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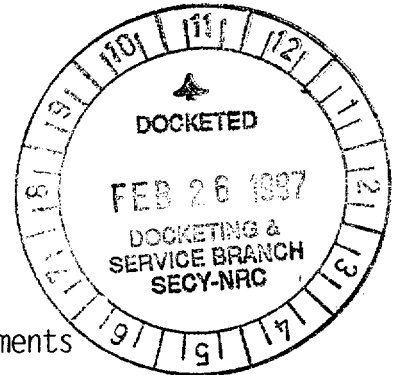
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NUCLEAR REGULATORY COMMISSION

10 CFR Part 73

RIN: 3150-AF53

Changes to Nuclear Power Plant Security Requirements



AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule.

DOCKET NUMBER
PROPOSED RULE **PR 73**
(62FR 7721)

SUMMARY: The Nuclear Regulatory Commission (NRC) is proposing to revise its regulations to delete certain security requirements associated with an internal threat. This action follows reconsideration by the NRC of nuclear power plant physical security requirements to identify those requirements that are marginal to safety, redundant, or no longer effective. This action would reduce the regulatory burden on licensees without compromising physical protection against radiological sabotage required for public health and safety.

May 6, 1997

DATES: Submit comments by (insert date 75 days after publication in the Federal Register). Comments received after this date will be considered if it is practical to do so, but the Commission is able to assure consideration only for comments received on or before this date.

ADDRESSES: Comments may be sent to: Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Attention: Docketing and Service Branch.

Deliver comments to: 11555 Rockville Pike, Rockville, Maryland, between 7:30 am and 4:15 pm on Federal workdays.

For information on submitting comments electronically, see the discussion under Electronic Access in the Supplementary Information Section.

Certain documents related to this rulemaking, including comments received, may be examined at the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. These same documents may also be viewed and downloaded electronically via the Electronic Bulletin Board established by NRC for this rulemaking as discussed under Electronic Access in the Supplementary Information Section.

FOR FURTHER INFORMATION CONTACT: Dr. Sandra Frattali, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 415-6261, e-mail sdf@nrc.gov.

SUPPLEMENTARY INFORMATION:

Background

In a memorandum dated September 3, 1991 (COMFR-91-005), the Commission requested the NRC staff to re-examine the security requirements associated with an internal threat to nuclear power plants that are contained in 10 CFR Part 73, "Physical Protection of Plants and Materials." The NRC staff

completed its re-examination and recommended some changes in 10 CFR Part 73 to the Commission (SECY-92-272, August 4, 1992). In a Staff Requirements Memorandum dated November 5, 1992, the Commission directed the NRC staff to work with the Nuclear Management and Resources Council (NUMARC) now known as the Nuclear Energy Institute (NEI). Following three public meetings with NUMARC, the NRC staff recommended to the Commission (SECY-93-326, December 2, 1993) additional changes to Part 73 that would provide significant relief to licensees without compromising the physical security of the plants. In a Staff Requirements Memorandum dated February 18, 1994, the Commission directed the NRC staff to proceed with a rulemaking.

Discussion

Seven areas in Part 73 were identified as candidates for modification through rulemaking. One of the recommended changes, relating to access of personnel and materials into reactor containments during periods of high traffic, has been addressed by a separate rulemaking. This recommended change was adopted in a final rule published on September 7, 1995 (60 FR 46497). Six other changes originally considered for this rulemaking were the subject of Generic Letter 96-02 issued February 13, 1996. This generic letter identified certain areas in which licensees might choose to revise their physical security plans without having to wait for issuance of the rule plan. One of these (discussed in detail later), an option to leave vital area doors unlocked provided certain compensatory measures are taken, has been reconsidered in light of recent tampering events. Consequently, that change is not being proposed in this rulemaking.

The five remaining changes being addressed in this proposed rulemaking are as follows:

1. Search requirements for on-duty guards, § 73.55(d)(1);
2. Requirements for vehicle escort, § 73.55(d)(4);
3. Control of contractor employee badges, § 73.55(d)(5);
4. Maintenance of access lists for each vital area,
§ 73.55(d)(7)(i)(A); and
5. Key controls for vital areas, § 73.55(d)(8).

