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AND DAY FIRING QUALIFICATIONS FOR SECURITY  
PERSONNEL AT CATEGORY I LICENSEE FUEL CYCLE  
FACILITIES

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QUALIFICATIONS FOR SECURITY PERSONNEL AT  
CATEGORY I LICENSEE FUEL CYCLE FACILITIES

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TO FIND THE STAFF CONTACT OR VIEW THE RULEMAKING HISTORY PRESS PAGE DOWN KEY

## HISTORY OF THE RULE

PART AFFECTED: PR-073

RULE TITLE: PHYSICAL FITNESS PROGRAMS AND DAY FIRING  
QUALIFICATIONS FOR SECURITY PERSONNEL AT  
CATEGORY I LICENSEE FUEL CYCLE FACILITIES

PROPOSED RULE	PROPOSED RULE	DATE PROPOSED RULE
SECY PAPER: 91-307	SRM DATE: 08/10/93	SIGNED BY SECRETARY: 12/09/91
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DOCKET NO. PR-073  
(56FR65024)

In the Matter of

PHYSICAL FITNESS PROGRAMS AND DAY FIRING  
QUALIFICATIONS FOR SECURITY PERSONNEL AT  
CATEGORY I LICENSEE FUEL CYCLE FACILITIES

DATE DOCKETED	DATE OF DOCUMENT	TITLE OR DESCRIPTION OF DOCUMENT
12/09/91	12/09/91	FEDERAL REGISTER NOTICE - PROPOSED RULE
03/02/92	02/27/92	COMMENT OF NUCLEAR FUEL SERVICES, INC. (DONALD PAINE, PH.D) ( 1)
03/13/92	03/12/92	COMMENT OF BABCOCK & WALCOX & NAVAL NUC. FUEL DIV. (J. A. CONNER, VICE PRESIDENT) ( 2)
03/23/92	03/16/92	COMMENT OF DUKE POWER COMPANY (H. B. TUCKER) ( 3)
08/25/93	08/24/93	FINAL RULE NOTICE PUBLISHED ON 8/31/93 AT 58FR45781

DOCKET NUMBER  
PROPOSED RULE **PR 73**  
(~~56~~FR 65024)

DSB

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NUCLEAR REGULATORY COMMISSION

10 CFR PART 73

RIN: 3150-AD30

Day Firing Qualification Courses for Tactical Response Team Members,  
Armed Response Personnel, and Guards at Category I Licensees

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending its regulations for armed security force personnel at fuel cycle facilities possessing formula quantities of strategic special nuclear material (Category I licensees).

Tactical Response Team members, armed response personnel, and guards at these facilities will be required to qualify and annually requalify for use of their assigned weapons using new day firing qualification courses. This action is necessary to ensure that these personnel are able to perform their assigned response duties during tactical engagements.

EFFECTIVE DATE: [Insert date 180 days following date of publication.]

FOR FURTHER INFORMATION CONTACT: Harry S. Tovmassian, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 492-3634.

Pub. on  
8/31/93 at  
58FR45781

## SUPPLEMENTARY INFORMATION:

### Background

Existing day firing qualification courses for Tactical Response Team members<sup>1</sup>, armed response personnel<sup>2</sup>, and guards<sup>3</sup> at Category I licensees need to be modified to require enhanced proficiency in weapon manipulation skills in order to more effectively protect the facilities in the event of a hostile tactical engagement. Currently, Tactical Response Team members, armed response personnel, and guards at these facilities are required to qualify and annually requalify for day firing of their assigned weapons in accordance with criteria set forth in Appendix B of 10 CFR Part 73. This appendix states that, for handgun qualification, the national police course of fire or an equivalent nationally recognized course is required and for semiautomatic rifles, the course required is the 1976 edition of the National Rifle Association (NRA) Highpower Rifle Rules book or an equivalent nationally recognized course. For qualification with the shotgun, the current course of fire consists of hip firing the weapon from a 15-yard distance and shoulder firing from a 25-yard distance. These courses of fire are more oriented towards marksmanship than to weapons manipulation skills (e.g., reloading, shooting failure drills, and changing positions while firing). Although these

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<sup>1</sup>"Tactical Response Team" means the primary response force for each shift which can be identified by a distinctive item of uniform, armed with specified weapons, and whose other duties permit immediate response.

<sup>2</sup>"Armed Response Personnel" means persons, not necessarily uniformed, whose primary duty in the event of attempted theft of special nuclear material or radiological sabotage shall be to respond, armed and equipped, to prevent or delay such actions.

<sup>3</sup>"Guard" means a uniformed individual armed with a firearm whose primary duty is the protection of special nuclear material against theft, the protection of a plant against radiological sabotage, or both.

marksmanship oriented courses were appropriate at the time they were specified, the NRC has developed an increased awareness of the evolution of the capabilities and tactics employed by the criminal and terrorist elements. Therefore, the NRC has specified, in 10 CFR 73.1, the capabilities that should be ascribed to individuals or groups that pose a threat to Category I facilities (i.e., the design basis threat). These assumed capabilities should constitute the basis for physical protection system design. The design basis threat includes a small, well trained and armed, dedicated group, possessing paramilitary capabilities.

For the reasons explained above, the NRC has decided to establish new day firing courses for the purpose of qualifying Tactical Response Team members, armed response personnel, and guards at Category I licensees for use of their assigned weapons. The techniques and methods required to successfully complete the day firing qualification courses specified in this final rule are oriented primarily toward weapons manipulation skills in addition to marksmanship and are considered necessary to survive a lethal confrontation. These amendments require that Tactical Response Team members, armed response personnel, and guards qualify and annually requalify for day firing with assigned weapons by meeting minimum qualification criteria specified in Appendix H of 10 CFR Part 73. The day firing qualification courses defined in this final rule are largely based on those developed by the Department of Energy for the purpose of qualifying its security inspectors who have the same duties as Category I licensee Tactical Response Teams, armed response personnel, and guards. These courses of fire include weapons manipulation skills that are necessary in tactical situations and demonstrate the ability to effectively use the weapons to protect the facility and

strategic special nuclear material from a group of individuals possessing the capabilities ascribed to the design basis threat.

### Summary of Public Comments

The comment period for the proposed rule published December 13, 1991 (56 FR 65024) expired on March 13, 1992. This Federal Register Notice contained proposed requirements for both day firing qualification and physical fitness programs. Three letters of comment were received. The NRC has decided to make substantive changes to the physical fitness related requirements and is republishing these amended requirements in a new proposed rule to solicit additional public comment. Therefore, this comment summary addresses only the comments on the day firing qualification course requirements which are being published as a final rule. The following comment summary and resolution addresses these comments.

1. Comment. One commenter stated that the need has not been clearly established for the more stringent firearms qualifications regulations.

Response. As discussed in the preamble of the proposed rule, the purpose of the more stringent day firing qualification courses was to make them consistent regarding the level of specificity and proficiency with the night firing requirements published in 1988. Because existing licensees' Weapons Qualifications Plans contained weapon qualification courses which were judged to be similar to the courses being proposed, the proposed rule stated the opinion that codifying the courses in a regulation would add no new burden to the existing licensees. Nevertheless, as a result of this comment, the NRC

reviewed whether the benefits to the public health and safety or to the national defense and security justify more stringent firearms qualification courses than those provided by the existing regulation.

This review has determined that these marksmanship oriented courses were appropriate at the time they were developed, but the NRC has developed an increased awareness of the evolution of the capabilities and tactics employed by the criminal and terrorist elements. The knowledge that the NRC has concerning the firepower, body armor, tactics, training, and equipment which can be ascribed to the design basis threat has broadened since Appendix B of 10 CFR Part 73 was established and has been accounted for in 10 CFR 73.1(a)(2)(i). The design basis threat includes a small, well trained and armed, dedicated group, possessing paramilitary capabilities. Appendix B of 10 CFR Part 73 allows handgun qualification via the national police course of fire, and rifle qualification via a 1976 National Rifle Association rulebook. These courses of fire emphasize marksmanship and do not test weapons manipulation skills (e.g., reloading, shooting failure drills, and changing positions while firing). The techniques and methods required to successfully complete the day firing qualification courses specified in this final rule are oriented toward weapons manipulation skills in addition to marksmanship and are considered to provide a significant improvement in the ability of licensee security forces to survive a lethal confrontation.

2. Comment. One commenter requested that Appendix H of 10 CFR 73.46 specify how head shots are to be scored for stage 2 of the handgun course.

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Response. The B-27 target consists of a silhouette of a standing person and contains qualification scoring rings for shots aimed at the center target mass, but not the head. Stage 2 of the handgun qualification course of



fire requires the shooter to fire two rounds at the center target mass followed by one round at the head. A description of a template for the center of the head, and the scoring scheme, are described in Appendix A of the Department of Energy's "Firearms Qualification Courses." Hits in the center of this template are scored five points and hits on the remainder of the silhouette are scored three points. The NRC does not believe that further description of this scoring technique in Appendix H of 10 CFR 73.46 is necessary. However, the NRC recognizes that other targets exist for which the scoring technique may be more explicit (such as the TQ-15 target). Therefore, Appendix H has been amended in the final rule to allow the use of such targets as an alternative to the B-27 provided that these targets are at least as difficult as the B-27 target (e.g., neck shots should not count the same as head shots or center mass shots).

3. Comment. Two commenters noted an error in that the handgun course contained distances of both 14 and 15 yards.

Response. Appendix H has been amended to correct this error.

