

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Title: AFFIRMATION/DISCUSSION AND VOTE

Location: ROCKVILLE, MARYLAND

Date: AUGUST 3, 1993

Pages: 4 PAGES

SECRETARIAT RECORD COPY

NEAL R. GROSS AND CO., INC.

COURT REPORTERS AND TRANSCRIBERS
1323 Rhode Island Avenue, Northwest
Washington, D.C. 20005
(202) 234-4433

DISCLAIMER

This is an unofficial transcript of a meeting of the United States Nuclear Regulatory Commission held on August 3, 1993, in the Commission's office at One White Flint North, Rockville, Maryland. The meeting was open to public attendance and observation. This transcript has not been reviewed, corrected or edited, and it may contain inaccuracies.

The transcript is intended solely for general informational purposes. As provided by 10 CFR 9.103, it is not part of the formal or informal record of decision of the matters discussed. Expressions of opinion in this transcript do not necessarily reflect final determination or beliefs. No pleading or other paper may be filed with the Commission in any proceeding as the result of, or addressed to, any statement or argument contained herein, except as the Commission may authorize.

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVENUE, N.W.
WASHINGTON, D.C. 20005

(202) 234-4433

(202) 232-6800

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

- - - -

AFFIRMATION/DISCUSSION AND VOTE

- - - -

PUBLIC MEETING

Nuclear Regulatory Commission
One White Flint North
Rockville, Maryland

Tuesday, August 3, 1993

The Commission met in open session,
pursuant to notice, at 11:36 a.m., Ivan Selin,
Chairman, presiding.

COMMISSIONERS PRESENT:

IVAN SELIN, Chairman of the Commission
KENNETH C. ROGERS, Commissioner
FORREST J. REMICK, Commissioner
E. GAIL de PLANQUE, Commissioner

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVENUE, N.W.
WASHINGTON, D.C. 20005

STAFF SEATED AT THE COMMISSION TABLE:

SAMUEL J. CHILK, Secretary

WILLIAM C. PARLER, General Counsel

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

P-R-O-C-E-E-D-I-N-G-S

11:36 a.m.

CHAIRMAN SELIN: We have an affirmation session with one item before us this morning.

Will the Secretary lead us through?

SECRETARY CHILK: The item, Mr. Chairman, is SECY-93-191 entitled "Amendments to 10 CFR Part 73, To Require Annual Physical Fitness Performance Testing and Updated Day Firing Qualifications For Tactical Response Team Members, Armed Response Team Personnel, Armed Response Personnel and Guards at Fuel Cycle Facilities Possessing Formula Quantities of Special Nuclear Material."

At this affirmation the Commission is being asked to approve a final rule that amends 10 CFR Part 73 to update the day firing requirements at fuel cycle facilities possessing formula quantities of special nuclear material.

All Commissioners have approved the final amendments. The Commission has also approved republishing for comment proposed requirements for physical fitness training programs.

Would you please affirm your votes?

CHAIRMAN SELIN: Aye.

COMMISSIONER ROGERS: Aye.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 COMMISSIONER REMICK: Aye.

2 COMMISSIONER de PLANQUE: Aye.

3 SECRETARY CHILK: I have nothing further,
4 sir.

5 CHAIRMAN SELIN: Thank you.

6 (Whereupon, at 11:38 a.m., the above-
7 entitled matter was concluded.)

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

CERTIFICATE OF TRANSCRIBER

This is to certify that the attached events of a meeting
of the United States Nuclear Regulatory Commission entitled:

TITLE OF MEETING: AFFIRMATION/DISCUSSION AND VOTE

PLACE OF MEETING: ROCKVILLE, MARYLAND

DATE OF MEETING: AUGUST 3, 1993

were transcribed by me. I further certify that said transcription
is accurate and complete, to the best of my ability, and that the
transcript is a true and accurate record of the foregoing events.



Reporter's name: Peter Lynch

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVENUE, N.W.
WASHINGTON, D.C. 20005

(202) 234-4433

(202) 232-6600



RULEMAKING ISSUE

July 12, 1993

(Affirmation)

SECY-93-191

FOR: The Commissioners

FROM: James M. Taylor, Executive Director for Operations

SUBJECT: AMENDMENTS TO 10 CFR PART 73, TO REQUIRE ANNUAL PHYSICAL FITNESS PERFORMANCE TESTING AND UPDATED DAY FIRING QUALIFICATIONS FOR TACTICAL RESPONSE TEAM MEMBERS, ARMED RESPONSE PERSONNEL, AND GUARDS AT FUEL CYCLE FACILITIES POSSESSING FORMULA QUANTITIES OF SPECIAL NUCLEAR MATERIAL

PURPOSE:

To obtain Commission approval to (i) publish a notice of final rulemaking for updated day firing qualification courses and (ii) republish for public comment the requirements for physical fitness training programs and annual performance testing.

BACKGROUND:

On December 13, 1991, the NRC published in the Federal Register (56 FR 65024) proposed amendments to 10 CFR Part 73 to establish requirements for physical fitness training and annual performance testing and updated day firing qualifications for Tactical Response Team members, armed response personnel, and guards at Category I facilities. The proposed rule was developed to ensure that such personnel have the appropriate physical capabilities and are sufficiently proficient in the use of their assigned weapons so that they may be able to perform their assigned duties in the event of a strenuous tactical engagement.

The comment period for the proposed rule expired on March 13, 1992. Three comment letters were received. Two of the commenters did not express opposition to the rule but provided constructive recommendations for NRC consideration. The third commenter also recommended changes to the rule but stated that the NRC has not adequately justified either the more stringent day firing qualification course requirements or the requirement for physical

CONTACT:
H. Tovmassian, RES
492-3634

NOTE: TO BE MADE PUBLICLY AVAILABLE
WHEN THE FINAL SRM IS MADE
AVAILABLE

fitness training programs and annual performance testing. This commenter also stated that the new requirements are too costly and unwarranted.

DISCUSSION:

During the analysis of the public comments, the staff considered whether adequate justification existed for these requirements and whether other less burdensome alternatives exist which satisfied the objectives of the requirements. In the case of the day firing qualification course, the staff concluded that updating these requirements was in fact justified but that the suggested modifications requested by the three commenters would make the requirements less costly and more easily complied with. In the case of the physical fitness performance test and the continuing physical fitness training program, the staff concluded that an acceptable alternative to the criteria based physical fitness test would be for the licensee to develop site specific content-based physical fitness tests. These tests would be administered quarterly to provide assurance that Tactical Response Team members, armed response personnel, and guards are capable of performing their response duties. This content-based physical fitness performance test would simulate the response duties that a security force member might need to make in the event of a strenuous tactical engagement. Since the public has not had an opportunity to comment on this alternative, it is appropriate to republish it as a proposed rule. Therefore, the previously published proposed rulemaking has been divided into two separate regulatory actions. The staff is proposing to issue the day firing qualification requirements contained in Enclosure 1 as a final rule and the physical fitness performance testing requirements contained in Enclosure 2 as a proposed rule. A summary and analysis of the public comments for each rulemaking is included in the respective Federal Register Notice of the attached rulemaking packages.

RESOURCES: Resources to conduct these rulemakings are included in the draft FY 1994-1998 Five-Year Plan. Resources to implement the physical fitness performance testing proposed rulemaking are 3 staff weeks and \$300,000 in contractual support. Resources to implement the day firing qualification final rulemaking are 3 staff weeks.

COORDINATION: The Office of the General Counsel has reviewed this paper and has no legal objections.

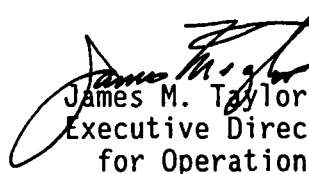
RECOMMENDATION:

That the Commission:

1. Approve publication in the Federal Register of the final amendments found in Enclosure A of Enclosure 1.
2. Approve publication in the Federal Register of the proposed amendments found in Enclosure A of Enclosure 2 for a 75-day public comment period.

3. Note that:

- a. English units have been used for both rulemakings because no standard courses in metric units are readily available.
- b. An Environmental Assessment (Enclosure B of each rulemaking) will be placed in the NRC Public Document Room.
- c. A Regulatory Analysis (Enclosure C of each rulemaking) will be placed in the NRC Public Document Room.
- d. The appropriate Congressional Committees will be informed of the Commission's action (Enclosure D of each rulemaking).
- e. A public announcement (Enclosure E of each rulemaking) will be issued.
- f. Each Federal Register Notice will be distributed to licensees and other interested parties.
- g. The Chief Counsel for Advocacy of the Small Business Administration will be informed of the regulatory flexibility certification and the reason for it, for each rulemaking, as required by the Regulatory Flexibility Act.


