

Appendix B to Part 73 Section VI.
Nuclear Power Reactor Training and Qualification Plan
for Personnel Performing Security Program Duties

A. General Requirements and Introduction

A.1. The licensee shall ensure that all individuals who are assigned duties and responsibilities required to prevent significant core damage and spent fuel sabotage, implement the Commission-approved security plans, licensee response strategy, and implementing procedures, meet minimum training and qualification requirements to ensure each individual possesses the knowledge, skills, and abilities required to effectively perform the assigned duties and responsibilities.

A.2. To ensure that those individuals who are assigned to perform duties and responsibilities required for the implementation of the Commission-approved security plans, licensee response strategy, and implementing procedures are properly suited, trained, equipped, and qualified to perform their assigned duties and responsibilities, the Commission has developed minimum training and qualification requirements that must be implemented through a Commission-approved training and qualification plan.

A.3. The licensee shall establish, maintain, and follow a Commission-approved training and qualification plan, describing how the minimum training and qualification requirements set forth in this appendix will be met, to include the processes by which all ~~members of the security organization~~ individuals, will be selected, trained, equipped, tested, and qualified.

A.4. Each individual assigned to perform security program duties and responsibilities required to effectively implement the Commission-approved security plans, licensee protective strategy, and the licensee implementing procedures, shall demonstrate the knowledge, skills, and abilities required to effectively perform the assigned duties and responsibilities before the individual is assigned the duty or responsibility.

A.5. The licensee shall ensure that the training and qualification program simulates, as closely as practicable, the specific conditions under which the individual shall be required to perform assigned duties and responsibilities.

A.6. The licensee may not allow any individual to perform any security function, assume any security duties or responsibilities, or return to security duty, until that individual satisfies the training and qualification requirements of this appendix and the Commission-approved training and qualification plan, unless specifically authorized by the Commission.

A.7. Annual requirements must be scheduled at a nominal twelve (12) month periodicity. Annual requirements may be completed up to three (3) months before or three (3) months after the scheduled date. However, the next annual training must be scheduled twelve (12) months from the previously scheduled date rather than the date the training was actually completed.

B. Employment suitability and qualification.

B.1. Suitability.

B.1.a. Before employment, or assignment to the security organization, an individual shall:

B.1.a.(1) Possess a high school diploma or pass an equivalent performance examination designed to measure basic mathematical, language, and reasoning skills, abilities, and

knowledge required to perform security duties and responsibilities;

B.1.a.(2) Have attained the age of 21 for an armed capacity or the age of 18 for an unarmed capacity; and

B.1.a.(3) ~~An unarmed individual assigned to the security organization may n~~Not have any felony convictions that reflect on the individual's reliability.

B.1.b. The qualification of each individual to perform assigned duties and responsibilities must be documented by a qualified training instructor and attested to by a security supervisor.

B.2. Physical qualifications.

B.2.a. General Physical Qualifications

B.2.a.(1) Individuals whose duties and responsibilities are directly associated with the effective implementation of the Commission-approved security plans, licensee protective strategy, and implementing procedures, may not have any physical conditions that would adversely affect their performance of assigned security duties and responsibilities.

B.2.a.(2) ~~Armed and unarmed members of the security organization-~~ individuals assigned security duties and responsibilities shall be subject to a physical examination designed to measure the individual's physical ability to perform assigned duties and responsibilities as identified in the Commission-approved security plans, licensee protective strategy, and implementing procedures.

B.2.a.(3) This physical examination must be administered by a licensed health professional with final determination being made by a licensed physician to verify the individual's physical capability to perform assigned duties and responsibilities.

B.2.a.(4) The licensee shall ensure that both armed and unarmed ~~members of the security organization-~~ individuals who are assigned security duties and responsibilities identified in the Commission-approved security plans, the licensee protective strategy, and implementing procedures, meet the following minimum physical requirements, as required to effectively perform their assigned duties.