4. Comment. One commenter suggested that the NRC allow either a single or double action revolver for stage 7 at the 50-yard distance in the handgun course (Note: the commenter identified stage 6 of the handgun course but the 50 yard distance is only found in stage 7).

Response. The NRC does not believe that the wording for stage 7 needs modification. Stage 7 of the handgun qualification course of fire does not specify a single or double action revolver, because either is permitted.

~~Therefore, this modification has not been made.~~

5. Comment. One commenter noted that stages 5 and 6 of the rifle course were to be used for .30 caliber weapons for TRT qualifications only.

The commenter stated that this limits the maximum score for the standard rifle (i.e., stages 1 through 4) to 110 points and suggested that 70% of this maximum score (77 points) be specified as the minimum qualifying score for the standard rifle instead of 70% of 150 points.

Response. The NRC agrees that minimum qualifying scores should be specified separately for standard and larger caliber rifles because there may be times that a security officer may need to qualify for one but not the other. Therefore, the specific qualifying scores have been deleted from Appendix H which now specifies that 70 percent is the minimum qualifying score.

6. Comment. One commenter suggested that failure to qualify should result in a 3-day suspension from armed duty rather than the proposed 7-day suspension. The commenter stated that the 7-day suspension may cause the individual to be out of a job for 7 days before he could requalify. The commenter noted that nonqualified personnel would usually be utilized in an unarmed position. However, because few of these positions exist, the 7-day waiting period could cause layoffs. Another commenter stated that the 7-day and 12-month suspensions are potentially the most significant and costly impacts of the rule. This commenter stated that extending the waiting periods beyond the time required to retrain the officer appears to be punitive, does not enhance the security program's effectiveness, and induces unnecessary costs. The commenter suggested that the rule be amended to require that an officer who fails to achieve the minimum qualifying score be removed from armed officer duty and complete a documented period of retraining prior to any subsequent attempt to qualify or requalify. The commenter further suggested that the NRC consider requiring that officers may not fire for record more

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than once on the same calendar day. Additionally, if an officer fails to qualify on two successive attempts, that individual would be required to receive additional training and fire two consecutive qualifying scores prior to being reassigned to armed officer duties.

Response. The NRC agrees that retraining an individual to the point of qualifying or requalifying can be accomplished in less time than the period specified in the proposed rule. Therefore, the NRC has adopted the suggestion to limit the suspension to the amount of time required to retrain individuals to the point that they can qualify or requalify and believes that this change satisfies the concerns of both commenters.

7. Comment. One commenter suggested that the same rationale for allowing multiple physical fitness qualifications be used in the development of weapons qualifications. The commenter stated that these qualifications, like the physical fitness qualifications, would reflect consistency with the environments in which individuals must perform their duties. The commenter further suggested that the weapons qualification requirements are appropriate for TRT members but are excessive for armed response personnel and for "static response positions" (e.g., operators of central and secondary alarm stations and security personnel which control entry or exit portals).

Response. This commenter is referring to the fact that physical fitness performance testing which was also contained in the proposed rulemaking (56 FR 65024) required Tactical Response Team members to pass a more stringent test than guards and armed response personnel. This was because the TRT members duties were to perform offensive combative tasks as opposed to defensive combative tasks required of other security personnel. The NRC disagrees that this logic can also be applied to weapons qualification

courses. It is recognized that physical capabilities required for Tactical Response Team members, armed response personnel, and guards to perform their duties satisfactorily vary depending upon job tasks. But, any armed response officer on site, regardless of duty station, could be involved in a violent confrontation requiring the use of his or her weapon, especially in areas of access or egress control. As a matter of fact, the reason that the 3-yard distance is included in the rule for weapon qualification for handguns is that violent confrontations which occur at access or egress locations are expected to be at close range. Also, the rule as written already limits the training to only assigned weapons. Therefore, the NRC has decided not to adopt this commenter's suggestion.

8. Comment. One commenter suggested that handgun qualification be limited to 25 yards or less because physical security personnel have shoulder fired weapons available for shots of greater distance.

Response. The NRC recognizes that the 50-yard distance is near the maximum distance at which a handgun is effective for the average shooter. However, the NRC believes that security officers should be familiar with handgun performance at greater distances because an adversary could penetrate the protected area in such a short period of time that the security officer may be tempted to use a handgun instead of retrieving a shoulder fired weapon. Because the current requirement in Appendix B of 10 CFR Part 73 references the national police course, which requires a total of 24 shots fired, applying the final rule in Appendix H is actually a relaxation of the requirement because it calls for only 6 shots. For these reasons the NRC believes that the requirement is reasonable and has retained it in the final rule.

9. Comment. One commenter suggested that the position description in the handgun course be amended from "reload with six rounds" to "reload" because the automatic pistol will reload in a different manner than the revolver.

Response. The NRC agrees with this comment and Appendix H has been modified to reflect this suggested change in the final rule.

10. Comment. One commenter stated, without providing the rationale, that the timing for qualifying with handguns (stage 1 and 4, string 3) and for rifles (stage 2 at 25 yards) are unrealistic and additional time should be considered.

Response. The NRC believes that the times prescribed in the handgun qualification course of fire are justified. Although law enforcement statistics show that police officers seldom fire, reload, and continue a confrontation, the NRC Design Basis Threat ascribes greater capabilities to adversaries engaged in malevolent activities against Category I licensees than those typically encountered during law enforcement type engagements. The security officers must be able to manipulate their weapons skillfully and precisely. Being able to draw and reload quickly and efficiently while maintaining a continuity of fire under realistic time constraints is important for defense of a facility undergoing attack. Therefore, the NRC has retained the timing requirement for the reload position in the day firing qualification course.

11. Comment. One commenter suggested that the shotgun course allow the use of either 00 buckshot or rifled slugs because some facilities do not use rifled slugs.

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Response. The NRC agrees with this comment and Appendix H has been modified accordingly.

12. Comment. One commenter suggested that footnote 4 of Appendix H of 10 CFR Part 73 be amended to indicate that stages 5 and 6 of the rifle qualification course are to be used for .30 caliber or larger rifles. As it stands, only .30 caliber rifles would be used in stage 5 and stage 6.

Response. The NRC agrees that clarification is needed and footnote 4 of Appendix H has been modified to indicate that stages 5 and 6 pertain to rifles .30 caliber or larger.

13. Comment. One commenter requested that the position column of the rifle course, which requires the safety to be in the on position at the beginning of each string, be amended to allow the weapon to be uncocked with the magazine inserted. The weapon used by this commenter, the Colt AR-15, requires cocking in order to use the safety selector.

Response. The NRC agrees with this comment and has amended the final rule to delete the requirement that the safety be in the on position at the beginning of each string in the rifle qualification course of fire.

14. Comment. One commenter had a general comment concerning the implementation schedule. This commenter stated that the amount of time allowed for implementation should be increased from 180 days to 1 year.

Response. The NRC believes that implementation of the new firearms qualification course within 180 days does not place an undue burden on its Category I licensees and has retained this implementation schedule.

The Commission notes that these amendments are issued under Sections 161 b and i of the Atomic Energy Act of 1954, as amended. Therefore, violation of these regulations may subject a person to criminal sanctions under Section 223 of the Atomic Energy Act.

#### Use of Metric System by Nuclear Industry

On October 7, 1992 (57 FR 46202), the Commission issued a Policy Statement on Conversion to the Metric System by the Nuclear Industry. This policy states that all new regulations will be published in dual units. However the NRC has determined that there are no standards readily available in the United States for weapons firing courses measured in metric units and that it would be confusing and inappropriate to publish the day firing qualification courses in dual units. Therefore, the final rule retains the English units of measurement.

#### Finding of no Significant Environmental Impact: Availability

The NRC has determined under the National Environmental Policy Act of 1969, as amended, and the NRC's regulations in Subpart A of 10 CFR Part 51, that this rule will not be a major Federal action significantly affecting the quality of the human environment and, therefore, an Environmental Impact Statement is not required. The rule does not adversely affect the routine release of radioactivity, exposure to radiation, or the safety of the operations carried out by licensees possessing formula quantities of strategic special nuclear material. The amendments specify new day firing qualification

courses for armed Tactical Response Team members, armed response personnel, and guards to ensure that they are able to perform their assigned duties.

The environmental assessment and finding of no significant impact on which this determination is based is available for inspection at the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC. Single copies are available from Mr. Harry Tovmassian, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, (301) 492-3634.

#### Paperwork Reduction Act Statement

This final rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). These requirements were approved by the Office of Management and Budget approval number 3150-0002.

The public reporting burden for this collection of information is estimated to average 31 hours per respondent, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Information and Records Management Branch (MNBB-7714), U.S. Nuclear Regulatory Commission, Washington D.C. 20555; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-3019, (3150-0002), Office of Management and Budget, Washington, D.C. 20503.



## Regulatory Analysis

The NRC has prepared a regulatory analysis for these amendments. The analysis examines the costs and benefits of the alternatives considered by the NRC and provides a decision rationale for the chosen approach. The analysis is available for inspection in the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC. Single copies of the analysis may be obtained from Ms. Carrie Brown, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, (301) 504-2382.

## Regulatory Flexibility Certification

In accordance with the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission certifies that this rulemaking will not have a significant economic impact upon a substantial number of small entities. The rule affects two licensees who operate fuel fabrication facilities possessing formula quantities of strategic special nuclear material licensed in accordance with 10 CFR Parts 70 and 73. The companies that own these facilities do not fall within the scope of the definition of "small entities" set forth in the Regulatory Flexibility Act, 15 U.S.C. 632, or the Small Business Size Standards set out in regulations issued by the Small Business Administration in 13 CFR Part 121. Thus, this rule does not fall within the purview of the act.