James M. Taylor
Executive Director
for Operations

Enclosures:

- 1. Final Rulemaking Package -
 - Updated Day Firing Qualification Courses
 - A. Federal Register Notice
 - B. Environmental Assessment
 - C. Regulatory Analysis
 - D. Congressional Letters
 - E. Public Announcement
- 2. Proposed Rulemaking Package -
 - Annual Physical Fitness Performance Testing
 - A. Federal Register Notice
 - B. Environmental Assessment
 - C. Regulatory Analysis
 - D. Congressional Letters
 - E. Public Announcement

Commissioners' comments or consent should be provided directly to the Office of the Secretary by COB Wednesday, July 28, 1993.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT Wednesday, July 21, 1993, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

This paper is tentatively scheduled for affirmation at an Open Meeting during the Week of August 2, 1993. Please refer to the appropriate Weekly Commission Schedule, when published, for a specific date and time.

DISTRIBUTION:

Commissioners

OGC

OCAA

OIG

OPA

OCA

OPP

EDO

ACRS

ASLBP

SECY

FINAL RULEMAKING PACKAGE
UPDATED DAY FIRING QUALIFICATION COURSES

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.

SUPPLEMENTARY INFORMATION:

Background

Existing day firing qualification courses for Tactical Response Team members¹, armed response personnel², and guards³ 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,

¹"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.

²"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.

³"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.

shooting failure drills, and changing positions while firing). Although these 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.

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 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.

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.

Criminal Penalties

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 requirement subjects 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 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.

* * * * *

(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.

* * * * *

(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 Criteria¹
(see footnotes at end of Table H-1)

Weapon	Stage	String ²	Distance	Number of rounds	Timing ³	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 Criteria¹ - Continued(see footnotes at end of Table H-1)

Weapon	Stage	String ²	Distance	Number of rounds	Timing ³	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 Criteria¹ - Continued
(see footnotes at end of Table H-1)

Weapon	Stage	String ²	Distance	Number of rounds	Timing ³	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 Criteria¹ - Continued
(see footnotes at end of Table H-1)

Weapon	Stage	String ²	Distance	Number of rounds	Timing ³	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 ⁴	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 ⁴	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 _____ day of _____, 1993.

For the Nuclear Regulatory Commission.

Samuel J. Chilk,
Secretary of the Commission.

ENCLOSURE B
ENVIRONMENTAL ASSESSMENT

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT
For the Final Rule Amending 10 CFR 73 and Appendix H

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

I. Introduction

The Nuclear Regulatory Commission (NRC) is amending 10 CFR Part 73 which contains safeguards requirements affecting licensees authorized to possess formula quantities of Strategic Special Nuclear Material (SSNM). Appendix H, which specifies the night firing qualification criteria for Tactical Response Team members, armed response personnel, and guards, is being augmented by adding new, more stringent, day firing qualification courses. This requirement has been imposed in order to enhance the day firing capabilities of guards at such facilities.

II. Need for Action

The NRC is revising Appendix H of 10 CFR Part 73 to include new day firing qualification courses. These amendments would update the day firing qualification criteria for Tactical Response Team members, armed response personnel, and guards by requiring that a more stringent qualification course be utilized. These modifications are needed to provide Tactical Response Team members, armed response personnel, and guards an enhanced capability of maintaining both marksmanship and weapons manipulation skills to protect against strenuous hostile engagement from a group of individuals with the capabilities which are ascribed to the design basis threat.

III. Environmental Impact of the Proposed Action

These amendments will not adversely affect either the safety of operation or the routine release of, or exposure to, radioactivity from the fuel fabrication facilities possessing formula quantities of SSNM. The day firing qualification courses for Tactical Response Team members, armed response personnel, and guards using all assigned weapons are being updated. This action has no identifiable environmental impacts.

IV. Alternative to the Proposed Action.

Section 102(2)(E) of NEPA provides that agencies of the Federal Government shall "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." The objective of these amendments is to provide greater assurance that the security personnel capabilities at fuel fabrication facilities possessing formula quantities of SSNM are maintained at a level commensurate with their responsibilities.

Two alternatives to the amendments were examined. The first was to take no action and allow licensees to continue to use the weapons qualification

courses in 10 CFR Part 73 Appendix B. This alternative was rejected because it would result in weapons qualification on courses that were not designed to test capabilities that would be required to protect licensed facilities against the design basis threat. The second alternative considered was to impose these requirements on fuel fabrication facilities through the issuance of license conditions, or orders, or to provide guidance and criteria in the form of regulatory guides. This alternative was rejected because regulatory guides do not afford the same assurance of enforcement as do regulations, orders, or license conditions, and requirements imposed through order or license condition do not provide the benefit of public notice and comment afforded in the rulemaking process.

V. Agencies and Persons Consulted

Cognizant Department of Energy personnel were consulted as part of this rulemaking activity.

VI. Finding of No Significant 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 the amendments are not a major Federal action significantly affecting the quality of the human environment, and therefore, an environmental impact statement is not required. These amendments will update day firing qualification criteria. This action will not have a significant impact upon the environment.

ENCLOSURE C
REGULATORY ANALYSIS

REGULATORY ANALYSIS
For the Final Rule Amending 10 CFR 73 and Appendix H

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

1. STATEMENT OF THE PROBLEM

The Nuclear Regulatory Commission (NRC) is amending armed security personnel performance regulations in 10 CFR Part 73 for licensees possessing formula quantities of strategic special nuclear material. Specifically, the Commission's regulations are being amended to impose on Tactical Response Team members, armed response personnel, and guards specific new qualification courses for day firing of all assigned weapons. Prior to this rulemaking, NRC's regulations required day firing qualification and requalification using a national police course or equivalent for handguns and an National Rifle Association (NRA) or nationally recognized equivalent course for semi-automatic weapons. Elements, that would better characterize actual engagement situations, such as firing positions, firing distances, reloading, and firing with the weaker hand would provide an enhanced capability in defending against the design basis threat, as defined in 10 CFR 73.1(a)(2)(i).

1.1 Need for Proposed Amendments

This rulemaking will amend Part 73 of the Commission's regulations, "Physical Protection of Plants and Materials." This rulemaking is needed to upgrade the currently required courses of fire for weapon qualification to better test for weapons capabilities sufficient to protect the licensed facility against an armed violent attack by a group of individuals with the abilities, weaponry, and equipment which the NRC ascribes to the design basis threat of theft.

1.2 Applicable NRC Licensees

These amendments to 10 CFR Part 73 will impact two NRC Category I licensees.

1.3 Relationship to Other Existing or Proposed Regulations

There are no apparent conflicts or overlaps with other NRC regulations or policies nor with other agencies' regulations or policies.

2. OBJECTIVES OF THE RULE

The objective of these amendments is to provide greater assurance that Tactical Response Team members, armed response personnel, and guards at facilities possessing formula quantities of strategic special nuclear material are qualified for day firing of their assigned weapons using a qualification course which tests their abilities to protect the facility against individuals or groups with the capabilities ascribed to the design basis threat.

3. ALTERNATIVES TO THE RULE

Three options are considered in this regulatory analysis. Summaries of the alternatives are provided in this section.

3.1 Option 1: No Action By the NRC

The result of following this option is that the current qualification course which does not test Tactical Response Team members, armed response personnel, and guards for skills required to protect against an adversary with the capabilities ascribed to the design basis threat would continue to be used.

3.2 Option 2: Non-Rulemaking Approaches

Existing regulations in 10 CFR 73.46 Appendix B contain specific weapons qualification courses to be used for handguns, semi-automatic rifles, and shotguns by Tactical Response Team members, armed response personnel, and guards. These requirements can not be superseded by the use of a license condition, regulatory guide, or an order. The NRC could promulgate a rule exempting Category I licensees from this provision of Appendix B and subsequently issue a license condition, order, or a regulatory guide. A regulatory guide, however, has the disadvantage of not being enforceable. License conditions and orders do not have the positive benefit of public notice and comment.

3.3 Option 3: Adopt the Amendments Through Formal Rulemaking

The result of following this option is that the day firing course for Tactical Response Team members, armed response personnel, and guards qualification with assigned weapons will be updated to test the capability to protect the facility against attacks by individuals or groups having the capabilities, weapons, and equipment ascribed to the design basis threat. This alternative also has the advantage of providing public notice and obtaining comments on the issues prior to promulgation of the final rule.

4. CONSEQUENCES

This section discusses the expected costs and benefits of implementing the identified alternatives. The information used to determine the consequences associated with the rule were based on discussions with NRC staff, Sections 4.1, 4.2, and 4.3 discuss the impact on the two facilities listed in Section 1.2 above, the NRC, and others.

4.1 Impacts on Industry

This section describes the costs that are expected to be incurred by the two licensees. The incremental cost of pursuing Option 1 is zero. The incremental cost of pursuing Options 2 and Option 3 are the same.

4.1.1 Labor Cost Estimate

In this section of the regulatory analysis, the labor cost will be estimated. The incremental labor cost of the new requirements is estimated by calculating the time required to fire the existing day firing course described in Appendix B of 10 CFR Part 73 and comparing this to the time required to fire the new qualification course in Appendix H. The average hourly basic pay rate for security personnel was solicited separately for each site. This analysis assumes that fully loaded labor costs will be double the average hourly rate.