B.2.b. Vision:

B.2.b.(1) For each individual, distant visual acuity in each eye shall be correctable to 20/30 (Snellen or equivalent) in the better eye and 20/40 in the other eye with eyeglasses or contact lenses.

B.2.b.(2) Near visual acuity, corrected or uncorrected, shall be at least 20/40 in the better eye.

B.2.b.(3) Field of vision must be at least 70 degrees horizontal meridian in each eye.

B.2.b.(4) The ability to distinguish red, green, and yellow colors is required.

B.2.b.(5) Loss of vision in one eye is disqualifying.

B.2.b.(6) Glaucoma is disqualifying, unless controlled by acceptable medical or surgical means, provided that medications used for controlling glaucoma do not cause undesirable side effects which adversely affect the individual's ability to perform assigned security job duties, and provided the visual acuity and field of vision requirements stated previously are met.

B.2.b.(7) On-the-job evaluation must be used for individuals who exhibit a mild color vision defect.

B.2.b.(8) If uncorrected distance vision is not at least 20/40 in the better eye, the individual shall carry an extra pair of corrective lenses in the event that the primaries are damaged. Corrective eyeglasses must be of the safety glass type.

B.2.b.(9) The use of corrective eyeglasses or contact lenses may not interfere with an individual's ability to effectively perform assigned duties and responsibilities during normal or emergency conditions.

B.2.c. Hearing:

B.2.c.(1) Individuals may not have hearing loss in the better ear greater than 30 decibels average at 500 Hz, 1,000 Hz, and 2,000 Hz with no level greater than 40 decibels at any one frequency.

B.2.c.(2) A hearing aid is acceptable provided suitable testing procedures demonstrate auditory acuity equivalent to the hearing requirement.

B.2.c.(3) The use of a hearing aid may not decrease the effective performance of the individual's assigned security job duties during normal or emergency operations.

B.2.d. Existing medical conditions.

B.2.d.(1) Individuals may not have an established medical history or medical diagnosis of existing medical conditions which could interfere with or prevent the individual from effectively performing assigned duties and responsibilities.

B.2.d.(2) If a medical condition exists, the individual shall provide medical evidence that the condition can be controlled with medical treatment in a manner which does not adversely affect the individual's fitness-for-duty, mental alertness, physical condition, or capability to otherwise effectively perform assigned duties and responsibilities.

B.2.e. Addiction. Individuals may not have any established medical history or medical diagnosis of habitual alcoholism or drug addiction, or, where this type of condition has existed, the individual shall provide certified documentation of having completed a rehabilitation program which would give a reasonable degree of confidence that the individual would be capable of effectively performing assigned duties and responsibilities.

B.2.f. Other physical requirements. An individual who has been incapacitated due to a serious illness, injury, disease, or operation, which could interfere with the effective performance of assigned duties and responsibilities shall, before resumption of assigned duties and responsibilities, provide medical evidence of recovery and ability to perform these duties and responsibilities.

B.3. Psychological qualifications:

B.3.a. ~~Armed and unarmed members of the security organization~~ **individuals** shall demonstrate the ability to apply good judgment, mental alertness, the capability to implement instructions and assigned tasks, and possess the acuity of senses and ability of expression sufficient to permit accurate communication by written, spoken, audible, visible, or other signals required by assigned duties and responsibilities.

B.3.b. A licensed ~~clinical~~ psychologist, psychiatrist, or physician trained in part to identify emotional instability shall determine whether armed members of the security organization and alarm station operators in addition to meeting the requirement stated in Paragraph a. of this section, have no emotional instability that would interfere with the effective performance of assigned duties and responsibilities.

B.3.c. A person professionally trained to identify emotional instability shall determine whether ~~unarmed members of the security organization~~ **individuals** in addition to meeting the requirement stated in Paragraph a. of this section, have no emotional instability that would interfere with the effective performance of assigned duties and responsibilities.