## Backfit Analysis

The Commission has determined that the backfit rule, 10 CFR 50.109, does not apply to this final rule because these amendments do not impose requirements on existing 10 CFR Part 50 licensees. Therefore, a backfit analysis was not prepared for this rule.

## List of Subjects in 10 CFR Part 73

Criminal penalties, Hazardous materials - transportation, Incorporation by reference, 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. 552 and 553, the Commission is adopting the following amendments to 10 CFR Part 73. This final rule is issued pursuant to Sections 161(b) and (i) of the Atomic Energy Act, as amended, and violation may be subject to criminal penalty sanctions.

## PART 73--PHYSICAL PROTECTION OF PLANTS AND MATERIALS

1. The authority citation for 10 CFR 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 (42 U.S.C. 5841, 5844).

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. In § 73.46 paragraphs (b)(4), (b)(7), and paragraph (i) are revised to read as follows:

§ 73.46 Fixed site physical protection systems, subsystems, components, and procedures.

\* \* \* \* \*

(b) \* \* \*

(4) The licensee may not permit an individual to act as a Tactical Response Team member, armed response person, or guard unless the individual has been trained, equipped, and qualified to perform each assigned security duty in accordance with Appendix B of this part, "General Criteria for Security Personnel." In addition, Tactical Response Team members, armed response personnel, and guards shall be trained, equipped, and qualified in accordance with paragraphs (b)(6) and (b)(7) of this section. Upon the request of an authorized representative of the NRC, the licensee shall demonstrate the ability of the physical security personnel, whether licensee

or contractor employees, to carry out their assigned duties and responsibilities. Each Tactical Response Team member, armed response person, and guard, whether a licensee or contractor employee, shall requalify in accordance with Appendix B of this part. Tactical Response Team members, armed response personnel, and guards shall also requalify in accordance with paragraph (b)(7) of this section at least every 12 months. The licensee shall document the results of the qualification and requalification. The licensee shall retain the documentation of each qualification and requalification as a record for 3 years after each qualification and requalification.

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(7) In addition to the weapons qualification and requalification criteria of Appendix B of this part, Tactical Response Team members, armed response personnel, and guards shall qualify and requalify, at least every 12 months, for day and night firing with assigned weapons in accordance with Appendix H of this part. Tactical Response Team members, armed response personnel, and guards shall be permitted to practice fire prior to qualification and requalification but shall be given only one opportunity to fire for record on the same calendar day. If a Tactical Response Team member, armed response person, or guard fails to qualify or requalify, the licensee shall remove the individual from security duties which require the use of firearms and retrain the individual prior to any subsequent attempt to qualify or requalify. If an individual fails to qualify or requalify on two successive attempts, he or she shall be required to receive additional training and successfully fire two consecutive qualifying scores prior to being reassigned to armed security duties.

(i) In addition, Tactical Response Team members, armed response personnel, and guards shall be prepared to demonstrate day and night firing qualification with their assigned weapons at any time upon request by an authorized representative of the NRC.

(ii) The licensee or the licensee's agent shall document the results of weapons qualification and requalification for day and night firing. The licensee shall retain the documentation of each qualification and requalification as a record for 3 years after each qualification and requalification.

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(i) Implementation schedule for revisions to physical protection plans.

(1) By (Insert a date 90 days after the effective date of this final rule) each licensee shall submit a revised Fixed Site Physical Protection Plan to the NRC for approval. The revised plan must describe how the licensee will comply with the requirements of paragraph (b)(7) of this section. Revised plans must be mailed to the Director, Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Materials Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

(2) Each licensee shall implement the approved plan pursuant to paragraph (b)(7) of this section within 180 days after NRC approval of the revised Fixed Site Physical Protection Plan.

3. Appendix H is revised to read as follows:

# APPENDIX H - WEAPONS QUALIFICATION CRITERIA

The B-27 Target or a target of equivalent difficulty will be used for all weapon qualification testing

Table H-1 Minimum Day Firing Criteria<sup>1</sup>  
(see footnotes at end of Table H-1)

Weapon	Stage	String <sup>2</sup>	Distance	Number of rounds	Timing <sup>3</sup>	Position	Scoring
Handgun	1	1 2 3	3 yards	6	9 seconds	Draw and fire 2 rounds (repeat 2 times) 3 seconds each string	Minimum qualifying = 70%
	2	1 2	7 yards	6	10 seconds	Draw and fire 2 rounds at center mass and 1 round at the head (repeat once) 5 seconds each string	
	3	1 2 3	7 yards	6	12 seconds (4 seconds each string)	Using weaker hand only, from the low ready position, fire 2 rounds (repeat twice)	
	4	1	10 yards	2	4 seconds	Draw and fire 2 rounds, come to low ready position	
		2	10 yards	2	3 seconds	Fire 2 rounds from low ready position and reholster	
		3	10 yards	4	12 seconds (revolver) 10 seconds (semi-automatic)	Draw and fire 2 rounds, reload, fire 2 rounds and reholster	
		4	10 yards	2	4 seconds	Draw and fire 2 rounds, come to low ready position	
		5	10 yards	2	3 seconds	Fire 2 rounds from low ready position and reholster	
	5	1	15 yards	2	5 seconds	Standing, draw weapon, move to kneeling position, then fire 2 rounds and reholster	
		2	15 yards	2	5 seconds	Standing, draw weapon, move to kneeling position, then fire 2 rounds and reholster	

Table H-1 Minimum Day Firing Criteria<sup>1</sup> - Continued(see footnotes at end of Table H-1)

Weapon	Stage	String <sup>2</sup>	Distance	Number of rounds	Timing <sup>3</sup>	Position	Scoring
Handgun (Cont'd)	5	3	15 yards	4	14 seconds (revolver) 12 seconds (semi-automatic)	Standing, draw weapon, fire 2 rounds, move to kneeling position and fire 2 rounds, reload and reholster	Minimum qualifying = 70%
		4	15 yards	2	5 seconds	Draw weapon and fire 2 rounds standing, come to low ready position and...	
		5	15 yards	2	3 seconds	Fire 2 rounds from low ready	
	6	1	25 yards	2	5 seconds	Draw and fire 2 rounds, standing, left side of barricade	
		2	25 yards	2	5 seconds	Draw and fire 2 rounds, right side of barricade (standing)	
		3	25 yards	4	15 seconds (revolver) 12 seconds (semi-automatic)	Draw weapon and move from standing to kneeling position, fire 2 rounds, left side of barricade, reload, and from the kneeling position, fire 2 rounds, right side of barricade	
		4	25 yards	2	10 seconds	Draw weapon and move from standing to prone, fire 2 rounds	
		5	25 yards	2	10 seconds	Draw weapon and move from standing to prone, fire 2 rounds	
	7	1	50 yards	2	8 seconds	Draw weapon and fire 2 rounds from a standing barricade position (right or left side, shooter's option)	
		2	50 yards	2	10 seconds	Draw weapon and fire 2 rounds from a kneeling barricade position (right or left side, shooter's option)	
		3	50 yards	2	12 seconds	Draw weapon and fire 2 rounds from prone position	

Table H-1 Minimum Day Firing Criteria<sup>1</sup> - Continued  
(see footnotes at end of Table H-1)

Weapon	Stage	String <sup>2</sup>	Distance	Number of rounds	Timing <sup>3</sup>	Position	Scoring
Shotgun	1	1	7 yards	2 Double 0 buck-shot	4 seconds	At low ready position fire 2 rounds standing	Minimum qualifying = 70%
	2	1 2	15 yards	4 Double 0 buck-shot	15 seconds	At low ready position fire 2 rounds standing, reload and fire 2 rounds	
	3	1 2	25 yards	4 rifled slugs or 00 buck-shot	20 seconds	On command, load 4 rounds and fire 2 rounds standing and 2 rounds kneeling	
Rifle	1	1 2 3	15 yards	6	10 seconds (4 seconds for 1st string, 3 seconds for each of 2nd and 3rd string)	Standing in low ready position, move to standing point shoulder position (1 magazine loaded with 6 rounds, weapon in half-load configuration), fire 2 rounds per string	Minimum qualifying = 70%
	2	1 2 3	25 yards	6	11 seconds (5 seconds for 1st string, 3 seconds for each of 2nd and 3rd string)	Standing in low ready position, move to standing point shoulder position (1 magazine loaded with 6 rounds, weapon in half-load configuration), fire 2 rounds per string	
	3	1 2 3	25 yards	6	17 seconds (7 seconds for 1st string, 5 seconds for each of 2nd and 3rd string)	Standing in low ready position, move to kneeling point shoulder position (1 magazine loaded with 6 rounds, weapon in half-load configuration), fire 2 rounds per string	



Table H-1 Minimum Day Firing Criteria<sup>1</sup> - Continued  
(see footnotes at end of Table H-1)

Weapon	Stage	String <sup>2</sup>	Distance	Number of rounds	Timing <sup>3</sup>	Position	Scoring
Rifle (Cont'd)	4	1 2	50 yards	4	16 seconds (9 seconds for 1st string, 7 second for 2nd string)	Standing in low ready position, move to kneeling point shoulder position (1 magazine loaded with 4 rounds, weapon in half-load configuration), fire 2 rounds per string	Minimum qualifying = 70%
	5 <sup>4</sup>	1	50 yards	4	20 seconds	Standing in low ready position, move to prone (weapon in half-load configuration) with two magazines each loaded with 2 rounds, fire 2 rounds, reload with 2nd magazine and fire 2 rounds	
	6 <sup>4</sup>	1	100 yards	4	25 seconds	Standing in low ready position, move to prone (weapon in half-load configuration) two magazines each loaded with 2 rounds, fire 2 rounds, reload with 2nd magazine and fire 2 rounds	

Footnotes

1. This day firing qualifications course is to be used by all TRT members, armed response personnel, and guards.
2. A string is one of the different phases within a single stage.
3. Security personnel will be timed as shown.
4. Stages 5 and 6 are to be used for .30 caliber or larger rifles.

