director, OIP, has

(A) obtained confirmation, through either the Department of Energy or State, that the foreign government in question has given its consent to the intended shipment pursuant to its agreement for cooperation with the United States, and

(B) communicated this in writing to the licensee.

* * * * *

§ 110.70 [Amended]

20. In § 110.70, paragraph (b) is amended by adding after paragraph (b)(4) the following parenthetical note:

* * * * *

(b) * * *

(4) * * *

(Note: Does not apply to exports of heavy water to Canada.)

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§ 110.82 [Amended]

21. Section 110.82(c)(2) is amended by revising ''15'' to read ''30''.

Appendix A to Part 110 [Amended]

22. In appendix A to part 110, in paragraphs 1 through 7, the words ''specially designed'' are revised to read ''especially designed''.

Appendix B to Part 110 [Amended]

23. In appendix B to part 110, paragraph 1.2(d) is amended by revising ''50–100'' to read ''50–1000''.

Appendix J to Part 110 [Amended]

24. Appendix J to part 110 is amended as follows:

a. The heading is revised to read as set forth below;

b. A new paragraph (a) is added before paragraph (1);

c. In newly designated paragraph (a)(1), the last sentence is amended by revising ''product'' to read ''produce'';

d. A new paragraph (a)(9) and note are added; and

e. A new paragraph (b) is added.

The revisions and additions read as follows:

Appendix J to Part 110—Illustrative List of Uranium Conversion Plant Equipment and Plutonium Conversion Plant Equipment Under NRC Export Licensing Authority

* * * * *

(a) Uranium Conversion Plant Equipment

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(9) Especially designed or prepared systems for the conversion of UO_2 to UCl_4 as feed for electromagnetic enrichment.

Note: Plutonium conversion plants and systems may perform one or more transformations from one plutonium chemical species to another, including: conversion of plutonium nitrate to PuO_2, conversion of PuO_2 to PuF_4 and conversion of PuF_4 to plutonium metal. Plutonium conversion plants are usually associated with reprocessing facilities, but may also be associated with plutonium fuel fabrication facilities. Many of the key equipment items for plutonium conversion plants are common to several segments of the chemical process industry. For example, the types of equipment employed in these processes may include the following items: furnaces, rotary kilns, fluidized bed reactors, flame tower reactors, liquid centrifuges, distillation columns and liquid-liquid extraction columns. Hot cells, glove boxes and remote manipulators may also be required. However, few of the items are available off-the-shelf; most would be prepared according to the requirements and specifications of the customer. Particular care is essential in designing for the special radiological, toxicity and criticality hazards associated with plutonium. In some circumstances, special design and construction considerations are required to address the corrosive properties of some of the chemicals handled (e.g., HF). Finally, it should be noted that, for all plutonium conversion processes, items of equipment which individually are not especially designed or prepared for plutonium conversion can be assembled into systems that are especially designed or prepared for use in plutonium conversion.

(b) Plutonium Conversion Plant Equipment

(1) Especially designed or prepared systems for the conversion of plutonium nitrate to oxide.

The main functions involved in this process are: process feed storage and adjustment, precipitation and solid/liquor separation, calcination, product handling, ventilation, waste management, and process control. The process systems are particularly adapted so as to avoid criticality and radiation effects and to minimize toxicity hazards. In most reprocessing facilities, this process involves the conversion of plutonium

nitrate to plutonium dioxide. Other processes can involve the precipitation of plutonium oxalate or plutonium peroxide.

(2) Especially designed or prepared systems for plutonium metal production.

This process usually involves the fluorination of plutonium dioxide, normally with highly corrosive hydrogen fluoride, to produce plutonium fluoride, which is subsequently reduced using high purity calcium metal to produce metallic plutonium and a calcium fluoride slag. The main functions involved in this process are the following: fluorination (e.g., involving equipment fabricated or lined with a precious metal), metal reduction (e.g., employing ceramic crucibles), slag recovery, product handling, ventilation, waste management and process control. The process systems are particularly adapted so as to avoid criticality and radiation effects and to minimize toxicity hazards. Other processes include the fluorination of plutonium oxalate or plutonium peroxide followed by reduction to metal.

25. In appendix K to part 110, paragraph C.2(viii) is added to read as follows:

Appendix K to Part 110—Illustrative List of Equipment and Components Under NRC Export Licensing Authority for Use in a Plant for the Production of Heavy Water, Deuterium and Deuterium Compounds

C.2. * * *

(viii) Complete Heavy Water Upgrade Systems or Columns.