For the purpose of this analysis, it is assumed that each facility employs 100 guards and that one-half the guard force (50 guards) are also trained to be TRT members. It is also assumed that guards fail to qualify on the first attempt 10% of the time and that those who are unsuccessful on the first attempt, qualify on the second attempt after a period of retraining. Each guard is assumed to require handgun qualification, shotgun qualification, and qualification with a .223 caliber rifle (normally the M-16). In addition, since one TRT member per shift normally carries a .30 caliber rifle, it is assumed that all the 55 TRT members are also qualified for that weapon. The amount of time required to fire each stage was considered negligible; however, the time required to load and reload the weapon and to score and document the results of each stage was assumed to be 3 minutes. It is assumed that the individual who currently administers weapons qualification attempts is available at no additional cost.

Appendix H

1. Number of qualification attempts = 110 (100 first attempts + 10 second attempts)
2. Amount of time for handgun qualification = 3 min. x 7 stages x 110 attempts = 38.5 hrs
3. Amount of time for shotgun qualification = 3 min. x 3 stages x 110 attempts = 16.5 hours
4. Amount of time for .223 caliber rifle qualification = 3 min. x 4 stages x 110 attempts = 22 hours
5. Amount of time for .30 caliber rifle qualification = 3 min. x 6 stages x 55 attempts = 16.5 hours
6. Manpower cost: Plant A = \$22.80 / hour x 93.5 hours = \$2,132
Plant B = \$17.00 / hour x 93.5 hours = \$1,586
Total = \$3,718

Appendix B

1. Number of qualification attempts = 110
2. Amount of time for handgun qualification = 3 min. x 4 stages x 110 attempts = 22 hrs
3. Amount of time for shotgun qualification = 3 min. x 2 stages x 110 attempts = 11 hours
4. Amount of time for .223 caliber rifle qualification = 3 min. x 4 stages x 110 attempts = 22 hours

5. Amount of time for .30 caliber rifle qualification = 3 min. x 4 stages
 x 55 attempts = 11 hours

6. Manpower cost: Plant A = \$22.80 / hour x 66 hours = \$1,505
 Plant B = \$17.00 / hour x 66 hours = \$1,122
Total = \$2,627

4.1.2 Ammunition Costs

The cost of ammunition was solicited from two suppliers in the Rockville, MD area and an average cost for each type of ammunition determined. Nine millimeter handgun shells are estimated to cost \$15 per box of 50 (30 cents each); 00 buckshot ammunition was \$4.00 per box of 5 (80 cents each); .223 shells for the semi-automatic rifle cost \$5.00 per box of 20 (25 cents each); .30 caliber shells for the semi-automatic rifle cost \$10.00 per box of 20 (50 cents each). The following table demonstrates the calculation of the ammunition cost for Appendix H and Appendix B.

	Appendix H		Appendix B	
Ammunition	Number of Rounds	Cost	Number of Rounds	Cost
9MM Shells	60x110 = 6,600	\$1,980	60x110 = 6,600	\$1,980
00 Buckshot	10x110 = 1,100	\$880	8x110=968	\$704
.30 Caliber Shells	30x55 = 1,650	\$825	20x55 = 1,100	\$550
.223 Shells	22x110 = 2,420	\$605	50x110 = 5,500	\$1,375
Totals		\$4,290		\$4,609

4.1.3 Total Costs

Combining the costs in Sections 4.1.1 and 4.1.2, the cost burden resulting in the qualification course in Appendix H is approximately \$8,008, versus \$7,236 for Appendix B.

4.2 Impacts on NRC

The NRC staff estimates that it will spend approximately \$4020 in travel expenses as a result of this rule. This is based upon the assumption of a 2-day 3-person trip to each facility, costing about \$500 per person, and a total of 12 days per diem at a rate of \$85 per day. To determine the staff labor cost, it was assumed that another 5 days would be required to approve the revised security plans containing the measures licensees commit to taking in order to comply with the additional requirements of this rule, in addition to the 12 days assumed for travel. Thus, staff labor costs for 136 hours (17 days) at \$48 per hour would be \$6528.

4.3 Impacts on Others

The impact on the public is the benefit of increased assurance that Tactical Response Team members, armed response personnel, and guards possess weapons skills sufficient to protect Category I licensees against armed assault by individuals possessing the skills, weaponry, and equipment which NRC ascribes to the design basis threat.

5. DECISION RATIONALE

While Option 1 would result in no incremental cost, it has been rejected because it will not accomplish NRC's objective of assuring that a security organization is in place which has the capability to perform its assigned tasks under conditions of strenuous tactical engagement. Neither Option 2 nor Option 3 have any substantial incremental cost. If Option 2 is pursued, the

new day firing qualification course would be imposed through a regulatory guide, an order, or a license condition. This is undesirable because regulatory guides do not afford the same assurance of enforceability as do regulations, orders, or license conditions, and actions by order or license condition do not provide the benefit of public notice and comment afforded in the rulemaking process. Therefore, Option 3, which is fully enforceable and has the benefit of public participation in its development is the desired alternative.

6. IMPLEMENTATION

Within 90 days after the effective date of the final rule, each licensee will be required to submit a revised Fixed Site Physical Protection Plan describing how the licensee will comply with the new requirements. Revised plans must be mailed to the Director, Division of Fuel Cycle Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Within 180 days of Commission approval, each licensee will implement the revised security plans.

ENCLOSURE D
CONGRESSIONAL LETTERS



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

The Honorable Philip R. Sharp, Chairman
Subcommittee on Energy and Power
Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

The NRC has sent to the Office of the Federal Register for publication the enclosed amendments to the Commission's regulations on the physical protection of plants and materials. These amendments require that armed security force personnel at fuel cycle facilities authorized to possess formula quantities of strategic special nuclear material be qualified for use of assigned weapons using new day firing qualification criteria.

These amendments are necessary to ensure that security personnel are capable of defending their facilities against a group of individuals possessing the capabilities which the NRC ascribes to the design basis threat. Presently, two licensees will be affected by these amendments.

Sincerely,

Dennis K. Rathbun, Director
Office of Congressional Affairs

Enclosure: As stated

cc: Representative Michael Bilirakis



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

The Honorable Joseph Lieberman, Chairman
Subcommittee on Clean Air and Nuclear Regulation
Committee on Environment and Public Works
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

The NRC has sent to the Office of the Federal Register for publication the enclosed amendments to the Commission's regulations on the physical protection of plants and materials. These amendments require that armed security force personnel at fuel cycle facilities authorized to possess formula quantities of strategic special nuclear material be qualified for use of assigned weapons using new day firing qualification criteria.

These amendments are necessary to ensure that security personnel are capable of defending their facilities against a group of individuals possessing the capabilities which the NRC ascribes to the design basis threat. Presently, two licensees will be affected by these amendments.

Sincerely,

Dennis K. Rathbun, Director
Office of Congressional Affairs

Enclosure: As stated

cc: Senator Alan K. Simpson



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

The Honorable Richard H. Lehman, Chairman
Subcommittee on Energy and Mineral Resources
Committee on Natural Resources
United States House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

The NRC has sent to the Office of the Federal Register for publication the enclosed amendments to the Commission's regulations on the physical protection of plants and materials. These amendments require that armed security force personnel at fuel cycle facilities authorized to possess formula quantities of strategic special nuclear material be qualified for use of assigned weapons using new day firing qualification criteria.

These amendments are necessary to ensure that security personnel are capable of defending their facilities against a group of individuals possessing the capabilities which the NRC ascribes to the design basis threat. Presently, two licensees will be affected by these amendments.

Sincerely,

Dennis K. Rathbun, Director
Office of Congressional Affairs

Enclosure: As stated

cc: Representative Barbara Vucanovich

ENCLOSURE E
PUBLIC ANNOUNCEMENT

NRC AMENDS WEAPONS QUALIFICATIONS REQUIREMENTS
FOR SECURITY PERSONNEL

The Nuclear Regulatory Commission is upgrading its regulations for certain nuclear fuel facilities to require the facilities' armed security force personnel to qualify for daytime weapons firing according to new criteria.

Tactical response team members, armed response personnel and guards at fuel cycle facilities possessing formula quantities of strategic special nuclear material (known as Category I licensees) will be required to qualify and annually requalify for use of their assigned weapons using new day firing qualification courses.

The modifications to existing day firing qualification courses are needed to enhance proficiency in weapon manipulation skills, such as reloading and changing positions while firing. The current requirements are oriented more toward marksmanship, which were appropriate at the time they were specified, but the NRC has developed an increased awareness of the evolution of the capabilities and tactics employed by criminal and terrorist elements. The weapons manipulation skills in addition to marksmanship are considered to provide a significant improvement in the ability of licensee security forces to survive a confrontation.

A proposed rule on this subject was published in the Federal Register for public comment on December 13, 1991. Revisions made

as a result of comments received are described in a Federal Register notice published on _____.

The December 13 notice also contained proposed requirements for physical fitness programs for security force personnel at the Category I facilities. The NRC has decided to make substantive changes to these requirements and will republish them separately as a proposed rule and seek additional public comment.