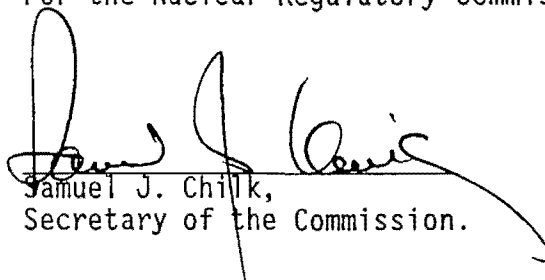
Table H-2 Minimum Night Firing Criteria

Weapon	Stage	Distance	No. of Rounds	Timing	Position	Scoring	Lighting
Handgun (Rev.)	1	7 yds	12	35 seconds	Standing-no artificial support	Minimum qualifying = 70%	For all courses 0.2 foot-candles at center mass of target area
	2	15 yds	12	45 seconds			
Handgun (Semi-)	1	7 yds	2 + clip	30 seconds	Standing-no artificial support		
	2	15 yds	2 + clip	40 seconds			
Shotgun	1	25 yds	2 rifled slugs	30 seconds (Load 2 slugs - chamber empty - Time starts - Commence firing)	Standing-strong shoulder	Rifled slug hits = strike area on target (10, 9, 7)	
	1	15 yds	5 Double 0 buckshot	10 seconds (Load 5rds Buckshot - chamber empty - Time starts - Commence firing)	Standing-strong shoulder	Double 0 Buckshot: Hits in black= 2 pts (5rds x 9 pellets/rd x 2 pts=90) Minimum qualifying = 70%	
Rifle	1	25 yds	1-5rd mag.	45 sec.	Standing-Barricade	Minimum qualifying =70%	
	2	25 yds	1-5rd mag.	45 sec.	Standing		
	3	25 yds	1-5rd mag.	45 sec.	Kneeling		
	4	25 yds	1-5rd mag.	45 sec.	Prone		

Note. - All firing is to be done only at night. Use of night simulation equipment during daylight is not allowable. Use of site specific devices (i.e., laser, etc.) should be included in the licensee amended security plan for NRC approval.

Dated at Rockville, Maryland, this 24<sup>th</sup> day of August, 1993.

For the Nuclear Regulatory Commission.

  
 Samuel J. Chalk,  
 Secretary of the Commission.

Duke Power Company  
P.O. Box 1007  
Charlotte, N.C. 28201-1007

DOCKET NUMBER  
PROPOSED RULE **PR 73**  
(56 FR 65024)  
DOCKETED  
USNRC

HAL B. TUCKER  
Senior Vice President  
Nuclear  
(704)373-4531



**DUKE POWER**

'92 MAR 23 A11:05

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

3

March 16, 1992

Secretary of the Commission  
U. S. Nuclear Regulatory Commission  
Attention: Docketing and Service Branch  
Washington, D. C. 20555

Subject: Proposed Revision to 10 CFR Part 73, Physical Fitness  
Programs and Day Firing Qualifications for Security  
Personnel at Category I Licensee Fuel Cycle Facilities;  
Duke Power Company Comments

Duke Power Company has reviewed the proposed revisions to the subject rule, and offers the following comments for consideration. While not directly affected by the proposed revisions, Duke feels that the goal of maintaining consistency among the various security-related rules is best served by providing comments at each stage of the rulemaking process.

The first comment relates to the proposed requirement (§ 73.46 (b)(11)(iii)) that "[w]ithin thirty days prior to participation in the physical performance testing, Tactical Response Team members, armed response personnel, and guards shall be given a medical examination... This requirement shall apply to initial and all subsequent physical performance testing." The requirement that the medical examination precede the performance testing by no more than 30 days, which previously appeared in Appendix B to Part 73, was deleted in 1988. What is the rationale for reinstating that requirement?

The second comment concerns the medical/fitness assessments required by § 73.46 (b)(10)(ii). Neither the methods for performing the assessment, nor any criteria for determining the acceptability of the results of the assessment, are specified. With regard to the methods to be used; is a physical assessment performed by medical personnel required, or is a questionnaire-type documentation of an individual's recent medical history and fitness-related activities sufficient? If the former is intended, it would result in unnecessarily repetitive medical evaluations.

An assessment to "determine the continued effectiveness of the ongoing physical fitness training program" (from § 73.46 (b)(10)(ii)) implies that the assessment will be compared to some defined acceptance criteria; and, where appropriate, corrective

Acknowledged by card APR 15 1992

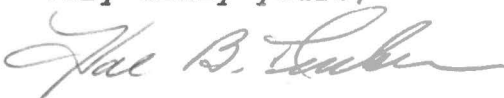
U. S. Nuclear Regulatory Commission  
March 16, 1992  
Page 2

actions will be applied to ensure that the fitness training program will remain effective. No such criteria or actions are provided in the proposed rule. As such, the "assessment" becomes simply another record-keeping requirement. In summary, the requirement for the assessment of general fitness every four months should be deleted. Barring any sudden changes in an individual's medical status due to illness or injury, an annual medical examination is adequate to ensure the capability of TRT members, armed response persons, or guards, to fulfill their duties.

A final comment is offered relative to the fitness program qualification criteria specified in § 73.46 (b)(11)(i)-(v). Duke has undertaken an extensive effort to establish a validated program which meets the intent of the physical fitness requirements of 10 CFR 73. The proposed revisions do not recognize the existence of such validated programs, in that they prescriptively delineate qualification criteria for fitness tests which may or may not be part of a validated program. The rule should consider the equivalency of such programs validated by the NRC, by requiring that criteria specified in the rule, or equivalent criteria contained in validated programs, be met.

If there are any questions, or we may provide any additional comments, please contact Scott Gewehr (704/373-7581) or Ron Eller (704/373-2583).

Very truly yours,



H. B. Tucker

trtqual/sag

U. S. Nuclear Regulatory Commission  
March 16, 1992  
Page 3

cc: Mr. T. A. Reed, Project Manager  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Mail Stop 14H25, OWFN  
Washington, D. C. 20555

Mr. L. A. Wiens, Project Manager  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Mail Stop 14H25, OWFN  
Washington, D. C. 20555

Mr. R. E. Martin, Project Manager  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Mail Stop 14H25, OWFN  
Washington, D. C. 20555

Mr. S. D. Ebnetter, Regional Administrator  
U.S. Nuclear Regulatory Commission - Region II  
101 Marietta Street, NW - Suite 2900  
Atlanta, Georgia 30323

Mr. P. K. Van Doorn  
Senior Resident Inspector  
McGuire Nuclear Station

Mr. W. T. Orders  
Senior Resident Inspector  
Catawba Nuclear Station

Mr. P. E. Harmon  
Senior Resident Inspector  
Oconee Nuclear Station



**Babcock & Wilcox**

a McDermott company

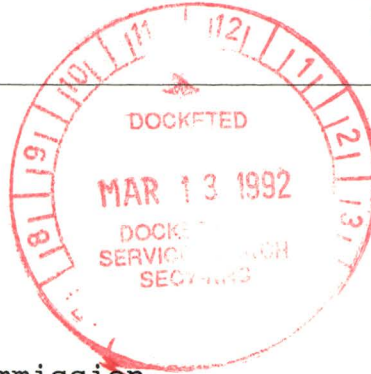
DOCUMENT NUMBER  
PROPOSED RULE

**PR 73**

**(56 FR 65024)**

Naval Nuclear Fuel Division

P. O. Box 785  
Lynchburg, Virginia 24505-0785  
(804) 522-6000



March 12, 1992

2

Secretary  
U.S. Nuclear Regulatory Commission  
ATTN: Docketing and Service Branch  
Washington, DC 20555

Dear Sir:

Babcock and Wilcox, Naval Nuclear Fuel Division, has reviewed the proposed amendments to 10 CFR 73 which were published in Volume 56, Number 240 of the Federal Register dated December 13, 1991. Based on this review, B&W believes the proposed amendments are unnecessary, burdensome, and expensive. B&W believes the need for these additional requirements has not been sufficiently established and the financial impact upon licensees has not been adequately evaluated.

Specific comments which support our conclusions are enclosed. Suggestions for alternate, less burdensome requirements to achieve the stated objectives are included in our comments. However, as stated, B&W believes no additional requirements are warranted.

Sincerely,

*J. A. Conner*  
J. A. Conner  
Vice President & General Manager

Enclosure

**APR 15 1992**

Acknowledged by card .....

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Babcock & Wilcox, Naval Nuclear Fuel Division

Comments on Proposed Amendments to 10 CFR 73  
Security Personnel Performance  
FR 56240

A. Physical Fitness

1. The need for increased levels of physical fitness has not been clearly established. Referenced surveys conducted by California State University at Hayward (CSUH) indicated that some officers may not have sufficient cardiovascular reserve for TRT response. B&W is not aware of any performance testing which has shown response deficiencies.

