

5. Firearms requalification.

(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.

(b) Firearms requalification must be conducted using the courses of fire outlined in paragraphs F.2, F.3, and F.4 of this section.

G. Weapons, Personal Equipment and Maintenance

1. Weapons. 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.

2. Personal equipment.

(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.

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

(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) Duress alarms.

3. Maintenance.

(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

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

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 superseded.

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 (3) years from the date of obtaining and recording these results.

I. Reviews

The licensee shall review the Commission-approved training and qualification program 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.

[43 FR 37426, Aug. 23, 1978, as amended at 46 FR 2026, Jan. 8, 1981; 53 FR 405, Jan. 7, 1988; 53 FR 19261, May 27, 1988; 57 FR 33432, July 29, 1992; 57 FR 61787, Dec. 29, 1992; 59 FR 50689, Oct. 5, 1994; 74 FR 13987, Mar. 27, 2009]

APPENDIX C TO PART 73—NUCLEAR POWER PLANT SAFEGUARDS CONTINGENCY PLANS

I. SAFEGUARDS CONTINGENCY PLAN

Licensee, applicants, and certificate holders, with the exception of those who are subject to the requirements of §73.55 shall comply with the requirements of this section.

INTRODUCTION

A licensee safeguards contingency plan is a documented plan to give guidance to licensee personnel in order to accomplish specific defined objectives in the event of threats, thefts, or radiological sabotage relating to special nuclear material or nuclear facilities licensed under the Atomic Energy Act of 1954, as amended. An acceptable safeguards contingency plan must contain:

- (1) A predetermined set of decisions and actions to satisfy stated objectives;
- (2) An identification of the data, criteria, procedures, and mechanisms necessary to efficiently implement the decisions; and
- (3) A stipulation of the individual, group, or organizational entity responsible for each decision and action.

The goals of licensee safeguards contingency plans for responding to threats, thefts, and radiological sabotage are:

(1) To organize the response effort at the licensee level;

(2) To provide predetermined, structured responses by licensees to safeguards contingencies;

(3) To ensure the integration of the licensee response with the responses by other entities; and

(4) To achieve a measurable performance in response capability.

Licensee safeguards contingency planning should result in organizing the licensee's resources in such a way that the participants will be identified, their several responsibilities specified, and the responses coordinated. The responses should be timely.

It is important to note that a licensee's safeguards contingency plan is intended to be complementary to any emergency plans developed under appendix E to part 50 of this chapter, § 52.17 or § 52.79, or to § 70.22(i) of this chapter.

CONTENTS OF THE PLAN

Each licensee safeguards contingency plan shall include five categories of information:

1. Background
2. Generic Planning Base
3. Licensee Planning Base
4. Responsibility Matrix
5. Procedures

Although the implementing procedures (the fifth category of Plan information) are the culmination of the planning process, and therefore are an integral and important part of the safeguards contingency plan, they entail operating details subject to frequent changes. They need not be submitted to the Commission for approval, but will be inspected by NRC staff on a periodic basis. The licensee is responsible for ensuring that the implementing procedures reflect the information in the Responsibility Matrix, appropriately summarized and suitably presented for effective use by the responding entities.

The following paragraphs describe the contents of the safeguards contingency plan.

1. *Background.* Under the following topics, this category of information shall identify and define the perceived dangers and incidents with which the plan will deal and the general way it will handle these:

a. *Perceived Danger*—A statement of the perceived danger to the security of special nuclear material, licensee personnel, and licensee property, including covert diversion of special nuclear material, radiological sabotage, and overt attacks. The statement of perceived danger should conform with that promulgated by the Nuclear Regulatory Commission. (The statement contained in 10 CFR 73.55(a) or subsequent Commission statements will suffice.)

b. *Purpose of the Plan*—A discussion of the general aims and operational concepts underlying implementation of the plan.

c. *Scope of the Plan*—A delineation of the types of incidents covered in the plan.

d. *Definitions*—A list of terms and their definitions used in describing operational and technical aspects of the plan.