PROPOSED RULEMAKING PACKAGE
ANNUAL PHYSICAL FITNESS PERFORMANCE TESTING

ENCLOSURE A
FEDERAL REGISTER NOTICE

NUCLEAR REGULATORY COMMISSION

10 CFR PART 73

RIN: 3150-AD30

Annual Physical Fitness Performance Testing for
Tactical Response Team Members, Armed Response Personnel,
and Guards at Category I Licensees

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is proposing to amend its regulations for Tactical Response Team members, armed response personnel, and guards at fuel cycle facilities possessing formula quantities of strategic special nuclear material (Category I licensees). This action is necessary to ensure that these personnel are able to perform their assigned duties under conditions of strenuous tactical engagements. Tactical Response Team members, armed response personnel, and guards at these facilities would be required to participate in a continuing physical fitness program and, according to new criteria, pass an annual performance test. As an alternative to the fitness program and the performance test previously proposed, the licensee will be permitted to develop a content-based site specific test, to be administered quarterly, and to justify that this test duplicates the response duties that are expected of Tactical Response Team members, armed response personnel, and guards in the event of a strenuous tactical engagement.

DATE: The comment period expires on [Insert date 75 days following date of publication.] Comments received after this date will be considered if it is practical to do so, but assurance of consideration can be given only for comments received on or before this date.

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 regulatory analysis, the environmental assessment and finding of no significant impact, the Paperwork Reduction Act statement submitted to OMB, 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: Harry S. Tovmassian, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 492-3634.

SUPPLEMENTARY INFORMATION:

BACKGROUND

On November 10, 1988 (53 FR 45447), the Commission published final amendments to 10 CFR 73.46 that require a Category I licensee to establish and train Tactical Response Teams (TRT)¹, conduct periodic tactical exercises,

¹"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.

and make available a force of guards² or armed response personnel³ to provide assistance to the TRT, as necessary.

At the time of the 1988 rulemaking, no need for specific physical fitness performance testing criteria was identified. However, observations of Category I licensee guard performance during a 1988 DOE Central Training Academy course prompted the NRC to examine, through the California State University at Hayward (CSUH), the physical fitness levels of Tactical Response Team members, armed response personnel, and guards at Category I licensees. CSUH found that of 77 subjects tested, 26 percent had a poor level of cardiovascular fitness and another 29 percent were below average. Furthermore, 26 percent of the individuals tested were classified as obese because of high body fat levels. 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 to reach the scene of an incident or their designated post during a critical situation. Therefore, the NRC concluded that criteria for physical fitness performance testing of TRT members, armed response personnel, and guards as well as the specification of a minimum continuing physical fitness training program are needed to ensure an adequate level of fitness. Accordingly, on December 13, 1991 (56 FR 65024), the Commission published proposed amendments to 10 CFR Part 73 that contained

²"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.

³"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.

additional requirements relative to the physical fitness qualifications of Tactical Response Team members, armed response personnel, and guards. The Federal Register Notice also included the requirements for day firing qualification courses for those personnel. The Commission has decided to publish the day firing qualification requirements as a final rule and to republish the physical fitness related requirements as a proposed rule as a result of the analysis of public comment (see Summary of Public Comments).

The amendments proposed in 1991 would have required TRT members, armed response personnel, and guards to participate in annual physical fitness performance testing and in a continuing physical fitness training program to ensure that the individuals achieve and maintain the required fitness level. Individuals would have been required to receive a physical examination by a licensed physician, and be provided with written certification that there are no medical contraindications to participation in the physical fitness training program or the annual performance testing, prior to participation in either program. In addition, the amendments proposed in 1991 would have required licensees to assess the general fitness of each participant every 4 months and to make modifications to the individual's training regime, as necessary.

In the amendments proposed in 1991, the minimum physical fitness training program needed to achieve the necessary fitness levels was separated into two elements. The first element included the training of individuals through cardiovascular training activities such as running, bicycling, rowing, swimming, or cross-country skiing. Individuals would be tested prior to assignment as a TRT member and each year thereafter using the performance criteria of a 1-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, individuals to be

assigned as armed response personnel and guards would be required to participate in the physical fitness training program. However, the performance criteria for these individuals would 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 fitness levels required of TRT members, whose duties are to perform offensive combative tasks, have been established by a 1982 DOE study.⁴ The fitness levels required of armed response personnel and support guards, whose duties are to perform defensive combative tasks, were also established by the study.⁴

The second element of the physical fitness training program involved musculoskeletal training, i.e., exercises that develop strength, flexibility, and endurance in the major muscle groups. Although musculoskeletal training would be an integral part of the physical fitness training program, performance criteria were not specified because to date there have been no studies that 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 would be included in a licensee's assessment program and the results used to make appropriate modifications to an 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 Reference Manual for Security

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

Force Personnel at Fuel Cycle Facilities Possessing Formula Quantities of Strategic Special Nuclear Material," NUREG/CR-5690,⁵ 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.

Summary of Public Comments

The comment period for the proposed rule published December 13, 1991 (56 FR 65024) expired on March 13, 1992. Three letters of comment were received on the proposed requirements for both day firing qualifications and physical fitness programs. Since the requirements for day firing qualification are being published separately as a final rule, the comment summary below addresses only the comments on the proposed physical fitness training program and annual performance testing requirements. The comments and their resolution, as incorporated in this proposed rule, are as follows:

⁵Copies 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.

1. Comment. One commenter stated that the Commission has not adequately established the need for the continuing physical fitness training program and the annual performance testing.

Response. The Commission disagrees with this comment and reiterates that observations of licensee guard performance at Central Training Academy exercises alerted the NRC to the fact that guards may not be physically fit to perform their response duties in spite of the existing requirement that they "shall have no physical weakness or abnormality that would adversely affect their performance of assigned security job duties." Based upon the unacceptable consequences of the failure to adequately respond to security related emergencies, the Commission believes that criteria, which objectively determine that Tactical Response Team members, armed response personnel, and guards have an adequate level of physical fitness to perform their duties, as well as a physical fitness training program are needed.

As a result of this comment, however, the Commission reexamined its position as to whether or not other alternatives existed that provide the same level of assurance that Tactical Response Team members, armed response personnel, and guards could adequately perform their assigned duties. The Commission has decided that an acceptable alternative to the approach specified in proposed 10 CFR 73.46(b)(10) and (11) would be for licensees to develop site specific content-based physical fitness performance tests for NRC approval. The site specific tests would duplicate the response duties a guard may need to perform during strenuous tactical engagements. These tests would be administered on a quarterly basis and would be used for qualifying Tactical Response Team members, armed response personnel, and guards. Therefore, a new proposed paragraph, 10 CFR 73.46(b)(12), has been added to allow this type of

test instead of the physical fitness training program and annual performance tests specified in proposed 10 CFR 73.46 (b)(10) and (11).

2. Comment. One commenter stated, without providing any rationale, that the aerobic exercise requirement seems excessive and therefore either the frequency or intensity of the training sessions required in 10 CFR 73.46(b)(10)(i)(A) should be reduced.

Response. The Commission disagrees with the commenter's contention. The proposed rule specifies that the aerobic portion of the physical fitness training sessions be at least 20 minutes in duration at 75 percent of maximum heart rate three times per week. The physical fitness training program is designed to follow the recommendations of the American College of Sports Medicine to achieve a level of fitness that helps Tactical Response Team members, armed response personnel, and guards maintain the requisite physical fitness for effective job performance and enables them to pass the applicable annual physical fitness performance tests. Therefore, neither the intensity nor the frequency of the aerobic requirement has been modified.

3. Comment. One commenter stated that individuals that served in "static response positions," such as operators of central or secondary alarm stations, or guards at exit and entry portals, should be exempted from the performance testing criteria because the rule states that the exercise program must be consistent with the environment in which individuals must perform their duties.

Response. The Commission agrees that individuals whose assignments do not include strenuous response duties should not be required to participate in the physical fitness training program or annual performance testing. Therefore, the proposed rule has been modified to include an exemption for

these employees, provided that these individuals are not assigned temporary response guard duties.

4. Comment. One commenter recommended, without providing any rationale, that different training regimes be specified for each type of position (i.e., TRT member, armed response person, and guard).

Response. The Commission did not specify a training regime to be followed by participants in the continuing physical fitness training program. The proposed rule provides the elements that must be part of the program in 10 CFR 73.46(b)(10)(i). The program must have elements devoted to aerobics and to the strength, flexibility, and endurance of large muscle groups. The Commission expects its licensee to develop, and modify as necessary, a training regime for each participant, depending upon a number of factors. These factors may include fitness level, recent medical history, and security responsibilities. The Commission believes that the language of this provision is sufficiently flexible to allow different training regimes for each type of position as well as for different individuals within each position. In fact, the text of 10 CFR 73.46(b)(10)(ii) included in this proposed rule states that "Individual exercise programs must be modified to be 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."

5. Comment. One commenter stated that the proposed requirement in 10 CFR 73.46 (10)(b)(ii) for a fitness assessment every 4 months should be modified to read "assessments three times each year" to allow for individuals who are on vacation, sick leave, etc., when the 4 months elapse.