Security officers are currently required to meet the physical performance standards required by Part 73, Appendix B. In addition to meeting these requirements, licensee security officers have consistently demonstrated acceptable levels of physical fitness while responding to realistic adversary encounters during required Tactical Response Exercises. These exercises are the most accurate evaluations of officers' abilities to perform during a tactical response situation which requires high intensity exertion in order to reach the scene of an incident or a designated post. B&W is not aware of any identified tactical exercise deficiencies related to physical fitness of security officers.

The level of performance demonstrated during tactical exercises indicates that additional requirements are unnecessary.

2. The costs of a supervised or monitored physical fitness program are excessive. Two basic options were evaluated for implementing the proposed physical fitness program. The first option requires building and equipping a fitness center. The costs of this option are shown below:

First Year Costs

Building & Equipment	\$ 400,000
Physical Examinations	44,600
Officer Pay	448,800
Administrative	30,000

\$ 923,400



Recurring Annual Costs

Officer Pay	\$ 448,800
Administrative	30,000
	<hr/>
	\$ 478,800

The second option requires memberships at a local commercially operated fitness center. Annual operating costs include the following:

Officer Pay	\$ 556,720
Annual Dues	46,200
Administrative	30,000
Mileage	48,048
	<hr/>
	\$ 680,968

Considering that no quantifiable improvement in security program performance will result from implementation of the proposed rule, this cost burden is considered to be excessive and unwarranted.

3. If a need for increased physical fitness can be established, B&W recommends that licensee responsibility be limited to employing only those personnel who are capable of meeting or exceeding physical performance testing criteria. This is the current philosophy applied to other areas of the physical protection program to determine initial and continued employment eligibility, e.g., educational development and current physical and mental qualifications.

Increasing and standardizing the minimum physical fitness testing criteria, as outlined in the proposed rule, will assure improved officer performance levels with minimum additional cost.

B. Firearms Qualification

1. The need for more stringent firearms qualification has also not been clearly established. No performance reasons for the proposed rule have been identified. Contrary to statements contained in the Federal Register Notice, the amended courses of fire represent a significant increase in difficulty compared to the day fire qualification courses currently approved by the NRC for use at Babcock

& Wilcox. Specifically, the proposed courses of fire contain more stringent time constraints, and require more weapon manipulation, reloading, and changes in firing position during timed sequences of fire. The proposed courses also require unsupported weak hand firing, head shots, firing from greater distances and more stringent scoring criteria.

Current approved qualification courses at B&W are patterned after those used by area public law enforcement agencies and are considered an adequate measure of officer proficiency. The difficulty in obtaining the minimum qualifying score on the proposed courses of fire constitutes an additional burden on the licensee where no need for more stringent criteria has been established.

B&W's experience indicates that adoption of the proposed courses will result in more failures to qualify, potentially creating a shortage of cleared, qualified personnel to perform armed security duties.

2. The most significant and potentially costly change in the proposed rule is the waiting periods between qualification attempts.

B&W assumes that the waiting periods are being proposed to preclude licensees from allowing an individual an unlimited number of attempts at qualification without retraining to correct identified deficiencies. However, no justification for this change is given in the Federal Register Notice and no documented retraining is required by the amendment.

Current commitments in the B&W Training & Qualification Plan require that an officer who fails to achieve the minimum qualifying firearms score undergo a documented period of retraining prior to subsequent attempts to qualify or requalify. It is B&W's position that this documented retraining is sufficient to meet the objectives of the proposed minimum waiting periods.

Extending the compulsory waiting period beyond the time required to retrain the officer will unnecessarily lengthen the time that an officer is limited in his ability to contribute to the security program. Needless overtime costs for other officers assigned to perform the suspended officers armed duties constitutes an additional cost burden for the licensee. The waiting period does not strengthen the security program nor increase the officer's confidence or effectiveness with assigned weapons.

By mandating suspension periods from armed officer status for a minimum of seven days, the NRC is apparently declaring:

- a) Seven days of retraining are required for officers who fail to qualify regardless of the reason for failure, actual score achieved, or type weapon(s) involved, or;
- b) The officer and licensee should incur some degree of hardship as a result of the officer's inability to qualify during one attempt.

The punitive implications of the waiting period are even more apparent considering the twelve month suspension from armed duty for officers who fail to qualify in three successive attempts. Any suspension from regular duties which exceeds the time required for the officer to improve his weaponcraft skills does not in any way improve the effectiveness of the security program.

Furthermore, recent regulatory upgrades have severely curtailed the number of unarmed security officers that Category I licensees can utilize at their sites. Unarmed status can be a crucial factor in determining whether an officer will be allowed to continue his employment.

B&W proposes that the amendment be revised to require that an officer who fails to achieve the minimum qualifying score be removed from armed officer duty and complete a documented period of retraining prior to any subsequent attempt to qualify or requalify. If the NRC needs additional assurance that unlimited qualification attempts are not being allowed, this can be accomplished by not allowing an officer to fire for record more than once on the same calendar day. If an officer fails to qualify on two (2) successive attempts, he would receive additional training and be required to fire two consecutive qualifying scores prior to being reassigned to armed officer duties.

Permitting only one attempt to qualify during any calendar day should be sufficient, when coupled with mandatory retraining and multiple consecutive passing scores, to provide the increased weapons proficiency levels that appear to be the goal of the proposed amendments. However, B&W believes no changes in the rule are warranted.

3. Babcock & Wilcox recommends the following modifications to the proposed day fire courses, if adopted in Appendix H of 10 CFR 73.

**Handgun**

Stage 2      Specify how head shots are to be scored  
Stage 5      Change distance from 14 yards to 15 yards  
Stage 6      Allow single or double action at 50 yard line

**Rifle**

As proposed, stages 5 & 6 are only to be used for .30 caliber rifles for TRT qualification. This limits the maximum score for the standard rifle to 110 points. Seventy per cent of this maximum score (77 points) should be specified as the minimum qualifying score for the standard rifle.



DOCKET NUMBER  
PROPOSED RULE **PR - 73**  
(56 FR 65024)

DOCKETED  
USNRC

Nuclear Fuel Services, Inc.  
1205 Banner Hill Rd.  
Erwin, TN 37650  
(615) 743-9141

'92 MAR -2 P3:09

24G-92-0026  
GOV-01-55-15

OFFICE OF SECRETARY  
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①

February 27, 1992

Secretary of the Commission  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

Attention: Docketing and Service Branch

Reference: Federal Register/Vol. 56, No. 240  
Proposed Rules dated Friday, December 13, 1991

Gentlemen:

Enclosed are our comments to the reference above. Should you have any questions concerning this submittal, please feel free to contact Mr. Scott C. Johnson, Security Director.

Sincerely,

**NUCLEAR FUEL SERVICES, INC.**

Donald Paine, Ph.D.  
Vice President  
Safety & Regulatory Management

LKE/DP/ts

Attachment(s)

Acknowledged by card **APR 15 1992**

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**Nuclear Fuel Services, Inc. (NFS)**  
**Physical Fitness Program and Day Firing Qualification**

NFS has carefully reviewed the proposed rules and would like to comment on aspects of both the fitness program and the firing qualification requirements.

**A. Physical Fitness**

As proposed, the fitness program rules need clarification on several items and, in NFS's opinion, revision on several items. First, paragraph (b)(11)(i) requires that the Tactical Response Team perform to certain levels on a fitness test and that all other armed positions must perform to a certain lesser level. NFS suggests that a third provision be made in performance testing criteria which exempts individuals who serve in static response positions (i.e., CAS/SAS operators, EECF guards, etc.). This seems consistent with the statement in paragraph (b)(10)(ii) which requires exercise programs to be consistent with the environments in which persons must be prepared to perform their duties.

Second, NFS requests that the wording be changed in the rules to allow flexibility in the assessment schedule. Currently, the regulation calls for fitness assessment each four months. A requirement which reads, "assessment three times each year," would allow for those individuals who were on sick leave, vacation, etc., when the four month period elapses.

NFS notes that the aerobic exercise requirement seems excessive in consideration of the actual performance criteria to be used. It is suggested that the training sessions specified in paragraph (b)(10)(i)(A) be brought more in line with the performance criteria by reducing the frequency and/or intensity of the aerobic sessions. NFS also suggests that development of different training regimes be allowed for each category of positions: TRT, Armed Response and Guard.

**B. Weapons**

The weapons qualification proposals require a level of proficiency that, while appropriate for TRT, seems excessive for armed guards and particularly for static response positions (CAS/SAS, EECF, etc.). NFS suggests that the same rationale used in allowing multiple physical fitness qualifications be used in development of multiple weapons qualifications. These qualifications, like the physical qualifications, would reflect consistency with the environments in which individuals must perform their duties.

In consideration of operational practicalities, NFS believes that failure to qualify should result in a three day suspension from armed duty rather than seven days as specified in the proposed rules. The real effect of this requirement is that failure to qualify may cause the person to be out of a job for seven days before he could re-qualify. Normally, NFS would utilize the non-qualified person in an unarmed position, but very few of those positions exist at our site. Since this situation could in turn, force a lay-off of the individual, a three day limit seems more reasonable.