B.4. Medical examinations and physical fitness qualifications.

B.4.a. Armed members of the security organization shall be subject to a medical examination by a licensed physician, to determine the individual's fitness to participate in physical fitness tests.

B.4.a. The licensee shall obtain and retain a written certification from the licensed physician that no medical conditions were disclosed by the medical examination that would preclude the individual's ability to participate in the physical fitness tests or meet the physical fitness attributes or objectives associated with assigned duties.

B.4.b. Before assignment, armed members of the security organization shall demonstrate physical fitness for assigned duties and responsibilities by performing a practical physical fitness test.

B.4.b.(1) The physical fitness test must consider physical conditions such as strenuous activity, physical exertion, levels of stress, and exposure to the elements as they pertain to each

individual's assigned security job duties for both normal and emergency operations and must simulate site specific conditions under which the individual will be required to perform assigned duties and responsibilities.

B.4.b.(2) The licensee shall describe the physical fitness test in the Commission-approved training and qualification plan.

B.4.d.(3) The physical fitness test must include physical attributes and performance objectives which demonstrate the strength, endurance, and agility, consistent with assigned duties in the Commission-approved security plans, licensee protective strategy, and implementing procedures during normal and emergency conditions.

B.4.b.(4) The physical fitness qualification of each armed member of the security organization must be documented by a qualified training instructor and attested to by a security supervisor.

B.5. Physical requalification.

B.5.a. At least annually, armed and unarmed ~~members of the security organization~~ individuals shall be required to demonstrate the capability to meet the physical requirements of this appendix and the licensee training and qualification plan.

B.5.b. The physical requalification of each armed and unarmed ~~member of the security organization~~ individual must be documented by a qualified training instructor and attested to by a security supervisor.

C. Duty training

C.1. Duty training and qualification requirements. All personnel who are assigned to perform any security-related duty or responsibility, shall be trained and qualified to perform assigned duties and responsibilities to ensure that each individual possesses the minimum knowledge, skills, and abilities required to effectively carry out those assigned duties and responsibilities.

C.1.a. The areas of knowledge, skills, and abilities that are required to perform assigned duties and responsibilities must be identified in the licensee's Commission-approved training and qualification plan.

C.1.b. Each individual who is assigned duties and responsibilities identified in the Commission-approved security plans, licensee protective strategy, and implementing procedures shall, before assignment, (1) be trained to perform assigned duties and responsibilities in accordance with the requirements of this appendix and the Commission-approved training and qualification plan.

C.1.b. (2) meet the minimum qualification requirements of this appendix and the Commission-approved training and qualification plan.

C.1.b. (3) be trained and qualified in the use of all equipment or devices required to effectively perform all assigned duties and responsibilities.

C.2. On-the-job training

C.2.a. The licensee training and qualification program must include on-the-job training performance standards and criteria to ensure that each individual demonstrates the requisite knowledge, skills, and abilities needed to effectively carry-out assigned duties and responsibilities in accordance with the Commission-approved security plans, licensee protective strategy, and implementing procedures, before the individual is assigned the duty or responsibility.

C.2.b. In addition to meeting the requirement stated in paragraph C.2.a., before assignment, individuals assigned duties and responsibilities to implement the Safeguards Contingency Plan shall complete a minimum of 40 hours of on-the-job training to demonstrate their ability to effectively apply the knowledge, skills, and abilities required to effectively perform assigned duties and responsibilities in accordance with the approved security plans, licensee protective strategy, and implementing procedures. On-the-job training must be documented by a qualified

training instructor and attested to by a security supervisor.

C.2.c. On-the-job training for contingency activities and drills must include, but is not limited to, hands-on application of knowledge, skills, and abilities related to:

- (1) Response team duties.
- (2) Use of force.
- (3) Tactical movement.
- (4) Cover and concealment.
- (5) Defensive-positions.
- (6) Fields-of-fire.
- (7) Re-deployment.
- (8) Communications (primary and alternate).
- (9) Use of assigned equipment.
- (10) Target sets.
- (11) Table top drills.
- (12) Command and control duties.