Response. The Commission believes that this is a valid concern. However, the modification as suggested by the commenter is vague and may result in an abuse of the rule. For example, a licensee could perform assessments once every week for 3 successive weeks then none for over 11 months and still be in compliance with the recommended modification. Therefore, the following sentence has been added to 10 CFR 73.46 (b)(10)(ii) in the revised rule: "Individuals who exceed 4 months without being assessed for general fitness, due to excused time off from work, must be assessed within 15 calendar days of returning to duty as a response guard."

6. Comment. One commenter stated that neither the method for performing the assessment required in 10 CFR 73.46 (b)(10)(ii), nor any criterion for determining the acceptability of the results of the assessment, is specified. With regard to the methods used, this commenter questioned the requirement for a physical assessment by "medical personnel" and suggested that a questionnaire-type documentation of an individual's recent medical history and fitness-related activities may be sufficient. This commenter stated that frequent medical evaluations would be unnecessarily repetitive.

Response. In regard to the commenter's question on the methods used for the trimester assessments, the proposed rule would not require a "physical assessment by medical personnel." What would be required is a recent health history, measures of cardiovascular fitness, percent of body fat, flexibility, muscular strength, and endurance. Specific measures are not required so that licensees have the flexibility to develop their own programs. The Commission believes that the trimester assessments are important because they will identify deficiencies in individual training regimes and provide a timely mechanism for modification. Concerning the commenter's assertion that no criteria are provided for the acceptability of the assessment results, it

should be noted that neither the existence nor absence of acceptance criteria relieves the licensee from the responsibility to assess the effectiveness of his program and make any necessary modifications to individual training regimes. It will be up to each licensee to determine how its fitness staff will evaluate the needs of the program participants.

7. Comment. One commenter stated that the requirement, in proposed § 73.46(b)(10)(ii), for an assessment to determine the effectiveness of the continuing physical fitness training program implies the existence of some acceptance criteria and corrective actions. The commenter further stated that the requirement should be deleted, because no criteria or corrective actions have been provided. Barring sudden changes in an individual's medical status, the annual physical examination should be sufficient to ensure the capability of Tactical Response Team members, armed response personnel, and guards to perform their duties.

Response. As noted in the previous response, it is the licensees responsibility to determine how the trimester assessments will be conducted. Corrective actions for individuals whose fitness level is deemed to be unacceptable will vary depending upon the individual and the degree to which physical fitness has degenerated. These measures might include reclassifying the individual from a minimally supervised regime to a directly supervised or individually monitored regime. In other cases, the training regime itself might be modified to address specific deficiencies discovered. In any event, the corrective action taken is also the responsibility of the licensee, who should rely upon a qualified program director to plan the action and obtain the appropriate medical advice when necessary. With respect to the comment that the yearly physical examination is sufficient to ensure that the continuing physical fitness program has been effective, it should be noted

that the yearly physical examination serves a different purpose and is not relied upon to assess the adequacy of the program. The purpose of the annual physical examination is to assure that Tactical Response Team members, armed response personnel, and guards are healthy enough to participate in the continuing physical fitness training program and to be tested against the performance criteria without undue hazard to themselves.

8. Comment. One commenter stated that the amount of time allowed for implementation should be increased from 180 days to 1 year.

Response. The Commission believes that a 1-year implementation period is reasonable because licensees may need to purchase or lease facilities or equipment, or acquire qualified personnel to administer their programs. Therefore, this proposed rule has been amended to incorporate this comment.

9. Comment. One commenter stated that the costs of a supervised or monitored physical fitness training program are excessive and unwarranted because the improvement in security guard performance is not quantifiable.

Response. The physical fitness performance criteria were developed as a result of the DOE Physical Standards Validation Study. The fitness levels required of Tactical Response Team members, armed response personnel, and guards, whose duties are to perform defensive combative tasks and offensive combative tasks, were established by the 1982 DOE study. The Commission specifies the elements that should be part of the physical fitness training program and not the program itself. These elements when taken together are considered the minimum required to allow Tactical Response Team members, armed response personnel, and guards to achieve and maintain the fitness level required to successfully perform the physical fitness performance test each year and are necessary to ensure that Tactical Response Team members, armed

response personnel, and guards can perform their response duties. The costs associated with implementing the elements can vary depending upon how the licensee designs the program. The Commission believes that this program is needed to ensure that Tactical Response Team members, armed response personnel, and guards at Category I licensees are sufficiently fit to perform their assigned duties under conditions of strenuous tactical engagement. Also, to allow licensees to better control their costs, the proposed rule contains a new paragraph, 10 CFR 73.46(b)(12), which allows licensees to have quarterly site specific content-based performance tests instead of a formal physical fitness training program and annual performance tests. Quarterly testing has the advantage of reducing the possibility of degradation of a individual's fitness level as compared to annual qualification tests. Therefore, no further modifications have been made in the rule.

10. Comment. One commenter recommended that licensee responsibility be limited to validating that their personnel meet or exceed the physical fitness performance testing criteria, but not be required to provide a training program.

Response. Under an alternative proposed in 10 CFR 73.46(b)(12) a licensee would not be required to have a physical fitness training program, provided Tactical Response Team members, armed response personnel, and guards pass site specific content-based physical fitness performance tests. However, licensees may still wish to provide a training program to ensure that their personnel are fit enough to undergo the qualification testing.

11. Comment. One commenter questioned why the requirement for a medical examination 30 days prior to performance testing, which was previously in Appendix B to Part 73 and deleted in 1988, was restored in this rule. The

commenter does not state whether or not the requirement should be modified or deleted.

Response. Previous requirements for timing of physical examinations are unrelated to the proposed 10 CFR 73.46(b)(11)(iii), which states that each guard undergo a physical examination within 30 days of participating in the physical fitness performance testing. The underlying issue of this requirement is the well-being of the individual being tested. The Commission believes that it is prudent to obtain a minimum level of assurance that an individual has no medical contraindications to physical fitness performance testing which may require a maximum effort on the part of the individual being tested. The 30-day limit is a common industry practice and is equivalent to the requirement in 10 CFR 1046 which applies to DOE security personnel.

Criminal Penalties

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.

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, 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 proposed rule 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 exposure to, radioactivity. These amendments would specify (1) annual performance testing criteria and a minimum physical fitness training program or (2) a quarterly administered site specific content-based physical fitness performance test to assure that Tactical Response Team members, armed response personnel, and guards can adequately perform their duties under conditions of strenuous tactical engagement.

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.). This rule has been submitted to the Office of Management and Budget for review and approval of the paperwork requirements.

The public reporting burden for this collection of information is estimated to average 41 hours per licensee 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 Commission has prepared a regulatory analysis on this proposed amendment. The analysis examines the costs and benefits of the alternatives considered by the Commission 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 regulatory 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, if adopted, will not have a significant economic impact upon a substantial number of small entities. The proposed rule would affect two Category I licensees. 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, 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 proposed rule because these amendments do not impose requirements on existing 10 CFR Part 50 licensees. Therefore, a backfit analysis is not required for this proposed 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. 553, the Commission 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).

2. In § 73.46 paragraphs (b)(4) and paragraph (i) are revised and new paragraphs (b)(10), (b)(11), and (b)(12) 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." Tactical Response Team members, armed response personnel, and guards shall be trained, equipped, and qualified for use of their assigned weapon in accordance with paragraphs (b)(6) and (b)(7) of this section. In addition, Tactical Response Team members, armed response personnel, and guards shall be trained and qualified in accordance with either paragraphs (b)(10) and (b)(11) or paragraph (b)(12) 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 once 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.

* * * * *

(10) In addition to the medical examinations and physical fitness requirements of paragraph I.C of Appendix B of this part, each Tactical Response Team member, armed response person, and guard, except as provided in paragraph (b)(10)(v) of this section, 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 percent of maximum heart rate for 20 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 4 months to determine the effectiveness of the continuing 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 to be 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. Individuals who exceed 4 months without being assessed for general fitness due to excused time off from work must be assessed within 15 calendar days of returning to duty as a Tactical Response Team member, armed response person, or guard.

(iii) Within 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.

(v) Guards whose duties are to staff the central or secondary alarm station and those who control exit or entry portals are exempt from the physical fitness training program specified in paragraph (b)(10) of this section, provided that they are not assigned temporary response guard duties.

(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 the requirements in paragraphs (b)(11)(i) through (b)(11)(v) of this section, except as provided in paragraph (b)(11)(vi) of this section, initially and at least once every 12 months thereafter.

(i) For Tactical Response Team members the criteria are a 1-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 3 years.

(ii) Incumbent Tactical Response Team members, armed response personnel, and guards shall meet or exceed the qualification criteria within 12 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) 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 fitness performance testing. The medical examination must be given within 30 days prior to the first administration of the physical fitness performance test, and on an annual basis thereafter.

(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 3 months to satisfactorily meet or exceed the qualification criteria.

(v) Licensees may temporarily waive the annual performance testing for an individual 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.

(vi) Guards whose duties are to staff the central or secondary alarm station and those who control exit or entry portals are exempt from the annual performance testing specified in paragraph (b)(11) of this section, provided that they are not assigned temporary response guard duties.

