§ 73.60 Additional requirements for physical protection at nonpower reactors.

Each nonpower reactor licensee who, pursuant to the requirements of part 70 of this chapter, possesses at any site or contiguous sites subject to control by the licensee uranium–235 (contained in uranium enriched to 20 percent or more in the U–235 isotope), uranium–233, or plutonium, alone or in any combination in a quantity of 5000 grams or more computed by the formula, grams=grams contained U–235+2.5 (grams U–233+grams plutonium), shall protect the special nuclear material from theft or diversion pursuant to the requirements of paragraphs 73.67 (a), (b), (c), and (d), in addition to this section, except that a licensee is exempt from the requirements of paragraphs (a), (b), (c), (d), and (e) of this section to the extent that it possesses or uses special nuclear material that is not readily separable from other radioactive material and that has a total external radiation dose rate in excess of 100 rems per hour at a distance of 3 feet from any accessible surface without intervening shielding.

(a) Access requirements. (1) Special nuclear material shall be stored or processed only in a material access area. No activities other than those which require access to special nuclear material or equipment employed in the process, use, or storage of special nuclear material, shall be permitted within a material access area.

(2) Material access areas shall be located only within a protected area to which access is controlled.

(3) Special nuclear material not in process shall be stored in a vault equipped with an intrusion alarm or in a vault-type room, and each such vault or vault-type room shall be controlled as a separate material access area.

(4) Enriched uranium scrap in the form of small pieces, cuttings, chips, solutions or in other forms which result from a manufacturing process, contained in 30-gallon or larger containers, with a uranium–235 content of less than 0.25 grams per liter, may be stored within a locked and separately fenced area which is within a larger protected area provided that the storage area is no closer than 25 feet to the perimeter of the protected area. The storage area when unoccupied shall be protected by a guard or watchman who shall patrol at intervals not exceeding 4 hours, or by intrusion alarms.

(5) Admittance to a material access area shall be under the control of authorized individuals and limited to individuals who require such access to perform their duties.

(6) Prior to entry into a material access area, packages shall be searched for devices such as firearms, explosives, incendiary devices, or counterfeit substitute items which could be used for theft or diversion of special nuclear material.

(7) Methods to observe individuals within material access areas to assure that special nuclear material is not diverted shall be provided and used on a continuing basis.

(b) Exit requirement. Each individual, package, and vehicle shall be searched for concealed special nuclear material before exiting from a material access area unless exit is into a contiguous material access area. The search may be carried out by a physical search or by use of equipment capable of detecting the presence of concealed special nuclear material.

(c) Detection aid requirement. Each unoccupied material access area shall be locked and protected by an intrusion alarm on active status. All emergency exits shall be continuously alarmed.

(d) Testing and maintenance. Each licensee shall test and maintain intrusion alarms, physical barriers, and other devices utilized pursuant to the requirements of this section as follows:

(1) Intrusion alarms, physical barriers, and other devices used for material protection shall be maintained in operable condition.

(2) Each intrusion alarm shall be inspected and tested for operability and required functional performance at the beginning and end of each interval during which it is used for material protection, but not less frequently than once every seven (7) days.

(e) Response requirement. Each licensee shall establish, maintain, and follow an NRC-approved safeguards contingency plan for responding to
threats, thefts, and radiological sabotage related to the special nuclear material and nuclear facilities subject to the provisions of this section. Safeguards contingency plans must be in accordance with the criteria in Appendix C to this part, "Licensee Safeguards Contingency Plans."

(f) In addition to the fixed-site requirements set forth in this section and in §73.67, the Commission may require, depending on the individual facility and site conditions, any alternate or additional measures deemed necessary to protect against radiological sabotage at nonpower reactors licensed to operate at or above a power level of 2 megawatts thermal.

§ 73.61 Relief from fingerprinting and criminal history records check for designated categories of individuals permitted unescorted access to certain radioactive materials or other property.

Notwithstanding any other provision of the Commission’s regulations, fingerprinting and the identification and criminal history records checks required by section 149 of the Atomic Energy Act of 1954, as amended, are not required for the following individuals prior to granting unescorted access to radioactive materials or other property that the Commission determines by regulation or order to be of such significance to the public health and safety or the common defense and security as to warrant fingerprinting and background checks:

(a) An employee of the Commission or of the Executive Branch of the U.S. Government who has undergone fingerprinting for a prior U.S. Government criminal history check;
(b) A Member of Congress;
(c) An employee of a member of Congress or Congressional committee who has undergone fingerprinting for a prior U.S. Government criminal history check;
(d) The Governor of a State or his or her designated State employee representative;
(e) Federal, State, or local law enforcement personnel;
(f) State Radiation Control Program Directors and State Homeland Security Advisors or their designated State employee representatives;
(g) Agreement State employees conducting security inspections on behalf of the NRC pursuant to an agreement executed under section 274.1 of the Atomic Energy Act;
(h) Representatives of the International Atomic Energy Agency (IAEA) engaged in activities associated with the U.S./IAEA Safeguards Agreement who have been certified by the NRC.


§ 73.67 Licensee fixed site and in-transit requirements for the physical protection of special nuclear material of moderate and low strategic significance.

(a) General performance objectives. (1) Each licensee who possesses, uses or transports special nuclear material of moderate or low strategic significance shall establish and maintain a physical protection system that will achieve the following objectives:

(i) Minimize the possibilities for unauthorized removal of special nuclear material consistent with the potential consequences of such actions; and
(ii) Facilitate the location and recovery of missing special nuclear material.

(2) To achieve these objectives, the physical protection system shall provide:

(i) Early detection and assessment of unauthorized access or activities by an external adversary within the controlled access area containing special nuclear material;
(ii) Early detection of removal of special nuclear material by an external adversary from a controlled access area;
(iii) Assure proper placement and transfer of custody of special nuclear material; and
(iv) Respond to indications of an unauthorized removal of special nuclear material.

PHYSICAL PROTECTION OF SPECIAL NUCLEAR MATERIAL OF MODERATE AND LOW STRATEGIC SIGNIFICANCE

§ 73.67 Licensee fixed site and in-transit requirements for the physical protection of special nuclear material of moderate and low strategic significance.

(a) General performance objectives. (1) Each licensee who possesses, uses or transports special nuclear material of moderate or low strategic significance shall establish and maintain a physical protection system that will achieve the following objectives:

(i) Minimize the possibilities for unauthorized removal of special nuclear material consistent with the potential consequences of such actions; and
(ii) Facilitate the location and recovery of missing special nuclear material.

(2) To achieve these objectives, the physical protection system shall provide:

(i) Early detection and assessment of unauthorized access or activities by an external adversary within the controlled access area containing special nuclear material;
(ii) Early detection of removal of special nuclear material by an external adversary from a controlled access area;
(iii) Assure proper placement and transfer of custody of special nuclear material; and
(iv) Respond to indications of an unauthorized removal of special nuclear material.