(13) Licensee Protective Strategy

C.3. Tactical response ~~team~~ drills and **force-on-force** exercises.

C.3.a. Licensees shall demonstrate response capabilities through a performance evaluation program as described in appendix C to this part.

C.3.b. The licensee shall conduct **tactical response** drills and **force-on-force** exercises in accordance with Commission-approved security plans, licensee protective strategy, and implementing procedures.

~~C.3.b.(1) Drills and exercises must be designed to challenge participants in a manner which requires each participant to demonstrate requisite knowledge, skills and abilities.~~

Tactical response drills and force-on-force exercises must be designed to challenge the site protective strategy against elements of the design basis threat and ensure each participant assigned security duties and responsibilities identified in the Commission-approved security plans, the licensee protective strategy, and implementing procedures demonstrate the requisite knowledge, skills, and abilities.

C.3.b.(2) Tabletop exercises may be used to supplement **tactical response** drills and **support force-on-force** exercises to accomplish desired training goals and objectives.

D. Duty qualification and re-qualification

D.1. Qualification demonstration

~~D.1.a. Armed and unarmed members of the security organization~~ **individuals** shall demonstrate the required knowledge, skills, and abilities to carry out assigned duties and responsibilities as stated in the Commission-approved security plans, licensee protective strategy, and implementing procedures.

D.1.b. This demonstration must include an annual written exam and hands-on performance demonstration.

(1) Written Exam. The written exams must include those elements listed in the Commission-approved training and qualification plan and shall require a minimum score of 80 percent to demonstrate an acceptable understanding of assigned duties and responsibilities, to include the recognition of potential tampering involving both safety and security equipment and systems.

(2) Hands-on Performance Demonstration. ~~Armed and unarmed members of the security organization~~ **individuals** shall demonstrate

hands-on performance for assigned duties and responsibilities by performing a practical hands-on demonstration for required tasks. The hands-on demonstration must ensure that theory and associated learning objectives for each required task are considered and each individual

demonstrates the knowledge, skills, and abilities required to effectively perform the task.

D.1.c. Upon request by an authorized representative of the Commission, any individual assigned to perform any security-related duty or responsibility shall demonstrate the required knowledge, skills, and abilities for each assigned duty and responsibility, as stated in the Commission-approved security plans, licensee protective strategy, or implementing procedures.

D.2. Requalification.

D.2.a. Armed and unarmed ~~members of the security organization~~ individuals shall be requalified at least annually in accordance with the requirements of this appendix and the Commission-approved training and qualification plan.

D.2.b. The results of requalification must be documented by a qualified training instructor and attested by a security supervisor.

E. Weapons training.

E.1. General firearms training.

E.1.a. Armed members of the security organization shall be trained and qualified in accordance with the requirements of this appendix and the Commission-approved training and qualification plan.

E.1.b. Firearms instructors.

E.1.b.(1) Each armed member of the security organization shall be trained and qualified by a certified firearms instructor for the use and maintenance of each assigned weapon to include but not limited to, ~~qualification scores~~ marksmanship, assembly, disassembly, cleaning, storage, handling, clearing, loading, unloading, and reloading, for each assigned weapon.

E.1.b.(2) Firearms instructors shall be certified from a national or state recognized entity.

E.1.b.(3) Certification must specify the weapon or weapon type(s) for which the instructor is qualified to teach.

E.1.b.(4) Firearms instructors shall be recertified in accordance with the standards recognized by the certifying national or state entity, but in no case shall re-certification exceed three (3) years.

E.1.c. Annual firearms familiarization. The licensee shall conduct annual firearms familiarization training in accordance with the Commission-approved training and qualification plan.