(12) The licensee may elect to comply with the requirements of this paragraph instead of the requirements of paragraphs (b)(10) and (b)(11) of this section. In addition to the physical fitness qualifications of paragraph I.C of Appendix B of this part, each licensee subject to the requirements of

this section shall submit to the NRC for approval site specific, content-based, physical fitness performance tests which will -- when administered to each Tactical Response Team member, armed response person, or guard -- duplicate the response duties these individuals may need to perform during a strenuous tactical engagement.

(i) The test must be administered to each Tactical Response Team member, armed response personnel, and guard once every 3 months. The test must specifically address the physical capabilities needed by armed response personnel during a strenuous tactical engagement at the licensed facility. Individuals who exceed 3 months without having been administered the test due to excused time off from work must be tested within 15 calendar days of returning to duty as a Tactical Response Team member, armed response person, or guard.

(ii) Within 30 days prior to the first administration of the physical fitness performance test, and on an annual basis thereafter, 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 fitness performance test.

(iii) Guards whose duties are to staff the central or secondary alarm station and those who control exit or entry portals are exempt from the performance test specified in paragraph (b)(12) of this section, provided that they are not assigned temporary response guard duties.

* * * * *

(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)(10) and (b)(11) of this section or the requirements of (b)(12) of this section. Revised plans must be mailed to the Director, Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

(2) Each licensee shall implement the approved plan pursuant to paragraphs (b)(10) and (b)(11) of this section or (b)(12) of this section within 1 year after NRC approval of the revised Fixed Site Physical Protection Plan.

Dated at Rockville, Maryland, this ____ day of _____, 1993.

For the Nuclear Regulatory Commission.

Samuel J. Chilk,
Secretary of the Commission.

ENCLOSURE B
ENVIRONMENTAL ASSESSMENT

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT
For the Proposed Rule Amending 10 CFR 73

Annual Physical Fitness Performance Testing for
Tactical Response Team Members, Armed Response Personnel,
and Guards at Category I Licensees

I. Introduction

The Nuclear Regulatory Commission (NRC) is proposing to amend 10 CFR Part 73 which contains safeguards requirements affecting licensees authorized to possess formula quantities of Strategic Special Nuclear Material (SSNM) (Category I licensees). These amendments provide the elements of minimum continuing physical training programs and the criteria for annual physical fitness performance testing for members of their Tactical Response Teams (TRT), armed response personnel, and guards. The proposed amendments also contain a provision that licensees may propose for NRC approval a content-based site specific performance test in lieu of the physical fitness training program and annual performance testing. These requirements have been proposed in order to ensure that guards at such facilities have an adequate level of physical fitness to perform their duties under conditions of strenuous tactical engagement.

II. Need for Action

Currently, NRC licensed fuel fabrication facilities possessing formula quantities of SSNM are required to establish and train Tactical Response Teams and to make available a force of armed response personnel or guards to provide assistance in the event of a hostile engagement. The NRC has concluded that implementation of these requirements may not be completely effective based on observations of the performance of some licensee guards participating in a Department of Energy (DOE) training exercise. After subsequent examination of the DOE guard training and testing program, the NRC has determined that specific criteria for annual physical fitness testing of TRT members, armed response personnel, and guards are needed. The NRC has further concluded that a quarterly administered site specific content-based performance test may also provide adequate assurance that armed response personnel are capable of performing their response duties during strenuous tactical engagements. Thus, the NRC is proposing to allow such a test as an alternative to physical fitness training programs and annual performance testing.

III. Environmental Impact of the Proposed Action

These proposed amendments will affect neither the safety of operation nor the routine release of, or exposure to, radioactivity from the fuel fabrication facilities possessing formula quantities of SSNM. The following amendments are being proposed: (1) physical fitness training programs and annual physical fitness performance testing, or (2) a quarterly administered site specific content-based performance test. Thus, neither of these has any identifiable environmental impacts.

IV. Alternative to the Proposed Action.

Section 102(2)(E) of NEPA provides that agencies of the Federal Government shall "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." The objective of these proposed amendments is to provide greater assurance that capabilities of Tactical Response Team members, armed response personnel, and guards at Category I licensees are maintained at a level commensurate with their responsibilities.

Two alternatives to the amendments were examined. The first was to take no action and leave the physical fitness of TRT members, armed response personnel, and guards to the licensee's discretion. This alternative was rejected because, based upon the observed performance of some licensee guards, there is no evidence that the licensees are exercising their discretion effectively. In addition, there would continue to be no requirement for physical fitness training programs and annual performance testing. The second alternative considered was to impose these requirements on fuel fabrication facilities through the issuance of license conditions, or orders, or to provide guidance and criteria in the form of regulatory guides. This alternative was rejected because regulatory guides do not afford the same assurance of enforceability as do regulations, orders, or license conditions, and regulatory actions by order or license condition do not provide the benefit of public notice and comment afforded in the rulemaking process.

V. Agencies and Persons Consulted

During the development of these amendments, Mr. Philip Arzino from California State University at Hayward, and cognizant officials and managers at the Department of Energy were consulted. Furthermore, an expert review panel comprised of three members of the American College of Sports Medicine provided independent views and recommendations. The panel members were Drs. D. W. Hill, T. A. Kaplan, and J. E. Young.

VI. Finding of No Significant 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 these proposed amendments are not a major Federal action significantly affecting the quality of the human environment, and therefore, an environmental impact statement is not required. The proposed amendments would establish criteria for physical fitness training programs and require annual performance testing or as an alternative require a quarterly administered site specific content-based performance test. Neither of these actions will have a significant impact upon the environment.

DOC. FILE NAME: ENVA.PF
LONG DISPLAY:
CREATED: 8/14/91, LCrossland
AUTHOR: HTovmassian
REVISED: 9/5/91 4/8/93 4/29/93
TYPIST: LCrossland jw jw
TIME: 9:25 am 2:30pm 2:30 pm

EXCERPT:

ENCLOSURE B
ENVIRONMENTAL ASSESSMENT

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT
For the Proposed Rule Amending 10 CFR 73

Annual Physical Fitness Performance Testing Qualifications for Tactical
Response Team Members, Armed Response Personnel, and Guards

ENCLOSURE C
REGULATORY ANALYSIS

REGULATORY ANALYSIS
For the Proposed Rule Amending 10 CFR 73

Annual Physical Fitness Performance Testing for Tactical Response Team
Members, Armed Response Personnel, and Guards at Category I Licensees

1. STATEMENT OF THE PROBLEM

The Nuclear Regulatory Commission (NRC) is proposing to amend armed security personnel performance regulations in 10 CFR Part 73 for licensees possessing formula quantities of strategic special nuclear material (Category I licensees). The proposed amendments would require a continuing physical fitness training program and specify criteria for annual physical fitness performance testing of Tactical Response Team members, armed response personnel, and guards at Category I licensees. Currently, the NRC's regulations specify that security force personnel have no physical weaknesses that would adversely affect the performance of their assigned duties. However, no regulatory criteria exist for assessing whether Tactical Response Team members, armed response personnel, and guards have an adequate level of physical fitness to perform their duties. Criteria for annual physical fitness performance testing for Tactical Response Team members, armed response personnel, and guards will provide greater assurance that these individuals are capable of performing their assigned duties in the event of a strenuous tactical engagement. As an alternative to the physical fitness training program and the annual physical fitness performance testing, the NRC is proposing to allow licensees to institute a quarterly administered site specific content-based test to provide the same level of assurance that Tactical Response Team members, armed response personnel, and guards can perform their response duties during a strenuous tactical engagement.

1.1 Need for Proposed Amendments

This proposed rulemaking will amend Part 73 of the Commission's regulations, "Physical Protection of Plants and Materials." Currently,

Tactical Response Team members, armed response personnel, and guards at Category I licensees are required to participate in periodic exercises to demonstrate their effectiveness (10 CFR 73.46(b)(9)). However, during a 1988 DOE Central Training Academy course, NRC observed that some of the NRC licensee Tactical Response Team members, armed response personnel, and guards were able to participate in tactical exercises only on a limited basis. This observation led the NRC staff to question whether the current regulations are providing adequate assurance that Tactical Response Team members, armed response personnel, and guards are physically fit and able to perform their duties under conditions of strenuous tactical engagements. Upon further study of this question, as discussed in the Federal Register Notice for the proposed rule, the staff concluded that the above tactical exercises did offer a viable representation of the sorts of actions Category I licensee personnel may be required to take and that specific criteria were needed to assure that such personnel would be physically capable of taking such actions.

1.2 Applicable NRC Licensees

These proposed amendments to 10 CFR Part 73 would impact two NRC Category I licensees.

1.3 Relationship to Other Existing or Proposed Regulations

There are no apparent conflicts or overlaps with other NRC regulations or policies nor with other agencies' regulations or policies.

2. OBJECTIVE OF THE RULE

The objective of this proposed amendment is to provide greater assurance that the Tactical Response Team members, armed response personnel, and guards at facilities possessing formula quantities of strategic special nuclear material are capable of performing their duties under conditions of strenuous tactical engagements.

3. ALTERNATIVES TO THE RULE

Three options are considered in this regulatory analysis. Summaries of the alternatives are provided in this section.