1. Search Requirements for On-duty Guards (§ 73.55(d)(1)).

Under current regulations, armed security guards who leave the protected area as part of their duties must be searched for firearms, explosives, and incendiary devices upon re-entry into the protected area. Requiring a guard to go through an explosives detector or searching packages carried by the guard protects against the introduction of contraband. Because an armed guard carries a weapon on site, passage of the guard through the metal detector, the principal purpose of which is to detect firearms, serves little purpose. The guard has to either remove the weapon while passing through the detector or be subject to a hand search. Either approach makes little sense for the guard who is authorized to carry a weapon on site. Further, removing and handling the guard's weapon could present a personnel safety risk.

This proposed rule would allow armed security guards who are on duty and have exited the protected area on official business to reenter the protected area without being searched for firearms (by a metal detector). Unarmed guards and watchpersons would continue to meet all search requirements. All

guards would continue to be searched for explosives and incendiary devices because they are not permitted to carry these devices into the plant.

2. Requirements for Vehicle Escort § (73.55(d)(4)).

The present requirement for a searched, licensee-owned vehicle within the protected area to be escorted by a member of the security organization, even when the driver is badged for unescorted access, does not contribute significantly to the security of the plant. Under the current regulations, all vehicles must be searched prior to entry into the protected area except under emergency conditions. Further, all vehicles must be escorted by a member of the security organization upon entry into the protected area except for "designated licensee vehicles." Designated licensee vehicles are those vehicles that are limited in their use to onsite plant functions and remain in the protected area except for operational, maintenance, repair, security, and emergency purposes. Under this requirement, those licensee-owned vehicles that are not "designated licensee vehicles" must be escorted at all times while in the protected area even when they are driven by personnel with unescorted access.

This proposed rule would eliminate the requirement for escort of licensee-owned vehicles entering the protected area for work-related purposes provided that these vehicles are driven by licensee employees who have unescorted access. (This amendment would still preclude periodic entry of a delivery truck without an escort.) This change would provide burden relief to licensees without significantly increasing the level of risk to the plant.

3. Control of Contractor Employee Badges (§ 73.55(d)(5)).

Contractor employees with unescorted access are required to return their badges when leaving the protected area. Current regulatory practice allows licensee employees to leave the protected area with their badges if adequate safeguards are in place to ensure that the security of the badge is not jeopardized. Because contractors and licensees are subject to the same programs required for unescorted access, there is no reason to employ more stringent badge control requirements for contractor employees.

This proposed rule would allow contractor employees to take their badges offsite under the same conditions that apply to licensee employees.

4. Maintenance of Access Lists for Each Vital Area (§ 73.55(d)(7)(i)(A)).

Maintaining separate access lists for each vital area and reapproval of these lists on a monthly basis is of marginal value. At many sites, persons granted access to one vital area also have access to most or all vital areas. Therefore, licensees presently derive little additional benefit from maintaining discrete lists of individuals allowed access to each separate vital area in the facility. Also, licensee managers or supervisors are required to update the access lists at least once every 31 days to add or delete individuals from these lists when appropriate. There is also a requirement to reapprove the list every 31 days. However, reapproval of all individuals on the lists at least every 31 days, to validate that the lists have been maintained in an accurate manner is unnecessarily burdensome.

This rulemaking would replace separate access authorization lists for each vital area of the facility by a single listing of all persons who have access to any vital area.

The proposed rulemaking would also change the requirement that the list must be reapproved at least once every 31 days to quarterly. The reapproval consists of a review to ensure that the list is current and that only those individuals requiring routine access to a vital area are included. Because of the requirement for a manager or supervisor to update the list at least every 31 days, conducting this comprehensive reapproval every 31 days is of marginal value. Comments from the public are requested on the question of the benefits of separating the update and reapproval requirements.

5. Key Controls for Vital Areas (§ 73.55(d)(8)).

Under current regulations, licensees change or rotate all keys, locks, combinations, and related access control devices at least once every twelve months. Because the rule also requires that these be changed whenever there is a possibility of their being compromised, requiring change at least every 12 months has been determined by the NRC to be only marginal to security.

This proposed rule would remove the requirement for change every 12 months while retaining the requirement for changing for cause, when an access control device has been compromised or there is a suspicion that it may be compromised.

Locking of Vital Areas

As noted earlier, Generic Letter 96-02, described, among other things, conditions under which licensees could leave vital areas unlocked. Specifically, to leave a vital area unlocked, the licensee would have had to ensure that the area is equipped with an alarmed access control system that

will alarm on unauthorized entry; ensure that the doors to the area can be locked remotely; continue to maintain a record of personnel access; to examine for explosives, with equipment specifically designed for that purpose, all hand-carried packages entering any protected area within which there is an unlocked vital area; and to demonstrate a capability to protect against an external adversary.¹ This change was considered for inclusion in this rulemaking but as a result of recent events, it has been rejected. If vital areas are unlocked but alarmed, the response to an entry by an unauthorized individual could require a considerable time and level of effort to assure that important equipment was not damaged. Maintaining VA doors locked limits the number of people who have access to the area and ensures that personnel who enter are identified.