Complete heavy water upgrade systems or columns especially designed or prepared for the upgrade of heavy water to reactor-grade deuterium concentration. These systems, which usually employ water distillation to separate heavy water from light water, are especially designed or prepared to produce reactor-grade heavy water (i.e., typically 99.75% deuterium oxide) from heavy water feedstock of lesser concentration.

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Appendix L to Part 100 [Amended]

26. In appendix L to part 110, the following terms are added in alphabetical order: ''Californium-253 (Cf 253)'', ''Californium-254 (Cf 254)'', and ''Neptunium-235 (Np 235)''.

27. A new appendix N to part 110 is added to read as follows:

Appendix N to Part 110–Illustrative List of Lithium Isotope Separation Facilities, Plants and Equipment Under NRC's Export Licensing Authority

a. Facilities or plants for the separation of lithium isotopes.

b. Equipment for the separation of lithium isotopes, such as:

(1) Packed liquid-liquid exchange columns especially designed for lithium amalgams;

(2) Mercury and/or lithium amalgam pumps;

(3) Lithium amalgam electrolysis cells;

(4) Evaporators for concentrated lithium hydroxide solution.

28. A new appendix O to part 110 is added to read as follows:

Appendix O to Part 110–Illustrative List of Fuel Element Fabrication Plant Equipment and Components Under NRC's Export Licensing Authority

Note: Nuclear fuel elements are manufactured from source or special nuclear material. For oxide fuels, the most common type of fuel equipment for pressing pellets, sintering, grinding and grading will be present. Mixed oxide fuels are handled in glove boxes (or equivalent containment) until they are sealed in the cladding. In all cases the fuel is hermetically sealed inside a suitable cladding which is designed to be the primary envelope encasing the fuel so as to provide suitable performance and safety during reactor operation. Also, in all cases precise control of processes, procedures and equipment to extremely high standards is necessary in order to ensure predictable and safe fuel performance.

(a) Items that are considered especially designed or prepared for the fabrication of fuel elements include equipment that:

(1) Normally comes in direct contact with, or directly processes or controls, the production flow of nuclear material;

(2) Seals the nuclear material within the cladding;

(3) Checks the integrity of the cladding or the seal; and

(4) Checks the finished treatment of the sealed fuel.

(b) This equipment or systems of equipment may include, for example:

(1) Fully automatic pellet inspection stations especially designed or prepared for checking final dimensions and surface defects of fuel pellets;

(2) Automatic welding machines especially designed or prepared for welding end caps onto the fuel pins (or rods);

(3) Automatic test and inspection stations especially designed or prepared for checking the integrity of completed fuel pins (or rods). This item typically includes equipment for:

(i) X-ray examination of pin (or rod) end cap welds;

(ii) Helium leak detection from pressurized pins (or rods); and

(iii) Gamma-ray scanning of the pins (or rods) to check for correct loading of the fuel pellets inside.

Dated at Rockville, Maryland, this 27th day of October 2000.

For the Nuclear Regulatory Commission.

Carl J. Paperiello,

Acting Executive Director for Operations.

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EMERGENCY STEEL GUARANTEE LOAN BOARD

13 CFR Part 400

RIN 3003–ZA00

Emergency Steel Guarantee Loan Program; Commercial Lending Practices and Re-Opening of Period for Applications

AGENCY: Emergency Steel Guarantee Loan Board.

ACTION: Final rule.

SUMMARY: The Emergency Steel Guarantee Loan Board (Board) is amending the regulations governing the Emergency Steel Guarantee Loan Program (Program). These changes are meant to harmonize certain program requirements with commercial lending practices and to open a second period for the submission of applications. The intent of these changes is to streamline program administration both for the Board and the lenders and to allow submission of additional applications for loan guarantees.

DATES: This rule is effective November 22, 2000.

FOR FURTHER INFORMATION CONTACT: Marguerite S. Owen, General Counsel, Emergency Steel Guarantee Loan Board, 1099—14th Street, NW., Suite 2600 East, Washington, DC 20005, (202) 219–0584.

SUPPLEMENTARY INFORMATION: On October 27, 1999, the Board published a final rule codifying at Chapter 4, Title 13, Code of Federal Regulations (CFR), regulations implementing the Program, as established in Chapter 1 of Public Law 106–51, the Emergency Steel Loan Guarantee Act of 1999 (64 FR 57932). Since those initial regulations were published the Board has made a number of changes to the regulations meant to conform the regulations to the Guarantee Agreement between the government and the lender and to allow for participations in unguaranteed tranches of loans guaranteed under the Program. Today the Board is making additional changes designed to harmonize certain program requirements with commercial lending practices, streamline program operation, and to open a second period for the submission of applications. In addition, several non-substantive changes are being made to change addresses and allow for certain delegations of authority.