2. *Generic Planning Base.* Under the following topics, this category of information shall define the criteria for initiation and termination of responses to safeguards contingencies together with the specific decisions, actions, and supporting information needed to bring about such responses:

a. *Identification of those events that will be used for signaling the beginning or aggravation of a safeguards contingency according to how they are perceived initially by licensee's personnel.* Such events may include alarms or other indications signaling penetration of a protected area, vital area, or material access area; material control or material accounting indications of material missing or unaccounted for; or threat indications—either verbal, such as telephoned threats, or implied, such as escalating civil disturbances.

b. *Definition of the specific objective to be accomplished relative to each identified event.* The objective may be to obtain a level of awareness about the nature and severity of the safeguards contingency in order to prepare for further responses; to establish a level of response preparedness; or to successfully nullify or reduce any adverse safeguards consequences arising from the contingency.

3. *Licensee Planning Base.* This category of information shall include the factors affecting contingency planning that are specific for each facility or means of transportation. To the extent that the topics are treated in adequate detail in the licensee's approved physical security plan, they may be incorporated by cross reference to that plan. The following topics should be addressed:

a. *Licensee's Organizational Structure for Contingency Responses*—A delineation of the organization's chain of command and delegation of authority as these apply to safeguards contingencies.

b. *Physical Layout*—(i) *Fixed Sites*—A description of the physical structures and their location on the site, and a description of the site in relation to nearby town, roads, and other environmental features important to the effective coordination of response operations. Particular emphasis should be placed on main and alternate entry routes for law-enforcement assistance forces and the location of control points for marshalling and coordinating response activities.

(ii) *Transportation*—A description of the vehicles, shipping routes, preplanned alternate routes, and related features.

c. *Safeguards Systems Hardware*—A description of the physical security and accounting system hardware that influence how the licensee will respond to an event.

Examples of systems to be discussed are communications, alarms, locks, seals, area access, armaments, and surveillance.

d. **Law Enforcement Assistance**—A listing of available local law enforcement agencies and a description of their response capabilities and their criteria for response; and a discussion of working agreements or arrangements for communicating with these agencies.

e. **Policy Constraints and Assumptions**—A discussion of State laws, local ordinances, and company policies and practices that govern licensee response to incidents. Examples that may be discussed include:

- Use of deadly force;
- Use of employee property;
- Use of off-duty employees;
- Site security jurisdictional boundaries.

f. **Administrative and Logistical Considerations**—Descriptions of licensee practices that may have an influence on the response to safeguards contingency events. The considerations shall include a description of the procedures that will be used for ensuring that all equipment needed to effect a successful response to a safeguards contingency will be easily accessible, in good working order, and in sufficient supply to provide redundancy in case of equipment failure.

4. **Responsibility Matrix**. This category of information consists of detailed identification of the organizational entities responsible for each decision and action associated with specific responses to safeguards contingencies. For each initiating event, a tabulation shall be made for each response entity depicting the assignment of responsibilities for all decisions and actions to be taken in response to the initiating event. (Not all entities will have assigned responsibilities for any given initiating event.) The tabulations in the Responsibility Matrix shall provide an overall picture of the response actions and their interrelationships. Safeguards responsibilities shall be assigned in a manner that precludes conflict in duties or responsibilities that would prevent the execution of the plan in any safeguards contingency.

5. **Procedures**. In order to aid execution of the detailed plan as developed in the Responsibility Matrix, this category of information shall detail the actions to be taken and decisions to be made by each member or unit of the organization as planned in the Responsibility Matrix.

AUDIT AND REVIEW

(1) For nuclear facilities subject to the requirements of §73.46, the licensee shall provide for a review of the safeguards contingency plan at intervals not to exceed 12 months. For nuclear power reactor licensees subject to the requirements of §73.55, the licensee shall provide for a review of the safeguards contingency plan either:

- (i) At intervals not to exceed 12 months, or

(ii) As necessary, based on an assessment by the licensee against performance indicators, and as soon as reasonably practicable after a change occurs in personnel, procedures, equipment, or facilities that potentially could adversely affect security, but no longer than 12 months after the change. In any case, each element of the safeguards contingency plan must be reviewed at least every 24 months.

(2) A licensee subject to the requirements of either §73.46 or §73.55 shall ensure that the review of the safeguards contingency plan is by individuals independent of both security program management and personnel who have direct responsibility for implementation of the security program. The review must include an audit of safeguards contingency procedures and practices, and an audit of commitments established for response by local law enforcement authorities.