In July and August of this year, tampering events were discovered within vital areas of a reactor. The first search missed significant tampering with safety-related switches. If vital areas are unlocked but alarmed, an entry by an unauthorized individual, deliberate or inadvertent, could require a considerable level of effort to assure that important equipment was not damaged. It is also uncertain that such alarms would always initiate the level of response needed to evaluate the safety systems within the impacted vital area. In addition, most safety equipment is automatic and rapid access to vital areas is generally not required. Thus, this option of leaving a vital area unlocked is no longer being considered.

¹ Generic Letter 96-02 (February 13, 1996) identified those areas in which licensees might choose to revise their security plans without having to wait for the issuance of the rule changes. One change would have provided the option of not locking the doors to a vital area provided that the security of the plant would not be compromised.

Electronic Access

Comments may be submitted electronically, in either ASCII text or WordPerfect format (version 5.1 or later), by calling the NRC Electronic Bulletin Board (BBS) on FedWorld. The bulletin board may be accessed using a personal computer, a modem, and one of the commonly available communications software packages, or directly via Internet. Background documents on the rulemaking are also available, as practical, for downloading and viewing on the bulletin board.

If using a personal computer and modem, the NRC rulemaking subsystem on FedWorld can be accessed directly by dialing the toll free number (800) 303-9672. Communication software parameters should be set as follows: parity to none, data bits to 8, and stop bits to 1 (N,8,1). Using ANSI or VT-100 terminal emulation, the NRC rulemaking subsystem can then be accessed by selecting the "Rules Menu" option from the "NRC Main Menu." Users will find the "FedWorld Online User's Guides" particularly helpful. Many NRC subsystems and data bases also have a "Help/Information Center" option that is tailored to the particular subsystem.

The NRC subsystem on FedWorld can also be accessed by a direct dial phone number for the main FedWorld BBS, (703) 321-3339, or by using Telnet via Internet: fedworld.gov. If using (703) 321-3339 to contact FedWorld, the NRC subsystem will be accessed from the main FedWorld menu by selecting the "Regulatory, Government Administration and State Systems," then selecting "Regulatory Information Mall." At that point, a menu will be displayed that has an option "U.S. Nuclear Regulatory Commission" that will take you to the NRC Online main menu. The NRC Online area also can be accessed directly by

typing "/go nrc" at a FedWorld command line. If you access NRC from FedWorld's main menu, you may return to FedWorld by selecting the "Return to FedWorld" option from the NRC Online Main Menu. However, if you access NRC at FedWorld by using NRC's toll-free number, you will have full access to all NRC systems but you will not have access to the main FedWorld system.

If you contact FedWorld using Telnet, you will see the NRC area and menus, including the Rules Menu. Although you will be able to download documents and leave messages, you will not be able to write comments or upload files (comments). If you contact FedWorld using FTP, all files can be accessed and downloaded but uploads are not allowed; all you will see is a list of files without descriptions (normal Gopher look). An index file listing all files within a subdirectory, with descriptions, is available. There is a 15-minute time limit for FTP access.

Although FedWorld also can be accessed through the World Wide Web, like FTP, that mode only provides access for downloading files and does not display the NRC Rules Menu.

For more information on NRC bulletin boards call Mr. Arthur Davis, Systems Integration and Development Branch, NRC, Washington, DC 20555-0001, telephone (301) 415-5780; e-mail AXD3@nrc.gov.

Environmental Impact: Categorical Exclusion

The Commission has determined that this proposed rule is the type of action described as a categorical exclusion in 10 CFR 51.22(c)(3)(i). Therefore, neither an environmental impact statement nor an environmental assessment has been prepared for this proposed rule.

Paperwork Reduction Act Statement

This proposed rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). This rule has been submitted to the Office of Management and Budget for review and approval of the paperwork requirements.

Because the rule will reduce existing information collection requirements, the public burden for this collection of information is expected to be decreased by 102 hours per licensee. This reduction includes the time required for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The NRC is seeking public comment on the potential impact of the collection of information contained in the proposed rule and on the following issues:

1. Is the proposed collection of information necessary for the proper performance of the functions of the NRC, including whether the information will have practical utility?
2. Is the estimate of burden accurate?
3. Is there a way to enhance the quality, utility, and clarity of the information to be collected?
4. How can the burden of the collection of information be minimized, including the use of automated collection techniques?