Several specific issues should be addressed concerning the Minimum Day Firing Criteria:

- Based on past experience, handgun qualification should be limited to 25 yards or less. Long guns are available to the guard for shots of greater distance.
- The handgun course position description "reload with six rounds" should be changed to "reload." The automatic pistol shooter will reload in a different manner than the revolver shooter.
- The handgun course shows several target distances of 14 yards. These should be changed to 15 yards for consistency.
- Timing is not realistic for handgun stages 1 and 4 (string 3) when shooting a revolver. Additional time should be considered. A similar problem is noted in Rifle Stage 2 at 25 yards. Additional time should be considered.
- The shotgun course should allow use of 00 buckshot or rifled slugs. Our facility does not utilize rifled slugs.
- Clarification is required on the footnote 4 of the rifle course. It appears that this should read, "Stages 5 and 6 only are to be used for .30 caliber or larger rifles."
- The position column of the rifle course states: "safety on at the beginning of each string." NFS uses a substantially different version of half-load which requires that the weapon be uncocked with the magazine inserted. The Colt AR-15 requires cocking in order to use the safety selector, thus the difficulty with the NRC proposed course. NFS believes in the inherent safety of our unloaded configuration and our personnel have been trained extensively to operate in the method described. NFS requests that the position column of the rifle course be amended to allow use of NFS's half load configuration.

Finally, NFS believes that 180 days is not enough time to implement programs of such impact. It is requested that the time period for implementation be extended to one year from the date of NRC approval of the revised Fixed Site Physical Protection Plan.

NFS appreciates your consideration of these issues.



DOCKET NUMBER  
PROPOSED RULE **PR 73**  
(56 FR 65024)

DOCKETED  
[7590-01]

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NUCLEAR REGULATORY COMMISSION

10 CFR PART 73

RIN:3150-AD30

OFFICE OF SECRETARY  
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BRANCH

Physical Fitness Programs and Day Firing Qualifications  
For Security Personnel at Category I Licensee Fuel Cycle Facilities

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is proposing to amend security personnel performance regulations for fuel cycle facilities possessing formula quantities of strategic special nuclear material (Category I licensees).

Certain security personnel at these facilities would be required to participate in a continuing physical fitness program and pass according to new criteria an annual performance test. In addition, these individuals would be required to qualify and annually requalify according to new criteria for day firing using their assigned weapons. This action is necessary to ensure that security personnel are able to perform their assigned duties under conditions of strenuous tactical engagements.

3/13/92  
DATES: The comment period expires on (Insert a date 90 days from publication). Comments received after this date will be considered if it is practical to do so, but assurance of consideration cannot be given unless comments are received on or before this date.

Pub.  
12/13/91

ADDRESSES: Mail written comments to: The Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Service Branch. Comments may also be delivered to 11555 Rockville Pike, Rockville, MD, between 7:30 a.m. and 4:15 p.m on Federal workdays. Copies of the environmental assessment and finding of no significant impact and any comments received will be available for examination and copying at the NRC Public Document Room at 2120 L Street, NW. (Lower Level), Washington, DC.

FOR FURTHER INFORMATION CONTACT: Mr. Harry Tovmassian, Division of Regulatory Applications, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 492-3634; or Ms. Carrie Brown, Division of Safeguards and Transportation, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 492-0382.

SUPPLEMENTARY INFORMATION:

BACKGROUND

On November 10, 1988, the NRC published amendments to 10 CFR 73.46 which required fuel cycle licensees who possess formula quantities of strategic special nuclear material (Category I licensee) to establish and train Tactical Response Teams (TRT)<sup>1</sup>, conduct periodic tactical

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<sup>1</sup>"Tactical Response Team" means the primary response force for each shift which can be identified by a distinctive item of uniform, armed with specified weapons, and whose other duties permit immediate response.

exercises, and make available a force of guards<sup>2</sup> or armed response personnel<sup>3</sup> to provide assistance to the TRT, as necessary. These amendments also required that TRT members, armed response personnel, and guards qualify and annually requalify for night firing with assigned weapons by meeting new minimum qualification criteria specified in Appendix H to 10 CFR Part 73. At that time, no need for specific performance testing criteria was identified.

As a result of NRC observations of licensee guard performance during a 1988 DOE Central Training Academy course, the NRC requested California State University at Hayward (CSUH) to examine the physical fitness levels of security force personnel of licensees who possess formula quantities of strategic special nuclear material. In the subsequent study, CSUH noted that in an emergency situation, that may be encountered by a TRT member, individuals need a cardiovascular reserve to perform effectively. However, CSUH found that of 66 subjects tested, 26 percent had a poor level of cardiovascular fitness and an additional 29 percent were below average. Further, high body fat levels were noted (e.g., 26 percent were classified as obese). Overall, the CSUH test results indicated that a potentially significant number of guards may not have a sufficient cardiovascular reserve for a TRT response situation, particularly if they must exert themselves at a high intensity in order

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<sup>2</sup>"Guard" means a uniformed individual armed with a firearm whose primary duty is the protection of special nuclear material against theft, the protection of a plant against radiological sabotage, or both.

<sup>3</sup>"Armed Response Personnel" means persons, not necessarily uniformed, whose primary duty in the event of attempted theft of special nuclear material or radiological sabotage shall be to respond, armed and equipped, to prevent or delay such actions.

to reach the scene of an incident or their designated post during a critical situation. Therefore, the Commission has concluded that criteria for physical performance testing of TRT members, armed response personnel, and guards and the specification of a minimum ongoing physical fitness training program are needed to ensure the needed level of fitness. Accordingly, the NRC is proposing additional requirements relative to the physical fitness qualifications of security personnel.

Under these proposed regulations TRT members, armed response personnel, and guards would be required to participate in annual physical fitness performance testing. Individuals would be required to be certified as medically fit by a licensed physician prior to participation in the performance tests or in the training program designed to ensure that the individuals achieve and maintain the required fitness level. In addition, licensees will be required to assess the general fitness of each participant every four months and to make modifications to the individual's training regime, as necessary.

The minimum physical fitness training program needed to achieve the necessary fitness levels has been separated into two elements. The first element includes the training of individuals through cardiovascular training activities such as running, bicycling, rowing, swimming, or cross-country skiing. The individuals will be tested prior to assignment as a TRT member and each year thereafter using the performance criteria of a one-mile run in 8.5 minutes or less and a 40-yard dash starting from a prone position in 8.0 seconds or less. Likewise, armed response personnel and guards will be required to participate in the physical fitness training program. However, the performance criteria for these

individuals will be a 1/2 mile run in 4 minutes and 40 seconds or less and a 40-yard dash starting from a prone position in 8.5 seconds or less. The former criteria have been validated to test the fitness levels required of individuals whose duties are to perform offensive combative tasks, such as those required of TRT members. The latter criteria have been validated to test the fitness levels required of individuals whose duties are to perform defensive combative tasks, such as armed response personnel and support guards<sup>4</sup>.

The second element of the physical fitness training program involves musculoskeletal training (i.e., exercises which develop strength, flexibility, and endurance in the major muscle groups). Although musculoskeletal training will be an integral part of the physical fitness training program, performance criteria have not been specified because to date there have been no validated studies which establish the levels of strength, flexibility, and endurance required of TRT members, armed response personnel, and guards under conditions of strenuous tactical engagement. However, the effectiveness of the musculoskeletal training will be included in the licensee's assessment program and the results will be used to make appropriate modifications to each individual's training regime.

Two documents have been prepared which may be used by licensees in developing physical fitness training programs and by physicians responsible for the required medical examinations of personnel participating in the programs. The first, "Physical Fitness Training

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<sup>4</sup> Telfair, W. D., et. al., United States Department of Energy Physical Standards Validation Study, Professional Management Associates, Inc., September 30, 1982.

Reference Manual for Security Force Personnel at Fuel Cycle Facilities Possessing Formula Quantities of Strategic Special Nuclear Material," NUREG/CR-5690<sup>5</sup>, provides information on designing and conducting a physical fitness training program. The second, "Medical Screening Reference Manual for Security Personnel at Category I Fuel Cycle Facilities Possessing Formula Quantities of Strategic Special Nuclear Material," NUREG/CR-5689, is intended for use by the examining physicians. These documents have been placed in the Public Document Room and are available for public inspection and copying.

In addition to proposing additional requirements for physical fitness, the NRC is also proposing to amend its day firing qualification criteria to make them consistent as to level of specificity and proficiency with the night firing requirements published in 1988. Although the proposed day firing criteria are more stringent than those which currently are specified in the regulations, each individual TRT member, armed response person, and guard is currently qualifying using both the night firing criteria contained in 10 CFR Part 73 and day firing criteria contained in the licensee's Weapon Qualification Plan that are very similar to the criteria being proposed. Based on this fact and the results of quarterly physical protection inspections of Tactical Response Teams for all assigned weapons, the staff believes that these individuals readily should be able to qualify using the proposed day firing criteria.

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<sup>5</sup>Copies of NUREGs may be purchased from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 37082, Washington, DC 20013-7082. Copies are also available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. A copy is also available for inspection or copying at the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC.

Hence, the staff believes that these day firing criteria add no new burden. None the less, since there has been no direct licensee experience with these precise criteria, the NRC is requesting comment on their appropriateness.

#### Finding of no Significant Environmental Impact: Availability

The Commission has determined under the National Environmental Policy Act of 1969, as amended, and the Commission's regulations in Subpart A of 10 CFR Part 51, that this rule, if adopted, would not be a major Federal action significantly affecting the quality of the human environment and therefore an Environmental Impact Statement is not required. The proposed amendments will not adversely affect either the safety of the operations carried out by licensees possessing formula quantities of strategic special nuclear material nor the routine release of, or exposures to, radioactivity. The amendments would: (1) specify annual performance testing criteria and a minimum physical fitness training program, and ensure that security force personnel can adequately perform their duties under conditions of strenuous tactical engagement; and (2) provide the same level of specificity and proficiency in the day firing weapons qualification criteria that is now present in the night firing criteria.