(3) The licensee shall document the results and the recommendations of the safeguards contingency plan review, management findings on whether the safeguards contingency plan is currently effective, and any actions taken as a result of recommendations from prior reviews in a report to the licensee's plant manager and to corporate management at least one level higher than that having responsibility for the day-to-day plant operation. The report must be maintained in an auditable form, available for inspection for a period of 3 years.

II. NUCLEAR POWER PLANT SAFEGUARDS CONTINGENCY PLANS

A. INTRODUCTION

The safeguards contingency plan is a documented plan that describes how licensee personnel implement their physical protection program to defend against threats to their facility, up to and including the design basis threat of radiological sabotage. The goals of licensee safeguards contingency plans are:

- (1) To organize the response effort at the licensee level;
- (2) To provide predetermined, structured response by licensees to safeguards contingencies;
- (3) To ensure the integration of the licensee response by other entities; and
- (4) To achieve a measurable performance in response capability.

Licensee safeguards contingency planning should result in organizing the licensee's resources in such a way that the participants will be identified, their responsibilities specified, and the responses coordinated. The responses should be timely, and include personnel who are trained and qualified to respond in accordance with a documented training and qualification program.

The evaluation, validation, and testing of this portion of the program shall be conducted in accordance with appendix B of this

part, General Criteria for Security Personnel. The licensee's safeguards contingency plan is intended to maintain effectiveness during the implementation of emergency plans developed under appendix E to part 50 of this chapter.

B. CONTENTS OF THE PLAN

Each safeguards contingency plan shall include five (5) categories of information:

- (1) Background.
- (2) Generic planning base.
- (3) Licensee planning base.
- (4) Responsibility matrix.
- (5) Implementing procedures.

Although the implementing procedures (the fifth category of plan information) are the culmination of the planning process, and are an integral and important part of the safeguards contingency plan, they entail operating details subject to frequent changes. They need not be submitted to the Commission for approval, but are subject to inspection by NRC staff on a periodic basis.

1. Background. This category of information shall identify the perceived dangers and incidents that the plan will address and a general description of how the response is organized.

a. Perceived Danger—Consistent with the design basis threat specified in §73.1(a)(1), licensees shall identify and describe the perceived dangers, threats, and incidents against which the safeguards contingency plan is designed to protect.

b. Purpose of the Plan—Licensees shall describe the general goals, objectives and operational concepts underlying the implementation of the approved safeguards contingency plan.

c. Scope of the Plan—A delineation of the types of incidents covered by the plan.

(i) How the onsite response effort is organized and coordinated to effectively respond to a safeguards contingency event.

(ii) How the onsite response for safeguards contingency events has been integrated in other site emergency response procedures.

d. Definitions—A list of terms and their definitions used in describing operational and technical aspects of the approved safeguards contingency plan.

2. Generic Planning Base. Licensees shall define the criteria for initiation and termination of responses to security events to include the specific decisions, actions, and supporting information needed to respond to each type of incident covered by the approved safeguards contingency plan. To achieve this result the generic planning base must:

a. Identify those events that will be used for signaling the beginning or aggravation of a safeguards contingency event according to how they are perceived initially by licensee's personnel. Licensees shall ensure detection of unauthorized activities and shall respond

to all alarms or other indications signaling a security event, such as penetration of a protected area, vital area, or unauthorized barrier penetration (vehicle or personnel); tampering, bomb threats, or other threat warnings—either verbal, such as telephoned threats, or implied, such as escalating civil disturbances.

b. Define the specific objective to be accomplished relative to each identified safeguards contingency event. The objective may be to obtain a level of awareness about the nature and severity of the safeguards contingency to prepare for further responses; to establish a level of response preparedness; or to successfully nullify or reduce any adverse safeguards consequences arising from the contingency.

c. Identify the data, criteria, procedures, mechanisms and logistical support necessary to achieve the objectives identified.