E.1.d. The Commission-approved training and qualification plan shall include, but is not limited to, the following areas:

(1) Mechanical assembly, disassembly, ~~range penetration capability of weapon, and bull's-eye firing.~~ weapons capabilities and fundamentals of marksmanship.

(2) Weapons cleaning and storage.

(3) Combat firing, day and night.

(4) Safe weapons handling.

(5) Clearing, loading, unloading, and reloading.

~~(6) When to draw and point a weapon.~~

~~(7) Rapid fire techniques.~~

~~(8) Closed quarter firing.~~

~~(9)~~ 6) Firing Under Stress firing.

~~(10)~~ 7) Zeroing assigned duty weapon(s) and Weapons Sighting Adjustments (sight and sight/scope adjustments).

~~(11)~~ 8) Target Identification and engagement.

~~(12)~~ 9) Weapon malfunctions.

~~(13)~~ 10) Cover and concealment.

~~(14) Weapon transition between strong (primary) and weak (support) hands.~~

~~(15)~~ 11) Weapon familiarization.

E.1.e. The licensee shall ensure that each armed member of the security organization is instructed on the use of deadly force as authorized by applicable state law.

E.1.f. Armed members of the security organization shall participate in weapons range activities on a nominal four (4) month periodicity. Performance may be conducted up to five (5) weeks before to five (5) weeks after the scheduled date. The next scheduled date must be four (4) months from the originally scheduled date.

F. Weapons qualification and requalification program.

F.1. General weapons qualification requirements.

F.1.a. Qualification firing must be accomplished in accordance with Commission requirements and the Commission-approved training and qualification plan for assigned weapons.

F.1.b. The results of weapons qualification and requalification must be documented and retained as a record.

~~F.1.c. Each individual shall be re-qualified at least annually.~~

F.2. Alternate weapons qualification. Upon written request by the licensee, the Commission may authorize an applicant or licensee to provide firearms qualification programs other than those listed in this appendix if the applicant or licensee demonstrates that the alternative firearm qualification program satisfies Commission requirements. Written requests must provide details regarding the proposed firearms qualification programs and describe how the proposed alternative satisfies Commission requirements.

F.3. Tactical weapons qualification. The licensee Training and Qualification Plan must describe the firearms used, the firearms qualification program, and other tactical training required to implement the Commission-approved security plans, licensee protective strategy, and implementing procedures. Licensee developed tactical qualification and re-qualification courses for ~~each firearm~~ must describe the performance criteria needed, to include the site specific conditions (such as lighting, elevation, fields-of-fire) under which assigned personnel shall be required to carry-out their assigned duties.

F.4. Firearms qualification courses. The licensee shall conduct the following qualification courses for each weapons used.

F.4.a. Annual daylight qualification course. Qualifying score must be an accumulated total of 70 percent with handgun and shotgun, and 80 percent with semi-automatic rifle and/or enhanced weapons, of the maximum obtainable target score.

F.4.b. Annual night fire qualification course. Qualifying score must be an accumulated total of 70 percent with handgun and shotgun, and 80 percent with semi-automatic rifle and/or enhanced weapons, of the maximum obtainable target score.

F.4.c. Annual tactical qualification course. Qualifying score must be an accumulated total of 80 percent of the maximum obtainable score.

F.5. Courses of fire

F.5.a. Handgun.

F.5.a.(1) Armed members of the security organization, assigned duties and responsibilities involving the use of a revolver or semiautomatic pistol shall qualify in accordance with standards ~~and scores~~ established by a law enforcement course, or an equivalent nationally recognized course.

~~F.5.a.(2) Qualifying scores must be an accumulated total of 70 percent of the maximum obtainable target score.~~

F.5.b. Semiautomatic rifle.

F.5.b.(1) Armed members of the security organization, assigned duties and responsibilities

involving the use of a semiautomatic rifle shall qualify in accordance with the standards ~~and scores~~ established by a law enforcement course, or an equivalent nationally recognized course.