Send comments on any aspect of this proposed collection of information, including suggestions for further reducing the burden, to the Information and Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission,

Washington, DC 20555-0001, or by Internet electronic mail at BJS1@NRC.GOV; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0002), Office of Management and Budget, Washington, DC 20503.

Comments to OMB on the collections of information or on the above issues should be submitted by (insert date 30 days after publication in the Federal Register). Comments received after this date will be considered if it is practical to do so, but assurance of consideration cannot be given to comments received after this date.

Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Regulatory Analysis

A discussion of each of the five changes proposed in this rule is provided in the supplementary information section. The costs and benefits for each of the changes proposed in this rulemaking are as follows:

1. Search Requirements for On-duty Guards (§ 73.55(d)(1)).

The regulatory burden on licensees would be reduced by eliminating unnecessary weapon searches of guards who are already allowed to carry a weapon, which would result in better utilization of licensee resources. There would be no reduction in plant security because the potential for reduction in

security personnel hours does not impact the total size of the security force. Further, the potential safety risk to personnel caused by removing and handling a guard's weapon would be eliminated.

2. Requirements for Vehicle Escort (73.55(d)(4)).

The regulatory burden on licensees would be reduced by requiring fewer vehicle escorts which would allow personnel to be utilized more effectively. Resources could be redirected to areas in which they would be more cost effective. The decrease in security would be marginal because unescorted access would be restricted to vehicles owned by the licensee and driven by licensee employees with unescorted access.

Assuming the number of entries by licensee-owned vehicles driven by personnel having unescorted access is 10-per-day per-site, the average time needed for escort is 3 hours, and the cost per hour for security personnel is \$30 (loaded), a rough estimate of the potential savings per site per year is about \$330,000 (10 escorts/day/site x 365 days/year x 3 hrs/escort x \$30/hr). With 75 sites, the savings to the industry per year would be approximately \$24,000,000.

3. Control of Contractor Employee Badges (\$ 73.55(d)(5)).

The regulatory burden on licensees would be reduced by more effective use of security personnel, who would no longer be needed to handle badges for contractor personnel who have unescorted access. There would be no reduction in plant security because adequate safeguards would be in place to ensure that the security of the badge is not jeopardized.

Assuming that one security person per working day (8 hours) is relieved from the duties of controlling contractor employees badges and that the cost per hour for security personnel is \$30 (loaded), a rough estimate of the potential savings per site per year is about \$88,000 (8 hours/day x 365 days/year x \$30/hr). With 75 sites, the savings to the industry per year would be approximately \$6,600,000.

4. Maintenance of Access Lists for Each Vital Area (\$ 73.55(d)(7)(i)(A)).

The regulatory burden on licensees would be reduced because licensees would have to keep only one access list for all vital areas and reapprove it quarterly, rather than keep individual access lists for each vital area that must be reapproved monthly.

Assuming that the time to reapprove each of the individual lists is 1 hour per month, that a combined list would take 1.5 hours per month, that the average number of vital areas per site is 10, and that the cost of a clerk including overhead is \$30 per hour (loaded), a rough estimate of the potential savings per site per year is about \$3,420 [(1 x 10 vital areas/month x 12 months/yr - 1.5 x 1 combined vital area/quarter x 4 quarters/yr) x \$30/hr]. With 75 sites, the savings to the industry per year would be approximately \$256,500.

5. Key Controls for Vital Areas (\$ 73.55(d)(8)).

The regulatory burden on the licensees would be reduced because fewer resources would be needed to maintain the system.

Assuming that of the approximately 60 locks per year, half of them had been changed for cause, leaving 30 locks unchanged which would take a

locksmith one day to change at a cost(including overhead) of \$45 per hour. A rough estimate of the potential savings per site per year is about \$360 (8 hrs/year x \$45/hr). With 75 sites, the savings to the industry per year would be approximately \$27,000.

Regulatory Flexibility Certification

As required by the Regulatory Flexibility Act as amended, 5 U.S.C. 605(b), the Commission certifies that this proposed rule, if adopted, would not have a significant economic impact on a substantial number of small entities. This proposed rule would affect only licensees authorized to operate nuclear power reactors. These licensees do not fall within the scope of the definition of "small entities" set forth in the Regulatory Flexibility Act, or the Small Business Size Standards set out in regulations issued by the Small Business Administration Act, 13 CFR Part 121.