The environmental assessment and finding of no significant impact on which this determination is based is available for inspection at the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC. Single copies of the environmental assessment and finding of no

significant impact are available from Mr. Harry Tovmassian, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, (301) 492-3634.

#### PAPERWORK REDUCTION ACT STATEMENT

This proposed rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). The recordkeeping and reporting requirements in this rulemaking have been submitted to the Office of Management and Budget for review and approval of the information collection and recordkeeping requirements.

Public reporting burden for this collection of information is estimated to average 44 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Information and Records Management Branch (MNBB-7714), U.S. Nuclear Regulatory Commission, Washington, DC 20555; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-3019, (3150-0002), Office of Management and Budget, Washington, DC 20503.



## REGULATORY ANALYSIS

The Commission has prepared a draft regulatory analysis on this proposed amendment. The analysis examines the costs and benefits of the alternatives considered by the Commission. The draft analysis is available for inspection in the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC. Single copies of the analysis may be obtained from Ms. Carrie Brown, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, (301) 492-0382.

### Regulatory Flexibility Certification

As required by the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission certifies that this rulemaking will not have a significant economic impact upon a substantial number of small entities. The proposed rule would affect two licensees who operate fuel facilities possessing formula quantities of strategic special nuclear material licensed in accordance with 10 CFR Parts 70 and 73. The companies that own these plants do not fall within the scope of the definition of "small entities" set forth in the Regulatory Flexibility Act or the Small Business Standards set out in regulations issued by the Small Business Administration in 13 CFR Part 121. Furthermore, if a small entity were to apply for a license to possess formula quantities of strategic special nuclear material pursuant to 10 CFR Parts 70 and 73, the proposed rule by itself would not have a significant economic impact on their operations

because the economic impact would be dominated by the existing requirements for physical security and nuclear material control and accounting. Thus, this rule does not fall within the purview of the act.

### Backfit Analysis

The NRC has determined that the backfit rule, 10 CFR 50.109, does not apply to this proposed rule because these amendments do not impose requirements on existing 10 CFR Part 50 licensees. Therefore, the NRC has determined that a backfit analysis is not required for this proposed rule.

### List of Subjects in 10 CFR Part 73

Part 73 - Criminal Penalty, Hazardous materials-transportation, Incorporation by reference, Nuclear materials, Nuclear power plants and reactors, Penalty, 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 10 CFR 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 (42 U.S.C. 5841, 5844).

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).

For the purposes of sec. 223, 68 Stat. 958, as amended, (42 U.S.C. 2273); §§ 73.21, 73.37(g), and 73.55 are issued under sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b)); §§ 73.20, 73.24, 73.25, 73.26, 73.27, 73.37, 73.40, 73.45, 73.46, 73.50, 73.55, and 73.67 are issued under sec. 161i, 68 Stat. 949, as amended (42 U.S.C. 2201(i)); and §§ 73.20(c)(1), 73.24(b)(1), 73.26(b)(3), (h)(6), and (k)(4), 73.27(a) and (b), 73.37(f), 73.40(b) and (d), 73.46(g)(6) and (h)(2), 73.50(g)(2), (3(iii)(B), and (h), 73.55(h)(2) and (4)(iii)(B), 73.57, 73.70, 73.71, and 73.72 are issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

2. In § 73.46 paragraphs (b)(4), (b)(7), and (i) are revised and new paragraphs (b)(10) and (b)(11) are added to read as follows:

§ 73.46 Fixed site physical protection systems, subsystems, components, and procedures.

\* \* \* \* \*

(b) \* \* \*

(4) The licensee may not permit an individual to act as a Tactical Response Team member, armed response person, or guard unless the individual has been trained, equipped, and qualified to perform each assigned security duty in accordance with Appendix B of this part, "General Criteria for Security Personnel." In addition, Tactical Response Team members, armed response personnel, and guards shall be trained, equipped, and qualified in accordance with paragraphs (b)(6), (b)(7), (b)(10), and (b)(11) of this section. Upon the request of an authorized representative of the Commission, the licensee shall demonstrate the ability of the physical security personnel, whether licensee or contractor employees, to carry out their assigned duties and responsibilities. Each Tactical Response Team member, armed response person, and guard, whether a licensee or contractor employee, shall requalify in accordance with Appendix B of this part. Tactical Response Team members, armed response personnel, and guards shall also requalify in accordance with paragraph (b)(7) of this section at least every twelve (12) months. The licensee shall document the results of the qualification and requalification. The licensee shall retain the documentation of each qualification and requalification as a record for three years after each qualification and requalification.

\* \* \* \* \*

(7) In addition to the weapons qualification and requalification criteria of Appendix B of this part, Tactical Response Team members, armed response personnel, and guards shall qualify and requalify, at least every twelve (12) months, for day and night firing with assigned weapons in accordance with Appendix H of this part. Tactical Response Team members, armed response personnel, and guards shall be permitted to practice fire prior to qualification and requalification but shall be given only one opportunity to fire for record. If a Tactical Response Team member, armed response person, or guard fails to qualify, the licensee shall remove the individual from security duties which require the use of firearms and may retrain the individual. At least seven (7) calendar days must elapse before another attempt at qualification is permitted. If an individual fails to qualify or requalify in three (3) consecutive attempts, at least twelve (12) months must elapse before another attempt at qualification or requalification is permitted.

(i) In addition, Tactical Response Team members, armed response personnel, and guards shall be prepared to demonstrate their day and night firing qualification with their assigned weapons at any time upon request by an authorized representative of the NRC.

(ii) The licensee or the licensee's agent shall document the results of weapons qualification and requalification for day and night firing. The licensee shall retain the documentation of each qualification and requalification as a record for 3 years after each qualification and requalification.

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(10) In addition to the physical fitness qualifications of paragraph I.C of Appendix B of this part, each Tactical Response Team member, armed response person, and guard shall participate in a physical fitness training program on a continuing basis.

(i) The elements of the physical fitness training program must include, but not necessarily be limited to, the following:

(A) Training sessions of sufficient frequency, duration, and intensity to be of aerobic benefit, e.g., normally a frequency of three times per week, maintaining an intensity of approximately 75% of maximum heart rate for twenty minutes;

(B) Activities that use large muscle groups, that can be maintained continuously, and that are rhythmical and aerobic in nature, e.g., running, bicycling, rowing, swimming, or cross-country skiing; and

(C) Musculoskeletal training exercises that develop strength, flexibility, and endurance in the major muscle groups, e.g., legs, arms, and shoulders.

(ii) The licensee shall assess Tactical Response Team members, armed response personnel, and guards for general fitness once every four months to determine the continued effectiveness of the ongoing physical fitness training program. Assessments must include a recent health history, measures of cardiovascular fitness, percent of body fat, flexibility, muscular strength, and endurance. Individual exercise programs must be modified consistent with the needs of each participating Tactical Response Team member, armed response person, and guard and consistent with the environments in which they must be prepared to perform their duties.

(iii) Within thirty (30) days prior to participation in the physical fitness training program, the licensee shall give Tactical Response Team members, armed response personnel, and guards a medical examination including a determination and written certification by a licensed physician that there are no medical contraindications, as disclosed by the medical examination, to participation in the physical fitness training program.

(iv) Licensees may temporarily waive an individual's participation in the physical fitness training program on the advice of the licensee's examining physician, during which time the individual may not be assigned duties as a Tactical Response Team member.

(11) In addition to the physical fitness demonstration contained in paragraph I.C of Appendix B of this part, Tactical Response Team members, armed response personnel, and guards shall meet or exceed qualification criteria as defined in paragraphs (b)(11)(i) through (b)(11)(v) of this section initially and at least every twelve (12) months thereafter.

(i) For Tactical Response Team members the criteria are a one-mile run in 8 minutes and 30 seconds or less, and a 40-yard dash starting from a prone position in 8 seconds or less. For armed response personnel and guards that are not members of the Tactical Response Team the criteria are a one-half mile run in 4 minutes and 40 seconds or less and a 40-yard dash starting from a prone position in 8.5 seconds or less. The test may be taken in ordinary athletic attire under the supervision of licensee designated personnel. The licensee shall retain a record of each individual's performance for three years.

(ii) Incumbent Tactical Response Team members, armed response personnel, and guards shall meet or exceed the qualification criteria within six (6) months of NRC approval of the licensee's revised Fixed Site Physical Protection Plan. New employees hired after the approval date shall meet or exceed the qualification criteria prior to assignment as a Tactical Response Team member, armed response person, or guard.

(iii) Within thirty days prior to participation in the physical performance testing, Tactical Response Team members, armed response personnel, and guards shall be given a medical examination including a determination and written certification by a licensed physician that there are no medical contraindications, as disclosed by the medical examination, to participation in the physical performance testing. This requirement shall apply to initial and all subsequent physical performance testing.

(iv) The licensee shall place Tactical Response Team members, armed response persons, and guards who do not meet or exceed the qualification criteria in a monitored remedial physical fitness training program and relieve them of security duties which require the use of firearms. Individuals in the remedial physical fitness training program shall have a maximum of three (3) months to satisfactorily meet or exceed the qualification criteria.

(v) Licensees may temporarily waive the annual qualification testing for an individual on the advice of the licensee's examining physician, during which time the individual shall not be assigned duties as a Tactical Response Team member.

\* \* \* \* \*



(i) Implementation schedule for revisions to physical protection plans.