~~F.5.b.(2) Qualifying scores must be an accumulated total of 80 percent of the maximum obtainable score.~~

F.5.c. Shotgun.

F.5.c.(1) Armed members of the security organization, assigned duties and responsibilities involving the use of a shotgun shall qualify in accordance with standards ~~and scores~~ established by a law enforcement course, or an equivalent nationally recognized course.

~~F.5.c.(2) Qualifying scores must be an accumulated total of 70 percent of the maximum obtainable target score.~~

F.5.d. Enhanced weapons.

F.5.d.(1) Armed members of the security organization, assigned duties and responsibilities involving the use of any weapon or weapons not described above, shall qualify in accordance with applicable standards ~~and scores~~ established by a law enforcement course or an equivalent nationally recognized course for these weapons.

~~F.5.d.(2) Qualifying scores must be an accumulated total of 80 percent of the maximum obtainable score.~~

F.6. **Firearms** Requalification.

F.6.a. Armed members of the security organization shall be re-qualified for each assigned weapon at least annually in accordance with Commission requirements and the Commission-approved training and qualification plan and the results documented and retained as a record.

F.6.b. Firearms requalification must be conducted using the courses of fire outlined in Paragraph ~~5~~ 4 of this section.

G. Weapons, personal equipment and maintenance.

G.1. Weapons.

G.1.a. The licensee shall provide armed personnel with weapons that are capable of performing the function stated in the Commission-approved security plans, licensee protective strategy, and implementing procedures.

G.2. Personal equipment.

G.2.a. The licensee shall ensure that each individual is equipped or has ready access to all personal equipment or devices required for the effective implementation of the Commission-approved security plans, licensee protective strategy, and implementing procedures.

G.2.b. The licensee shall provide armed security personnel, required for the effective implementation of the Commission-approved Safeguards Contingency Plan and implementing procedures, at a minimum, but is not limited to, the following: ;

(1) Gas mask, full face.

(2) Body armor (bullet-resistant vest).

(3) Ammunition/equipment belt.

(4) Duress alarms.

(5) Two-way portable radios (handi-talkie) 2 channels minimum, 1 operating and 1 emergency.

G.2.c. Based upon the licensee protective strategy and the specific duties and responsibilities assigned to each individual, the licensee should provide, as appropriate, but is not limited to, the following.

(1) Flashlights and batteries.

(2) Baton or other non-lethal weapons.

(3) Handcuffs.

- (4) Binoculars.
- (5) Night vision aids(e.g. goggles, weapons sights).
- (6) Hand-fired illumination flares or equivalent.
- ~~(7) Tear gas or other non-lethal gas.~~

G.3. Maintenance.

G.3.a. Firearms maintenance program. Each licensee shall implement a firearms maintenance and accountability program in accordance with the Commission regulations and the Commission-approved training and qualification plan. The program must include:

- (1) Semiannual test firing for accuracy and functionality.
- (2) Firearms maintenance procedures that include cleaning schedules and cleaning requirements.
- (3) Program activity documentation.
- (4) Control and Accountability (Weapons and ammunition).
- (5) Firearm storage requirements.
- (6) Armorer certification.

H. Records.

H.1. The licensee shall retain all reports, records, or other documentation required by this appendix in accordance with the requirements of § 73.55(r).

H.2. The licensee shall retain each individual's initial qualification record for three (3) years after termination of the individual's employment and shall retain each re-qualification record for three (3) years after it is superceded.

H.3. The licensee shall document data and test results from each individual's suitability, physical, and psychological qualification and shall retain this documentation as a record for three years from the date of obtaining and recording these results.

I. Audits and reviews.

The licensee shall review the Commission-approved training and qualification plan in accordance with the requirements of § 73.55(n).

J. Definitions

Terms defined in Parts 50, 70, and 73 of this chapter have the same meaning when used in this appendix.