3.1 Option 1: No Action By the NRC

If this option were to be pursued, there would continue to be no physical fitness training program or performance testing criteria and, therefore, there would not be adequate assurance that Tactical Response Team members, armed response personnel, and guards are able to perform their assigned duties under conditions of strenuous tactical engagement.

3.2 Option 2: Non-Rulemaking Approaches

Since the existing regulations in 10 CFR 73.46 Appendix B require that all Tactical Response Team members, armed response personnel, and guards are physically able to perform their duties, the NRC could have imposed these requirements through issuance of license conditions or an order. Alternatively, the Commission could have issued a regulatory guide containing the minimum acceptable qualifications. Each of these mechanisms would necessitate that each Category I licensee revise current Fixed Site Physical Protection Plans to include annual physical fitness performance testing and a minimum continuing physical fitness training program for the facilities' Tactical Response Team members, armed response personnel, and guards. As an alternative, a quarterly administered site specific content-based performance test could be instituted.

3.3 Option 3: Adopt the Amendments Through Formal Rulemaking

The result of following this option is the same as Option 2 for the two licensees in question. However, this option has the advantage of obtaining

comments on the issues from the public prior to promulgation of the final rule.

4. CONSEQUENCES

This section discusses the expected costs and benefits of implementing the identified alternatives. The information used to determine the consequences associated with the rule were based on discussions with NRC staff, cognizant personnel and managers from Oak Ridge National Laboratory, Oak Ridge, Tennessee, California State University-Hayward, and discussions with the managers of YMCAs in areas near the applicable Category I licensees concerning the cost of using their facilities for training. Sections 4.1, 4.2, and 4.3 discuss the impact on the two facilities listed in Section 1.2 above, the NRC, and others, respectively.

4.1 Impacts on Industry

This section describes the costs that are expected to be incurred by the two licensees. The incremental cost of pursuing Option 1 is zero. The incremental costs of pursuing Options 2 and 3 are essentially identical.

4.1.1 Physical Fitness Performance Training

Unless the licensee elects to use the site specific content-based test alternative permitted pursuant to 10 CFR 73.46(b)(12), Tactical Response Team members, armed response personnel, and guards will be required to participate in a continuing physical fitness training program in order to meet the performance criteria specified in the rule. Therefore, the cost of this requirement would be the labor cost for Tactical Response Team members, armed response personnel, and guards while they participate in the program and the costs associated with the training facilities. To obtain the estimated incremental cost of this regulation, the cost licensees are incurring to meet existing physical training requirements is subtracted from the cost of this rule.

4.1.1.1 Labor Cost Estimate

In this section of the regulatory analysis, the labor cost will be estimated assuming that the licensee has no physical fitness training program. The adjustment required to account for the fact that licensees currently are required to have an annual physical demonstration will be covered in Section 4.1.1.4, where the total incremental cost is addressed.

The average hourly basic pay rate for Tactical Response Team members, armed response personnel, and guards was obtained separately for each site. This analysis assumes that fully loaded labor costs will be double the average hourly rate. This analysis also assumes that each guard is to take three 1-hour training sessions per week with up to 2 hours of travel per week for off-site training. It is further postulated that each facility employs 100 guards. Since guards who staff the alarm stations and entry and exit portals are exempt from this proposed rule, it is assumed that 70 percent (70 guards) of the guards will be required to participate. Thus, if each guard has 5 hours per week of training related time, and trains for 50 weeks per year, each facility will require 17,500 hours annually to meet the physical fitness training requirement in this rule. The estimated annual labor cost for Plant A is \$399,000 and for Plant B is \$297,500. The total estimated annual labor cost for both plants is \$696,500. The total estimated lifetime cost, assuming a 30-year period with a 5 percent discount rate, is \$10.7 million. The calculation of these labor cost estimates is summarized in Table 1.

4.1.1.2 Club Membership Estimates

In this section of the regulatory analysis, the club membership cost will be estimated assuming that the licensee has no physical fitness training program at all.

For the purpose of this analysis, the annual corporate cost for a physical fitness training program was obtained from YMCAs near the applicable fuel cycle facilities. Each facility's annual health club (i.e., YMCA) costs were ascertained separately. For each guard, these memberships would cost \$115 and \$50 per year for Plant A and Plant B, respectively. The combined

total annual cost is \$11,550. The combined total cost, over a 30-year life cycle assuming a discount rate of 5 percent, is approximately \$0.2 million. The estimated health club membership costs are summarized in Table 2.

This rule does not require health club or YMCA membership. Most of the objectives of the annual physical fitness performance testing and the physical fitness training program may be accomplished through use of publicly available facilities without sophisticated equipment. Therefore, the cost estimates in this section may overstate the impact on the industry. However, the club membership costs are small in comparison to the labor costs. Therefore, savings derived from pursuing a less costly approach would not affect the conclusions of this analysis.

4.1.1.3 Other Costs

As part of the physical training program, licensees will be required to perform assessments of the effectiveness of the program for each participant every 4 months. The California State University-Hayward has estimated that each assessment would take about 20 minutes. Since these assessments would probably occur during the participant's normal training time and are relatively infrequent, no additional costs were assumed for the assessments.

The cost of obtaining initial and yearly medical examinations was also not considered in this analysis because Tactical Response Team members, armed response personnel, and guards are currently required to have such examinations pursuant to 10 CFR Part 73, Appendix B.

4.1.1.4 Total Costs

In this section, the total cost of the upgraded physical fitness requirements will be estimated, then these costs will be adjusted to an incremental cost estimate to reflect the added cost over and above what licensees are currently doing to comply with NRC's regulations.

To obtain the total cost for the physical fitness training program per facility, the club membership costs are combined with the labor costs. Table 3 shows that the annual cost would be about \$0.7 million and the

estimated lifetime cost, assuming a 30-year period with a 5 percent discount rate, is approximately \$11 million.

In order to assess the incremental costs of this rule, the costs summarized in Table 3 must be adjusted to reflect the fact that licensees are currently required to annually demonstrate that Tactical Response Team members, armed response personnel, and guards are physically capable to perform their assigned duties. Although some form of physical fitness training would appear to be needed to pass this demonstration, neither licensee had included an extensive fitness training program in their Fixed Site Physical Protection Plan. The annual demonstrations require 1 hour of each guard's time per year and 1 hour of time for the administrator of the test. Thus, these labor costs are estimated to be a total of 280 hours (70 guards per licensee x 2 hours per guard x 2 licensees) for the industry or \$5,572 per year (140 hours X \$22.80 per hour + 140 hours X \$17.00 per hour). Therefore, the annual incremental cost of this rule will be \$702,478 (\$708,050 - \$5,572).

Some indirect benefits which could be derived by the licensees are a healthier, more physically fit guard force, which results in potentially fewer on-the-job injuries, decreased sick leave, and health insurance claims.

4.1.2 Site Specific Content-Based Test

As an alternative to the physical fitness performance testing and physical fitness training program discussed in Section 4.1.1, the NRC is proposing to allow licensees to develop a quarterly administered site specific content-based physical performance test to demonstrate that the Tactical Response Team members, armed response personnel, and guards can perform their response duties in the event of a strenuous tactical engagement. Since this form of a test requires duplication of actual response conditions, it is expected that it would be performed in stages with setup time and rest between stages. For example, one scenario might be a hostile building search whereas another might involve rescuing an injured guard while under fire and dragging or carrying the individual to a safe location. This analysis assumes that such a test would require 8 weeks (240 hours) to develop. Since this test

would be developed by professional or supervisory personnel, \$50 per hour was assumed to be the cost. This would result in a one time cost of \$12,000 for each licensee (240 hours x \$50.00). For the purpose of this analysis, it was also assumed that such a test would take approximately 3 hours to administer. Therefore, on a yearly basis it would take an 1680 hours (4 tests annually x 3 hours per test x 70 guards x factor of 2 for an administrator) to conduct such tests at each site. Therefore, the annual cost, in addition to the one time development cost, is \$38,304 for site A (1680 hours x \$22.80 per hour) and \$28,560 for site B (1680 hours x \$17.00 per hour). The annual cost would be about \$66,864 and the estimated lifetime cost, assuming a 30-year period with a 5 percent discount rate, is approximately \$1.0 million. The calculation of the cost estimates for the site specific content-based test are summarized in Table 4.

4.2 Impacts on NRC

The NRC staff estimates that it would spend approximately \$4,020 in travel expenses to implement this rule. This is based upon the assumption of a 2-day 3-person trip to each facility, costing about \$500 per person, and a total of 12 days per diem at a rate of \$85 per day. To determine the staff labor cost, it was assumed that another 5 days would be required to approve the revised security plans containing the measures licensees commit to taking in order to comply with the additional requirements of the rule, in addition to the 12 days assumed for travel. Thus, staff labor costs for 136 hours (17 days) at \$48 per hour would be \$6528. In addition, the cost of contractual support to assist in developing the rule and licensing criteria is \$300,000. Therefore, total implementation cost to NRC is approximately \$310,000.