3. Licensee Planning Base. This category of information shall include factors affecting safeguards contingency planning that are specific for each facility. To the extent that the topics are treated in adequate detail in the licensee's approved physical security plan, they may be incorporated by reference in the Safeguards Contingency Plan. The following topics must be addressed:

a. Organizational Structure. The safeguards contingency plan must describe the organization's chain of command and delegation of authority during safeguards contingency events, to include a general description of how command and control functions will be coordinated and maintained.

b. Physical Layout. The safeguards contingency plan must include a site map depicting the physical structures located on the site, including onsite independent spent fuel storage installations, and a description of the structures depicted on the map. Plans must also include a description and map of the site in relation to nearby towns, transportation routes (e.g., rail, water, and roads), pipelines, airports, hazardous material facilities, and pertinent environmental features that may have an effect upon coordination of response activities. Descriptions and maps must indicate main and alternate entry routes for law enforcement or other offsite response and support agencies and the location for marshaling and coordinating response activities.

c. Safeguards Systems. The safeguards contingency plan must include a description of the physical security systems that support and influence how the licensee will respond to an event in accordance with the design basis threat described in §73.1(a). The licensee's description shall begin with onsite physical protection measures implemented at the outermost facility perimeter, and must move inward through those measures implemented to protect target set equipment.

(i) Physical security systems and security systems hardware to be discussed include security systems and measures that provide defense in depth, such as physical barriers, alarm systems, locks, area access, armaments, surveillance, and communications systems.

(ii) The specific structure of the security response organization to include the total number of armed responders and armed security officers documented in the approved security plans as a component of the protective strategy and a general description of response capabilities shall also be included in the safeguards contingency plan.

(iii) Licensees shall ensure that individuals assigned duties and responsibilities to implement the safeguards contingency plan are trained and qualified in those duties according to the Commission approved security plans, training and qualification plans, and the performance evaluation program.

(iv) Armed responders shall be available to respond from designated areas inside the protected area at all times and may not be assigned any other duties or responsibilities that could interfere with assigned armed response team duties and responsibilities.

(v) Licensees shall develop, implement, and maintain a written protective strategy to be documented in procedures that describe in detail the physical protection measures, security systems and deployment of the armed response team relative to site specific conditions, to include but not be limited to, facility layout, and the location of target set equipment and elements. The protective strategy should support the general goals, operational concepts, and performance objectives identified in the licensee's safeguards contingency plan. The protective strategy shall:

(1) Be designed to meet the performance objectives of §73.55(a) through (k).

(2) Identify predetermined actions, areas of responsibility and timelines for the deployment of armed personnel.

(3) Contain measures that limit the exposure of security personnel to possible attack, including incorporation of bullet resisting protected positions.

(4) Contain a description of the physical security systems and measures that provide defense in depth such as physical barriers, alarm systems, locks, area access, armaments, surveillance, and communications systems.

(5) Describe the specific structure and responsibilities of the armed response organization to include:

The authorized minimum number of armed responders, available at all times inside the protected area.

The authorized minimum number of armed security officers, available onsite at all times.

The total number of armed responders and armed security officers documented in the approved security plans as a component of the protective strategy.

(6) Provide a command and control structure, to include response by off-site law enforcement agencies, which ensures that decisions and actions are coordinated and communicated in a timely manner to facilitate response.

d. Law Enforcement Assistance. Provide a listing of available law enforcement agencies and a general description of their response capabilities and their criteria for response and a discussion of working agreements or arrangements for communicating with these agencies.

e. Policy Constraints and Assumptions. The safeguards contingency plan shall contain a discussion of State laws, local ordinances, and company policies and practices that govern licensee response to incidents and must include, but is not limited to, the following.

(i) Use of deadly force.

(ii) Recall of off-duty employees.

(iii) Site jurisdictional boundaries.

(iv) Use of enhanced weapons, if applicable.

f. Administrative and Logistical Considerations. Descriptions of licensee practices which influence how the security organization responds to a safeguards contingency event to include, but not limited to, a description of the procedures that will be used for ensuring that equipment needed to facilitate response will be readily accessible, in good working order, and in sufficient supply.