(1) By (Insert a date 90 days after the effective date of these amendments) each licensee shall submit a revised Fixed Site Physical Protection Plan to the NRC for approval. The revised plan must describe how the licensee will comply with the requirements of paragraphs (b)(7), (b)(10), and (b)(11) of this section. Revised plans must be mailed to the Director, Division of Safeguards and Transportation, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

(2) Each licensee shall implement the approved plan relative to paragraphs (b)(7), (b)(10), and (b)(11) of this section within 180 days after NRC approval of the revised Fixed Site Physical Protection Plan.

3. Appendix H is revised to read as follows:

# APPENDIX H - WEAPONS QUALIFICATION CRITERIA

The B-27 Target will be used for all weapon qualification testing

Table H-1 Minimum Day Firing Criteria<sup>1</sup>  
(see footnotes at end of Table H-1)

Weapon	Stage	String <sup>2</sup>	Distance	Number of rounds	Timing <sup>3</sup>	Position	Scoring
Handgun <sup>3</sup>	1	1 2 3	3 yards	6	9 seconds	Draw and fire 2 rounds (repeat 2 times) 3 seconds each string	70% = qualified, maximum possible = 300 points, minimum required = 210 points
	2	1 2	7 yards	6	10 seconds	Draw and fire 2 rounds at center mass and 1 round at the head (repeat once) 5 seconds each string	
	3	1 2 3	7 yards	6	12 seconds (4 seconds each string)	Using weaker hand only, at the low ready position, fire 2 rounds (repeat twice)	
	4	1	10 yards	2	4 seconds	Draw and fire 2 rounds, come to low ready position	
		2	10 yards	2	3 seconds	Fire 2 rounds in low ready position and reholster	
		3	10 yards	4	12 seconds (revolver) 10 seconds (semi-automatic)	Draw and fire 2 rounds, reload with 6 rounds, fire 2 rounds and reholster	
		4	10 yards	2	4 seconds	Draw and fire 2 rounds, come to low ready position	
		5	10 yards	2	3 seconds	Fire 2 rounds in low ready position and reholster	
	5	1	15 yards	2	5 seconds	Standing, draw weapon, go to kneeling position, then fire 2 rounds and reholster	
		2	15 yards	2	5 seconds	Standing, draw weapon, go to kneeling position, then fire 2 rounds and reholster	

Table H-1 Minimum Day Firing Criteria<sup>1</sup> - Continued  
(see footnotes at end of Table H-1)

Weapon	Stage	String <sup>2</sup>	Distance	Number of rounds	Timing <sup>3</sup>	Position	Scoring
Handgun <sup>2</sup> (Cont'd)	5	3	14 yards	4	14 seconds (revolver) 12 seconds (semi-automatic)	Standing, draw weapon, fire 2 rounds, reload with 6 rounds, move to kneeling position and fire 2 rounds, reload with 6 rounds and	70% = qualified, maximum possible = 300 points, minimum required = 210 points
		4	14 yards	2	5 seconds	Draw weapon and fire 2 rounds standing, come to low ready position and...	
		5	14 yards	2	3 seconds	Fire 2 rounds	
	6	1	25 yards	2	5 seconds	Draw and fire 2 rounds, standing, left side of barricade	
		2	25 yards	2	5 seconds	Draw and fire 2 rounds, right side of barricade (standing)	
		3	25 yards	4	15 seconds (revolver) 12 seconds (semi-automatic)	Draw weapon and from standing to kneeling position, fire 2 rounds, left side of barricade, reload with 6 rounds, and still in the kneeling position, fire 2 rounds right side of barricade	
		4	25 yards	2	10 seconds	Draw weapon and go from standing to prone, fire 2 rounds	
		5	25 yards	2	10 seconds	Draw weapon and go from standing to prone, fire 2 rounds	
	7	1	50 yards	2	8 seconds	Draw weapon and fire 2 rounds from a standing barricade position (right or left side, shooter's option)	
		2	50 yards	2	10 seconds	Draw weapon and fire 2 rounds from a kneeling barricade position (right or left side, shooter's option)	
		3	50 yards	2	12 seconds	Draw weapon and fire 2 rounds from prone position	

Table H-1 Minimum Day Firing Criteria<sup>1</sup> - Continued  
(see footnotes at end of Table H-1)

Weapon	Stage	String <sup>2</sup>	Distance	Number of rounds	Timing <sup>3</sup>	Position	Scoring
Shotgun <sup>3</sup>	1	1	7 yards	2 Double 00 buck-shot	4 seconds	At low ready position fire 2 rounds standing	70% = qualifies (Maximum=94, Minimum=65) (each pellet in black target area equals 1 point)
	2	1 2	15 yards	4 Double 00 buck-shot	15 seconds	At low ready position fire 2 rounds standing, reload and fire 2 rounds	
	3	1 2	25 yards	4 rifled slugs	20 seconds	On command, load 4 rifled slugs and fire 2 rounds standing and 2 rounds kneeling	(10, 9, 8, 7 points are available for each hit as indicated)
Rifle <sup>2</sup>	1	1 2 3	15 yards	6	10 seconds (4 seconds for 1st string, 3 seconds for each of 2nd and 3rd string)	Standing in low ready position, to standing point shoulder (1 magazine loaded with 6 rounds, weapon in half-load configuration) safety on beginning of each string, fire 2 rounds per string	70% = qualifies (Maximum = 150 points, Minimum = 105 points, based on 5 point increments)
	2	1 2 3	25 yards	6	11 seconds (5 seconds for 1st string, 3 seconds for each of 2nd and 3rd string)	Standing in low ready position, to standing point shoulder (1 magazine loaded with 6 rounds, weapon in half-load configuration) safety on beginning of each string, fire 2 rounds per string	
	3	1 2 3	25 yards	6	17 seconds (7 seconds for 1st string, 5 seconds for each of 2nd and 3rd string)	Standing in low ready position, to kneeling point shoulder (1 magazine loaded with 6 rounds, weapon in half-load configuration) safety on beginning of each string, fire 2 rounds per string	

Table H-1 Minimum Day Firing Criteria<sup>1</sup> - Continued  
(see footnotes at end of Table H-1)

Weapon	Stage	String <sup>2</sup>	Distance	Number of rounds	Timing <sup>3</sup>	Position	Scoring
Rifle <sup>3</sup> (Cont'd)	4	1 2	50 yards	4	16 seconds (9 seconds for 1st string, 7 second for 2nd string)	Standing in low ready position, to kneeling point shoulder (1 magazine loaded with 4 rounds, weapon in half-load configuration) safety on beginning of each string, fire 2 rounds per string	70% = qualifies (Maximum = 150 points, Minimum = 105 points, based on 5 point increments)
	5 <sup>4</sup>	1	50 yards	4	20 seconds	Standing in low ready position, go to prone (weapon in half-load configuration) safety on with two magazines each loaded with 2 rounds, fire 2 rounds, eject first magazine, reload with 2nd magazine and fire 2 rounds	
	6 <sup>4</sup>	1	100 yards	4	25 seconds	Standing in low ready position, go to prone (weapon in half-load configuration) safety on two magazines each loaded with 2 rounds, fire 2 rounds, eject first magazine, reload with 2nd magazine and fire 2 rounds	

Footnotes

1. This day firing qualifications course is to be used by all TRT members, armed response personnel, and guards.
2. A string is one of the different phases within a single stage.
3. Security force personnel will be timed as shown.
4. Stages 5 and 6 are only to be used for .30 caliber rifles.

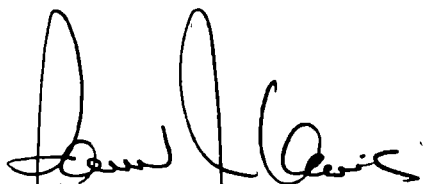
Table H-2 Minimum Night Firing Criteria

Weapon	Stage	Distance	No. of Rounds	Timing	Position	Scoring	Lighting
Handgun (Rev.)	1	7 yds	12	35 seconds	Standing-no artificial support	Minimum qualifying = 70%	For all courses 0.2 foot-candles at center mass of target area
	2	15 yds	12	45 seconds			
Handgun (Semi-)	1	7 yds	2 + clip	30 seconds	Standing-no artificial support		
	2	15 yds	2 + clip	40 seconds			
Shotgun	1	25 yds	2 rifled slugs	30 seconds (Load 2 slugs - chamber empty - Time starts - Commence firing)	Standing-strong shoulder	Rifled slug hits = strike area on target (10, 9, 7)	
	1	15 yds	5 Double 00 buckshot	10 seconds (Load 5rds Buckshot - chamber empty - Time starts - Commence firing)	Standing-strong shoulder	Double 00 Buckshot: Hits in black= 2 pts (5rds x 9 pellets/rd x 2 pts=90) Minimum qualifying = 70%	
Rifle	1	25 yds	1-5rd mag.	45 sec.	Standing-Barricade	Minimum qualifying =70%	
	2	25 yds	1-5rd mag.	45 sec.	Standing		
	3	25 yds	1-5rd mag.	45 sec.	Kneeling		
	4	25 yds	1-5rd mag.	45 sec.	Prone		

Note. - All firing is to be done only at night. Use of night simulation equipment during daylight is not allowable. Use of site specific devices (i.e., laser, etc.) should be included in the licensee amended security plan for NRC approval.

Dated at Rockville, Maryland, this 9<sup>th</sup> day of December 1991.

For the Nuclear Regulatory Commission.

  
 Samuel J. Chilk,  
 Secretary of the Commission.