4.3 Impacts on Others

The impact on the public is the benefit of greater assurance that Tactical Response Team members, armed response personnel, and guards are capable of performing their duties under conditions of strenuous tactical engagement.

TABLE 1

PHYSICAL FITNESS TRAINING COSTS
LABOR COST ESTIMATES

Based on:

1. Three 1-hour training sessions per week and 40 minutes of commuting time per session.
2. Fully loaded labor cost assumed to be twice the basic pay rate.
3. Seventy guards per plant required to participate.

ANNUAL LABOR COSTS

Plant A: 5Hrs/wk X 50 Wks/yr X 70 Guards X \$22.80/hr	=	\$399,000
Plant B: 5Hrs/wk X 50 Wks/yr X 70 Guards X \$17.00/hr	=	\$297,500
Total	=	\$696,500

TOTAL LABOR COSTS

(Assuming 30-year life cycle costing at a 5 percent real discount rate)¹

Plant A: 15.4 X \$399,000	=	\$6,144,600
Plant B: 15.4 X \$297,500	=	\$4,581,500
Total	=	\$10,726,100

¹NUREG/CR-3568, PNL-4646, Table C.2, pg. C.5

TABLE 2

PHYSICAL FITNESS TRAINING COSTS CLUB MEMBERSHIP COST ESTIMATES

Based on:

1. YMCA group membership rates in towns near the licensee facilities.

ANNUAL CLUB MEMBERSHIP COSTS

Plant A: \$115.00 X 70 Guard force members	=	\$8,050
Plant B: \$50.00 X 70 Guard force members	=	\$3,500
Total	=	\$11,550

TOTAL CLUB MEMBERSHIP COSTS

(Assuming 30-year life cycle costing at a 5 percent real discount rate)²

Plant A: 15.4 X \$8,050	=	\$123,970
Plant B: 15.4 X \$3,500	=	\$53,900
Total	=	\$177,870

²Ibid.

TABLE 3

COMBINED PHYSICAL FITNESS TRAINING COSTS
ANNUAL COST ESTIMATES

Plant A: \$399,000 + \$8,050 = \$407,050

Plant B: \$297,500 + \$3,500 = \$301,000

Total = \$708,050

TOTAL COSTS

(Assuming 30-year life cycle costing at a 5 percent real discount rate)³

Plant A: \$407,050 X 15.4 = \$6,268,570

Plant B: \$301,000 X 15.4 = \$4,635,400

Total = \$10,903,970

³Ibid.

TABLE 4

COST FOR SITE SPECIFIC CONTENT-BASED TEST
ANNUAL COST ESTIMATE

Plant A: 1680 Hrs/yr X \$22.80/hr = \$38,304

Plant B: 1680 Hrs/yr X \$17.00/hr = \$28,560

Total = \$66,864

TOTAL COSTS

(Assuming 30-year life cycle costing at a 5 percent real discount rate)⁴

Plant A: \$38,304 X 15.4 = \$589,882

Plant B: \$28,560 X 15.4 = \$439,824

Total = \$1,029,706

⁴Ibid.

5. DECISION RATIONALE

While Option 1 would result in no incremental cost, it has been rejected because it will not accomplish NRC's objective of assuring that a security organization is in place which has the capability to perform its assigned tasks under conditions of strenuous tactical engagement. Option 2 and Option 3 have no difference in cost. If Option 2 is pursued, the performance criteria and the annual performance testing would be imposed through a regulatory guide, an order, or a license condition. This is undesirable because regulatory guides do not afford the same assurance of enforceability as do regulations, orders, or license conditions, and actions by order or license condition do not provide the benefit of public notice and comment afforded in the rulemaking process. Therefore, Option 3, which is fully enforceable and has the benefit of public notice and comment in its development, is the desired alternative.

6. IMPLEMENTATION

Within 90 days after the effective date of the final rule, each licensee will be required to submit a revised Fixed Site Physical Protection Plan describing how the licensee will comply with the new requirements. Revised plans must be mailed to the Director, Division of Fuel Cycle Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Within 1 year of Commission approval, each licensee will implement the revised security plans.

DOC. FILE NAME: REGA.WP
LONG DISPLAY:
CREATED: 8/16/91, LCrossland
AUTHOR: HTovmassian
REVISED: 9/5/91 4/8/93
TYPIST: LCrossland jw
TIME: 9:45 am 2:50pm

EXCERPT:

ENCLOSURE C
REGULATORY ANALYSIS

REGULATORY ANALYSIS

1. STATEMENT OF THE PROBLEM

The Nuclear Regulatory Commission (NRC) is proposing to amend security personnel performance regulations in 10 CFR Part 73 for licensees possessing formula quantities of strategic special nuclear material. The following upgrades in security personnel performance regulations are being proposed:

ENCLOSURE D
CONGRESSIONAL LETTERS



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

The Honorable Richard H. Lehman, Chairman
Subcommittee on Energy and Mineral Resources
Committee on Natural Resources
United States House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

The NRC has sent to the Office of the Federal Register for publication the enclosed proposed amendments to the Commission's regulations on physical protection of plants and materials. These amendments would require that guards and other armed response personnel at fuel cycle facilities authorized to possess formula quantities of strategic special nuclear material participate in annual physical fitness performance testing and participate in a physical fitness training program. Alternatively, licensees could develop, and administer quarterly, site specific content-based tests which duplicate the response tasks to be performed in the event of a strenuous tactical engagement.

These amendments are necessary to ensure that security personnel are capable of defending their facilities against a group of individuals possessing the capabilities which the NRC ascribes to the design basis threat. Presently, two licensees will be affected by these proposed amendments.

Sincerely,

Dennis K. Rathbun, Director
Office of Congressional Affairs

Enclosure: As stated

cc: Representative Barbara Vucanovich



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

The Honorable Philip R. Sharp, Chairman
Subcommittee on Energy and Power
Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

The NRC has sent to the Office of the Federal Register for publication the enclosed proposed amendments to the Commission's regulations on physical protection of plants and materials. These amendments would require that guards and other armed response personnel at fuel cycle facilities authorized to possess formula quantities of strategic special nuclear material participate in annual physical fitness performance testing and participate in a physical fitness training program. Alternatively, licensees could develop, and administer quarterly, site specific content-based tests which duplicate the response tasks to be performed in the event of a strenuous tactical engagement.

These amendments are necessary to ensure that security personnel are capable of defending their facilities against a group of individuals possessing the capabilities which the NRC ascribes to the design basis threat. Presently, two licensees will be affected by these proposed amendments.

Sincerely,

Dennis K. Rathbun, Director
Office of Congressional Affairs

Enclosure: As stated

cc: Representative Michael Bilirakis



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

The Honorable Joseph Lieberman, Chairman
Subcommittee on Clean Air and Nuclear Regulation
Committee on Environment and Public Works
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

The NRC has sent to the Office of the Federal Register for publication the enclosed proposed amendments to the Commission's regulations on physical protection of plants and materials. These amendments would require that guards and other armed response personnel at fuel cycle facilities authorized to possess formula quantities of strategic special nuclear material participate in annual physical fitness performance testing and participate in a physical fitness training program. Alternatively, licensees could develop, and administer quarterly, site specific content-based tests which duplicate the response tasks to be performed in the event of a strenuous tactical engagement.

These amendments are necessary to ensure that security personnel are capable of defending their facilities against a group of individuals possessing the capabilities which the NRC ascribes to the design basis threat. Presently, two licensees will be affected by these proposed amendments.

Sincerely,

Dennis K. Rathbun, Director
Office of Congressional Affairs

Enclosure: As stated

cc: Senator Alan K. Simpson

ENCLOSURE E
PUBLIC ANNOUNCEMENT

NRC ISSUES PROPOSED RULES ON PHYSICAL FITNESS
OF GUARDS AT CERTAIN NUCLEAR FUEL FACILITIES

The Nuclear Regulatory Commission is considering amending its regulations for certain nuclear fuel fabrication facilities to ensure that the facilities' security guards can adequately perform their duties in the event of an assault by an adversary.

The revisions would require the guards to participate in a continuing physical fitness training program and pass an annual performance test, with elements of the training program and test to be specified in the NRC regulations. Alternatively, the changes would permit licensees to propose, for NRC approval, a content-based site-specific test that duplicates the response tasks that a guard would need to perform if the facility came under attack. This test would be administered at least quarterly.

A proposed rule permitting only the first alternative, participating in an NRC-specified fitness program and passing an NRC-specified annual test, was published in the Federal Register on December 13, 1991. As a result of analysis of the comments received, the Commission has reexamined its position and believes that the second alternative, passing an NRC-approved sitespecific test administered quarterly, could also be acceptable. Since the public has not had an opportunity to comment on this alternative, a new proposed rule is being published in the Federal Register for comment.

The new proposed rule has also been modified to exempt from the physical fitness testing individuals who serve in static response positions, such as operators of central or secondary alarm stations or guards at exit and entry portals, provided they are not assigned to temporary response guard duties.

Interested persons are invited to submit written comments on the proposed revisions, which are to Part 73 of the Commission's regulations, by _____ (75 days following publication of a Federal Register notice on.

_____. The comments should be addressed to the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Service Branch.