4. Responsibility Matrix. This category of information consists of the detailed identification of responsibilities and specific actions to be taken by licensee organizations and/or personnel in response to safeguards contingency events.

a. Licensees shall develop site procedures that consist of matrixes detailing the organization and/or personnel responsible for decisions and actions associated with specific responses to safeguards contingency events. The responsibility matrix and procedures shall be referenced in the licensee's safeguards contingency plan.

b. Responsibility matrix procedures shall be based on the events outlined in the licensee's Generic Planning Base and must include the following information:

(i) The definition of the specific objective to be accomplished relative to each identified safeguards contingency event. The objective may be to obtain a level of awareness about the nature and severity of the safeguards contingency to prepare for further responses, to establish a level of response preparedness, or to successfully nullify or reduce any adverse safeguards consequences arising from the contingency.

(ii) A tabulation for each identified initiating event and each response entity which

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depicts the assignment of responsibilities for decisions and actions to be taken in response to the initiating event.

(iii) An overall description of response actions and interrelationships specifically associated with each responsible entity must be included.

c. Responsibilities shall be assigned in a manner that precludes conflict of duties and responsibilities that would prevent the execution of the safeguards contingency plan and emergency response plans.

d. Licensees shall ensure that predetermined actions can be completed under the postulated conditions.

5. Implementing Procedures.

(i) Licensees shall establish and maintain written implementing procedures that provide specific guidance and operating details that identify the actions to be taken and decisions to be made by each member of the security organization who is assigned duties and responsibilities required for the effective implementation of the security plans and the site protective strategy.

(ii) Licensees shall ensure that implementing procedures accurately reflect the information contained in the Responsibility Matrix required by this appendix, the security plans, and other site plans.

(iii) Implementing procedures need not be submitted to the Commission for approval but are subject to inspection.

C. RECORDS AND REVIEWS

1. Licensees shall review the safeguards contingency plan in accordance with the requirements of §73.55(n).

2. The safeguards contingency plan audit must include a review of applicable elements of the Physical Security Plan, Training and Qualification Plan, implementing procedures and practices, the site protective strategy, and response agreements made by local, State, and Federal law enforcement authorities.

3. Licensees shall retain all reports, records, or other documentation required by this appendix in accordance with the requirements of §73.55.

(Sec. 161i, Pub. L. 83-703, 68 Stat. 948, secs. 201, 204(b)(1), Pub L. 93-438, 88 Stat. 1243, 1245 (42 U.S.C. 2201, 5841, 5844))

[43 FR 11965, Mar. 23, 1978; 43 FR 14007, Apr. 4, 1978, as amended at 57 FR 33432, July 29, 1992; 64 FR 14818, Mar. 29, 1999; 72 FR 49562, Aug. 28, 2007; 74 FR 13991, Mar. 27, 2009]

APPENDIX D TO PART 73—PHYSICAL PROTECTION OF IRRADIATED REACTOR FUEL IN TRANSIT, TRAINING PROGRAM SUBJECT SCHEDULE

Pursuant to the provision of §73.37 of 10 CFR part 73, each licensee who transports or delivers to a carrier for transport irradiated reactor fuel is required to assure that individuals used as shipment escorts have completed a training program. The subjects that are to be included in this training program are as follows:

Security Enroute

- Route planning and selection
- Vehicle operation
- Procedures at stops
- Detours and use of alternate routes

Communications

- Equipment operation
- Status reporting
- Contacts with law enforcement units
- Communications discipline
- Procedures for reporting incidents

Radiological Considerations

- Description of the radioactive cargo
- Function and characteristics of the shipping casks
- Radiation hazards
- Federal, State and local ordinances relative to the shipment of radioactive materials
- Responsible agencies

Response to Contingencies

- Accidents
- Severe weather conditions
- Vehicle breakdown
- Communications problems
- Radioactive “spills”
- Use of special equipment (flares, emergency lighting, etc.)

Response to Threats

- Reporting
- Calling for assistance
- Use of immobilization features
- Hostage situations
- Avoiding suspicious situations

The licensee is also required to assure that armed individuals serving as shipment escorts, other than members of local law enforcement agencies, have completed a weapons training and qualifications program equivalent to that required of guards, as described in III and IV of appendix B of this part, to assure that each such individual is fully qualified to use weapons assigned him.

[44 FR 34468, June 15, 1979, as amended at 45 FR 34710, June 3, 1980]