

boundary, (ii) the capability to shut down the reactor and maintain it in a safe shutdown condition, or (iii) the capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to the guideline exposures of this part. In addition to seismic loads, including aftershocks, applicable concurrent functional and accident-induced loads shall be taken into account in the design of such safety features. The design provisions shall be based on an assumption that the design basis for surface faulting can occur in any direction and azimuth and under any part of the nuclear power plant unless evidence indicates this assumption is not appropriate, and shall take into account the estimated rate at which the surface faulting may occur.

(c) *Seismically Induced Floods and Water Waves and Other Design Conditions.* The design basis for seismically induced floods and water waves from either locally or distantly generated seismic activity and other design conditions determined pursuant to paragraphs (c) and (d) of section V, shall be taken into account in the design of the nuclear power plant so as to prevent undue risk to the health and safety of the public.

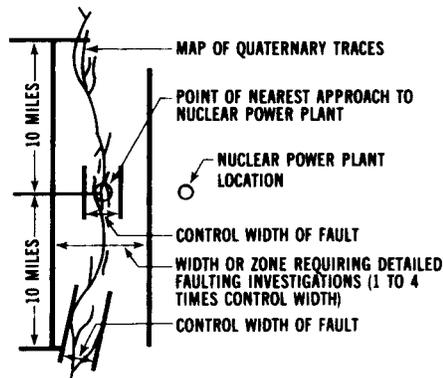


FIGURE 1—DIAGRAMMATIC ILLUSTRATION OF DELINEATION OF WIDTH OF ZONE REQUIRING DETAILED FAULTING INVESTIGATIONS FOR SPECIFIC NUCLEAR POWER PLANT LOCATION.

(Sec. 201, Pub. L. 93-438, 88 Stat. 1243 (42 U.S.C. 5841))

[38 FR 31281, Nov. 13, 1973, as amended at 38 FR 32575, Nov. 27, 1973; 42 FR 2052, Jan. 10, 1977]

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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); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note).

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.*).

SOURCE: 43 FR 21641, May 19, 1978, unless otherwise noted.

Subpart A—General Provisions

§ 110.1 Purpose and scope.

(a) The regulations in this part prescribe licensing, enforcement, and rule-making procedures and criteria, under the Atomic Energy Act, for the export of nuclear equipment and material, as set out in §§ 110.8 and 110.9, and the import of nuclear equipment and material, as set out in § 110.9a. This part also

gives notice to all persons who knowingly provide to any licensee, applicant, contractor, or subcontractor, components, equipment, materials, or other goods or services, that relate to a licensee's or applicant's activities subject to this part, that they may be individually subject to NRC enforcement action for violation of § 110.7b.

(b) The regulations in this part apply to all persons in the United States except: (1) The Departments of Defense and Energy for activities authorized by sections 54, 64, 82, and 91 of the Atomic Energy Act, except when the Department of Energy seeks an export license under section 111 of the Atomic Energy Act;

(2) Persons who export or import U.S. Munitions List nuclear items, such as uranium depleted in the isotope-235 and incorporated in defense articles. These persons are subject to the controls of the Department of State pursuant to 22 CFR 120–130 "International Traffic in Arms Regulations" (ITAR), under the Arms Export Control Act, as authorized by section 110 of the International Security and Development Cooperation Act of 1980;

(3) Persons who export uranium depleted in the isotope-235 and incorporated in commodities solely to take advantage of high density or pyrophoric characteristics. These persons are subject to the controls of the Department of Commerce under the Export Administration Act, as authorized by section 110 of the International Security and Development Cooperation Act of 1980;

(4) Persons who export nuclear referral list commodities. These persons are subject to the licensing authority of the Department of Commerce pursuant to 15 CFR part 799, such as bulk zirconium, rotor and bellows equipment, maraging steel, nuclear reactor related equipment, including process control systems and simulators; and

(5) Persons who import deuterium, nuclear grade graphite, or nuclear equipment other than production or utilization facilities. A uranium enrichment facility is not a production facility.

(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.

[49 FR 47197, Dec. 3, 1984; 49 FR 49841, Dec. 24, 1984, as amended at 55 FR 34519, Aug. 23, 1990; 56 FR 40692, Aug. 15, 1991; 58 FR 13001, Mar. 9, 1993; 61 FR 35602, July 8, 1996; 63 FR 1900, Jan. 13, 1998; 65 FR 70289, Nov. 22, 2000]

§ 110.2 Definitions.

As used in this part,

Agreement for cooperation means any agreement with another nation or group of nations concluded under section 123 of the Atomic Energy Act, as amended.

Atomic Energy Act means the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011).

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).

Classified information means National Security Information classified under Executive Order 12356.

Commission means the United States Nuclear Regulatory Commission or its duly authorized representatives.

Common defense and security means the common defense and security of the United States.

Conversion facility means any facility for the transformation from one uranium chemical species to another, including: conversion of uranium ore concentrates to UO₃, conversion of UO₃ to UO₂, conversion of uranium oxides to UF₄ or UF₆, conversion of UF₄ to UF₆, conversion of UF₆ to UF₄, conversion of UF₄ to uranium metal, and conversion of uranium fluorides to UO₂.

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.

Deuterium means deuterium and any deuterium compound, including heavy water, in which the ratio of deuterium atoms to hydrogen atoms exceeds 1:5000.

Disposal means permanent isolation of radioactive material from the surrounding environment.

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

Effective kilograms of special nuclear material means:

(1) For plutonium and uranium-233, their weight in kilograms;

(2) For uranium enriched 1 percent or greater in the isotope U-235, its element weight in kilograms multiplied by the square of its enrichment expressed as a decimal weight fraction; and

(3) For uranium enriched below 1 percent in the isotope U-235, its element weight in kilograms multiplied by 0.0001.

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.

Exceptional circumstances means, with respect to exports from the United States of radioactive material listed in Table 1 of Appendix P of this part:

(1) Cases of considerable health or medical need as acknowledged by the U.S. Government and the government of the importing country;

(2) Cases where there is an imminent radiological hazard or security threat presented by one or more radioactive sources; and

(3) Cases in which the exporting facility or U.S. Government maintains control of the radioactive material throughout the period the material is outside of the U.S. and removes the material at the conclusion of this period.

Executive Branch means the Departments of State, Energy, Defense and Commerce and the Arms Control and Disarmament Agency.

Export means to physically transfer nuclear equipment or material to a person or an international organization in a foreign country, except DOE distributions as authorized in Section 111 of the Atomic Energy Act or Section