

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

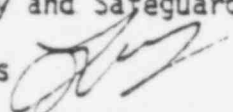
July 13, 1979

SECY-79-187A

**CONSENT CALENDAR ITEM**

For: The Commissioners

From: William J. Dircks, Director  
Office of Nuclear Material Safety and Safeguards

Thru: Executive Director for Operations 

Subject: CHANGE TO UPGRADE RULE: MAKING "HIGH ASSURANCE"  
REQUIREMENT AN OBJECTIVE

Purpose: To obtain Commission approval for changes to 73.20(a) and  
(b) and 73.55(a) incorporating "high assurance" as an  
objective.

Category: This paper covers a minor issue requiring Commission action.

Discussion: Chairman Hendrie, at the June 27th briefing of the Upgrade  
Rule, indicated that it was the consensus of the Commission  
that both fuel cycle facilities and power reactors would  
use the term "high assurance," as an objective, in contrast  
to "reasonable assurance." A draft of a proposed change  
in wording to 73.20, which stipulates that "high assurance"  
would be an objective for the licensee to attain, was handed  
to each Commissioner. After reviewing the draft, the  
Chairman stated that the Commission, at its next meeting  
on the Upgrade Rule, would like to see similar wording  
applied to requirements of 73.55. This wording is  
attached along with previously distributed changes to  
73.20(a) and (b). The comparative text indicates the  
changes made to the Upgrade Rule draft presently before  
the Commission as Enclosure "A" of SECY-79-187.

Recommendations: That the Commission approve the proposed changes to 73.20  
and 73.55.

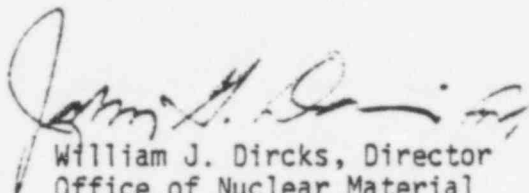
Coordination: The Offices of Inspection and Enforcement and Nuclear Reactor  
Regulation concur in the recommendation of the paper. The  
Executive Legal Director has no legal objection to the  
recommendations of the paper.

Contact:  
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Scheduling: For consideration in conjunction with the Safeguards Upgrade Rule.



William J. Dircks, Director  
Office of Nuclear Material  
Safety and Safeguards

Enclosure:  
Changes to 73.20(a) and (b)

Commissioners' comments or consent should be provided directly to the Secretary by c.o.b. Friday, July 20, 1979.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT July 18, 1979, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional time for analytical review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

This paper is tentatively scheduled for affirmation at an open meeting during the week of July 23, 1979. Please refer to the appropriate Weekly Commission Schedule, when published, for a specific date and time.

DISTRIBUTION:

Commissioners  
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§73.20 General Performance Objective and Requirements.

(a) In addition to any other requirements of this part, each licensee who is authorized to operate a fuel reprocessing plant pursuant to Part 50 of this chapter; possesses or uses formula quantities of strategic special nuclear material at any site or contiguous sites subject to control by the licensee; is authorized to transport or deliver to a carrier for transportation pursuant to Part 70 of this chapter formula quantities of strategic special nuclear material; takes delivery of formula quantities of strategic special nuclear material free on board (f.o.b.) the point at which it is delivered to a carrier for transportation; or imports or exports formula quantities of strategic special nuclear material shall establish and maintain or make arrangements for a physical protection system which will have as its objective to provide [reasonable] high assurance that activities involving special nuclear material are not inimical to the common defense and security, and do not constitute an unreasonable risk to the public health and safety. The physical protection system shall be designed to protect against the design basis threats of theft or diversion of strategic special nuclear material and radiological sabotage as stated in §73.1(a).

(b) To ~~[meet]~~ achieve the general performance ~~[requirements]~~ objective of paragraph (a) of this section a licensee ~~[shall]~~ is required to establish and maintain, or arrange for, a physical protection system that:

(1) provides the performance capabilities described in Section 73.25 for in-transit protection or in Section 73.45 for fixed site protection unless otherwise authorized by the Commission;

(2) is designed with sufficient redundancy and diversity to assure maintenance of the capabilities described in Section 73.25 or 73.45; and

(3) includes a testing and maintenance program to assure control over all activities and devices affecting the effectiveness, reliability, and availability of the physical protection system, including a demonstration

that any defects of such activities and devices will be promptly detected and corrected for the total period of time they are required as a part of the physical protection system.

§73.55 Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage.

(a) General Performance Objective and Requirements.

The licensee shall establish and maintain an onsite physical protection system and security organization which will have as its objective to provide [~~reasonable~~] high assurance that activities involving special nuclear material are not inimical to the common defense and security, and do not constitute an unreasonable risk to the public health and safety.<sup>1/</sup> The physical protection system shall be designed to protect against the design basis threat of radiological sabotage as stated in §73.1(a). [~~In-meeting-these~~] To achieve this general performance [~~requirements~~] objective, the onsite physical protection system and security organization shall be required to include, but not necessarily be limited to, the capabilities to meet the specific requirements contained in paragraphs (b) through (h) of this section. The Commission

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<sup>1/</sup> As used in this section, "high assurance" is comparable to the degree of assurance required by the Commission in its safety reviews for protection against severe postulated accidents having potential consequences similar to the potential consequences from reactor sabotage. It should be appreciated that the standard "reasonable assurance," commonly used in safety evaluations, is applied to a broad category of safety concerns ranging from the mitigation of minor anticipated operational occurrences to protection against severe postulated accidents. Thus, the degree of assurance necessary to provide "reasonable assurance" varies with the gravity of the safety concern.

may authorize an applicant or licensee to provide measures for protection against radiological sabotage other than those required by this section if the applicant or licensee demonstrates that the measures have the same high assurance objective as specified in this paragraph and that the overall level of system performance provides protection against radiological sabotage equivalent to that which would be provided by paragraphs (b)--(h) of this section. Specifically, in the special cases of licensed operating reactors with adjacent reactor powerplants under construction, the licensee shall provide and maintain a level of physical protection of the operating reactor against radiological sabotage equivalent to the requirements of this section.