Backfit Analysis

The Commission has determined that the backfit rule, 10 CFR 50.109, does not apply to this proposed amendment because this amendment would not impose new requirements on existing 10 CFR Part 50 licensees. The proposed changes to physical security are voluntary and should the licensee decide to implement this amendment, will be a reduction in burden to the licensee. Therefore, a backfit analysis has not been prepared for this amendment.

List of Subjects in 10 CFR Part 73

Criminal penalties, Hazardous materials transportation, Export, Import, Nuclear materials, Nuclear power plants and reactors, Reporting and recordkeeping requirements, Security measures.

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. 553; the NRC is proposing to adopt the following amendments to 10 CFR Part 73.

PART 73 -- PHYSICAL PROTECTION OF PLANTS AND MATERIALS

1. The authority citation for Part 73 continues to read as follows:

AUTHORITY: Secs. 53, 161, 68 Stat. 930, 948, as amended, sec. 147, 94 Stat. 780 (42 U.S.C. 2073, 2167, 2201); sec. 201, as amended, 204, 88 Stat. 1242, as amended, 1245 sec. 1701, 106 Stat. 2951, 2952 (42 U.S.C. 5841, 5844, 2297f).

Section 73.1 also issued under secs. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161). Section 73.37(f) also issued under sec. 301, Pub. L. 96-295, 94 Stat. 789 (42 U.S.C. 5841 note). Section 73.57 is issued under sec. 606, Pub. L. 99-399, 100 Stat. 876 (42 U.S.C. 2169).

2. Section 73.55 is amended by revising paragraphs (d)(1), (d)(4), (d)(5), (d)(7)(i)(A), (d)(7)(i)(D) and (d)(8) to read as follows:

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

* * * * *

(d) * * *

(1) The licensee shall control all points of personnel and vehicle access into a protected area. Identification and search of all individuals unless otherwise provided herein must be made and authorization must be checked at these points. The search function for detection of firearms, explosives, and incendiary devices must be accomplished through the use of both firearms and explosive detection equipment capable of detecting those devices. The licensee shall subject all persons except bona fide Federal, State, and local law enforcement personnel on official duty to these equipment searches upon entry into a protected area. Armed security guards who are on duty and have exited the protected area on official business may reenter the protected area without being searched for firearms.

* * * * *

(4) All vehicles, except under emergency conditions, must be searched for items which could be used for sabotage purposes prior to entry into the protected area. Vehicle areas to be searched must include the cab, engine compartment, undercarriage, and cargo area. All vehicles, except as indicated below, requiring entry into the protected area must be escorted by a member of the security organization while within the protected area and, to the extent practicable, must be off loaded in the protected area at a specific designated materials receiving area that is not adjacent to a vital area. Escort is not required for designated licensee vehicles or licensee-owned vehicles entering the protected area and driven by licensee employees having unescorted access.

(5) A numbered picture badge identification system must be used for all individuals who are authorized access to protected areas without escort. An individual not employed by the licensee but who requires frequent and extended access to protected and vital areas may be authorized access to such areas without escort provided that he or she displays a licensee-issued picture badge upon entrance into the protected area which indicates:

- (i) Non-employee-no escort required;
- (ii) areas to which access is authorized; and
- (iii) the period for which access has been authorized.

Badges must be displayed by all individuals while inside the protected area.

* * * * *

(7) * * *

(i) * * *

(A) Establish a current authorization access list for all vital areas. The access list must be updated by the cognizant licensee manager or supervisor at least once every 31 days and must be reapproved at least quarterly. The licensee shall include on the access list only individuals whose specific duties require access to vital areas during nonemergency conditions.

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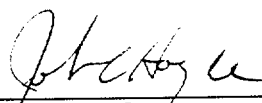
(d)(8) All keys, locks, combinations, and related access control devices used to control access to protected areas and vital areas must be controlled to reduce the probability of compromise. Whenever there is evidence or suspicion that any key, lock, combination, or related access

control devices may have been compromised, it must be changed or rotated. The licensee shall issue keys, locks, combinations and other access control devices to protected areas and vital areas only to persons granted unescorted facility access. Whenever an individual's unescorted access is revoked due to his or her lack of trustworthiness, reliability, or inadequate work performance, keys, locks, combinations, and related access control devices to which that person had access must be changed or rotated.

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Dated at Rockville, Maryland, this 14th day of February, 1997.

For the Nuclear Regulatory Commission.



John C. Hoyle,
Secretary of the Commission.